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Ego-Centricism To Eco-Centricism: A Visual Ecosophical Analysis Of The Graphic Novel 'As The World Burns'

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Abstract:

The present study focuses on the interconnection of the ecosophical thoughts by Felix Guattari (2009) and visual grammar (2006). To analyze the environmental catastrophe in Derrick Jensen and Stephen Mcmillan's (2007) graphic novel "As the World Burns," this study integrates Guattari's ecosophy through the methodology of visual grammar. This research incorporates qualitative methodology to explore the nexus between visual grammar (2002, 2006) and ¹Felix Guattari's ecosophies (2009). Kress and Van Leeuwen (2001) argue that "multimodality is one of modern society's features" (p. 2). The study found that environmental deterioration reduces our quality of life and threatens the long-term viability of our communities, ecosophy can be useful in informing attitudes and practices. The interaction of sign is nothing other than interaction of people. Hence, Visual Grammar can be utilized as an ethical—ecological dimension of meaning making.

Key terms: Guattari's ecosophy, environmental catastrophe, visual grammar, As the world burns, multimodality.

Introduction:

The ecological disaster has spread over the globe in the twenty-first century, leaving its mark on the Anthropocene epoch. Environmental concerns include the depletion of natural resources, the extinction of other forms of life, and the eventual extinction of the human species worldwide. These topics are widely addressed in today's culture. From this viewpoint, the ecological disasters of today's environmental challenges are caused by the unjust choices made by modern men. The focus of ecosophy is on the vast and intricate connections that all people have, as well as the connections that are inside, between, and among social processes, economies, ideologies, and life systems. It draws attention to these systems as dynamic assemblages (p 22). Deleuze and Guattari (1995) consider ecosophy as a tool of altering mentalities to reinvent social practices that would give humanity a sense of responsibility, not only for its own existence, but also for the future of all lives on the earth (p. 120). Ecosophy is a practical and theoretical, ethical-political and aesthetic paradigm. Ecophilosophy enables one to comprehend that humans and the natural world are a part of the same ecosystem. Felix Guattari's ecosophy examines our understanding as a part of the world in which we live as well as how we learn about and respond to environmental challenges. It consists of three ecologies: the environmental, social, and individual. This research analyzes the ecosophies of Felix

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Guattari using the visual grammar model to track the effects of environmental calamities in Derrick Jensen and Stephen Mcmillan's graphic novel "As the World Burns."

Research Objective:

- To analyze the Visuals of the graphic novel 'As the World Burns' by employing the model of Kress and Van Leeuwen's Visual Grammar (2002).
- To identify through textual analysis the environmental, mental and social ecosophies in the graphic novel to explore an ethos of accountability to nature.

Research Questions:

- How do the graphics of 'As the World burns' involve in the meaning making semiotic process to investigate ecosophies?
- How does the satire of 'As the World Burns' incorporate an ethos of accountability to the natural environment in terms of Felix Guattari's social, mental and environmental ecosophies?

Literature Review:

The study of language in relation to its environment is known as ecolinguistics. Early studies on ecolinguistics (e.g., Halliday 1992) focused on the ways in which lexical and syntactic structures of language express growthism, classism, and speciesism.

Discourse analysis and ecological factors are combined in the field of ecolinguistics, a subfield of CDA. Although it sees ideology and power relations as ideas that apply to both human and non-human beings, ecolinguistics uses many of the same methodologies as CDA (Dash, 2019). Stibbe (2015) states that an important area of research for ecolinguistics is how language shapes certain stories or narratives, or what he refers to as "the stories we live by" (p. 6). These cognitive frameworks affect our perceptions of economic growth, technological advancement, and the relationship between humans and nature. As a result, they affect our responses to the environment. The dominant narratives to which we are exposed, according to eco critique, emerge between the lines of a text (Stibbe, 2015).

However, these narratives may be recognized through discourse analysis of a particular text. By pursuing multimodal analysis, it is possible to extend the ecolinguistics framework to encompass other semiotic codes. Using a multimodal perspective, Kress and van Leeuwen (1996) contend that our perception of reality is shaped by the production and presentation of images. To better understand how visual structures impact human perceptions, Kress and Van Leeuwen (2002) developed a theory of visual grammar, a multimodal approach that distinguishes between three forms of meaning: compositional, interactional, and representational. In essence, graphic novels use both print text and images to engage readers, Since both print text and images provide important information, they are equally important to the story. A reader is flexible in how they perceive what they read, both in words and images (Kress, 2006). Stibbe (2015) asserts that stories naturalize social signs and impact human relationships with other people, animals, plants, forests, rivers, and the physical environment. Stories also allude to the exercise of power by different groups, and they govern our lives. These stories are being categorized based on the harm they do to the ecosystem. Stories are beneficial if they foster attitudes or actions that support care and protection, and negative if they encourage or enable harm to species and the environment.

Stibbe used the term "ecosophy," which was first used in 1973 by philosopher and Deep Ecology Movement founder Arne Naess. According to Stibbe (2015), ecosophy is an "ecological philosophy" that consists of norms, values, and beliefs on the relationships that exist between human civilizations, other living beings, and the natural world (p. 11). Guattari

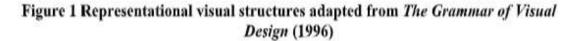
(2009) claims that technological-scientific changes are speeding up on our globe and that unsustainable growth is isolating us from our social, cultural, and environmental connections. According to Stibbe, ecosophy serves as a normative framework for assessing the discourses that are the subject of the inquiry. Stibbe emphasizes the significance of theoretically justifying and aligning one's ecosophy with existing information. The assumptions that underpin my research are based on social semiotics, which emerged in the mid-twentieth century and highlighted language as a socio-semiotic tool for representing both the social and physical worlds, thereby affecting users' attitudes and perceptions. Language is a social semiotic tool that plays a critical part in the construction of human-environment interaction, shaping ideological ecosophical conceptions about what we do with ecology. Ecolinguistic analysis in various social and cultural contexts has been the focus of various research projects. Ooriah (2018) used a systemic functional method to conduct a research study on HIV AIDS slogans. Halliday's SFL theory (1970) and Martin and White's theory (2005) were utilized to evaluate language in Ali Masris study titled "Climate Change in Egypt" (2019). Tian (2020) explored the role of genre in the construction of text structures using SFL theory. The multimodal analysis of environmental discourse has been ignored in previous studies. The findings of this study address the gap created by previous studies by employing representational, interactional and compositional meanings of the graphic novel 'As the World Burns' to explore the anthropocentric vision of human nature engaged with environmental disasters.

Introduction of the Graphic Novel 'As the World burns':

'As the World Burns,' a graphic novel, is a provocative critique of present environmental policies. Derick Jensen's satirical graphic novel 'As the World Burns' focuses on global/economic and social challenges in our current world. The novel's purpose is to alarm readers and draw attention to what and how humans are destroying the world. To engage the audience, the author uses children's favorite characters. For example, a rabbit, space robot machines, different forest creatures, and two eco conscious little girls, who are channeled through dialogues and a one-eyed bunny. The novel explores why our irrational alienation from nature is literally placing us towards the path of world devastation. As the world burns is a graphic novel that combines images of industry/technology with images of nature, animals, people and the environment through symbolic representation.

Theoretical framework:

The present study employs Visual Grammar to analyze the multimodality of the selected three visuals from the graphic novel 'As the world burns' (2007). In their book Reading Images: Visual Grammar, Kress and van Leeuwen (2002) proposed the first systematic and comprehensive paradigm for multimodal discourse analysis. According to visual grammar (1996) Language is thought to be a social semiotic form. Moreover, to analyze the images and its text related to the environmental, social and mental ecosophies embedded in the graphic novel' As the world burns', I have utilized visual grammar as a tool to analyze the Felix Guattari's concept of ecosophies (2009). The detail of the frame works of visual Grammar and Guattari's concept of ecosophies are given below:



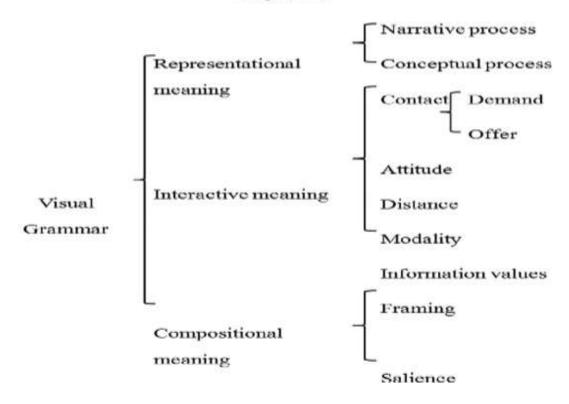


Figure 2 - Understanding the characteristics of Ecosophy

Ecology of <u>Guatarri</u> (2009)	Key Concepts
Environmental Mental	 Catastrophes Development or evolution Human interventions Nature Create new thoughts and actions Relation of the subject with the body
Social	 Understand the subject's purpose in the environment Understanding human relationships Ways of belonging to the social environment Ways to collectively correct the environment in which he lives in society

Research Methodology:

The current study is based on qualitative methodology to explore the nexus between Visual Grammar (2002) and Felix Guattari's ecosophies (2009). The data chosen for this study is the graphic novel 'As the World Burns'. The Visuals has been chosen for this study are from the first chapter of the graphic novel to serve the purpose of ecosophical analysis. The analysis is based on employing three meta-functions of Visual Grammar i.e. representational, interactive and compositional to explore the three types of ecosophies i.e. mental, social and environmental in the graphic novel 'As the World burns' in terms of Felix Guattari's notion of ecosophies.

Visual Analysis:

Kress and Leeuwen's (2002) framework of visual grammar has been applied to the selected images of the graphic novel 'As the World Burns'. Kress and Van Leeuwen framework of visual grammar is based on the theoretical concept of 'metafunction' derived from Halliday and Mattiessen (2014) discussion. Halliday proposed three metafunctions of ideational, interpersonal, and textual metafunctions. Kress and Leeuwen combined them in a way that applies to all semiotic forms and is not limited to speech or writing. The ideational function is classified as a representational function, interpersonal as an interactional function, and textual as a compositional meaning or function in visual grammar. The representational function is classified into Narrative and Conceptual Processes. The Narrative Processes are further divided into actional, non-transactional, transactional, reactional, speech/mental processes, and conversion processes. Whereas Conceptual Processes are classified into classificational and analytic processes. To put it another way, interactive meaning is a description of the relationship between image marker, image, representor, and the readers, Contact, attitude, distance, and modality are the factors that determine the interactive meaning. In Visual Grammar, modalities are divided into three categories: high modality, middle modality, and low modality, as depicted by colour, illumination, and other factors. Compositional meaning refers to how multimodal discourse is arranged. Compositional meaning consists of salience, framing, and information value. The way specific information is represented, such as new and given information, is called information value. The techniques to connect the elements of discourse are referred to as framing. However, various degrees of foregrounding, such as background and foreground, are known as salience.

Visual analysis of figure 1:

The context of visual in figure 1 is to highlight the environmental pollution. It revolves around the speech of one-eyed bunny based on the pollution caused by toxins and Cans.



Representational meaning: By analyzing the representational meaning of figure 1, it was found that figure 1 carries the sensor, phenomenon and transactional processes. The one-eyed bunny is a sensor, and the recipients are the phenomenon (who are viewers). It is transactional in which both sensor and phenomenon are found. Bunny is demanding action, from the viewers in a particular way which is the contemplation on the environmental issues. It is not a conceptual process because it appears in the form of an event that happened instead of portraying participants in terms of their more generalized and timeless essence. It is a direct communication between the sender (bunny) and the receiver (viewers). Moreover, the visual is referring to class in which bunny has a subordinate position and human beings implicitly acquire the superordinate status having the control of resources, excluding the care for the other species of the planet. It is symbolic as well background and bunny both represent themselves symbolically as a voice of environmental protection.

Interactive meaning: The second meta function in visual grammar is Interactive meaning. The participants in the image are interactive, that's why communication happened. Also, the concept of Barthes can be fused, which is the concept of the implied author and implied reader. The implied meaning can be stated as the bunny wants to have a positive correlation between humans and animals. Also, it contains social meaning as the message in the speech bubble meant for the betterment of all the species on the planet. Moreover, within the category of "Contact", it is an offer because the sensor (bunny) is directly offering the information by pointing towards heaps of empty cans around him. The bunny has a positive attitude. According to the category of distance, it is an extreme close-up frame which shows the relationship of part (animals) and whole (nature). From the perspective of space and geographical location which constitutes circumstance, it is daytime, it depicts the location of the industrial area from where smoke is coming out of the factories. Furthermore, the angles are horizontal which are forming request or marginalized position of bunny, sharing the reality with the viewers that what you see here is the part of our world, something we are involved with.

In addition, the fourth and last category of interactive meaning is "Modality". Fig. 1 was analyzed using visual modality values of color saturation (white and black saturation) to highlight the environmental pollution. Black and white panels have been used to present disastrous ecological crisis of modern society which shape the behavior of individuals. The Blackened shades portray something negative, but the lightened shades represent pure and good images. The visual of bunny is not purely light it has dark spots represent the despair and pollution. Factory is shown having dark walls, dark image of smoke is significant. Black and white metaphorically represent two different situations i.e. clean/ polluted environment. Maximum modality is represented through "Naturalistic" code of the global issue of pollution in terms of industrial area because it does belong to any natural phenomena, not culture specific. Lastly, the "Sensory" code shows the highest modality as a sense of sight is being portrayed by using the image of one-eyed bunny, the damage of his sight represented in the image refer to the hazardous impact of polluted environment on animals sharing the same planet.

Compositional meaning:

The last and third meaning in visual grammar is Compositional Meaning, divided further into two processes: Framing and Salience. The acceptance framework was used through portraying animal character of bunny, which further represents the polarities of good and evil (clean and polluted environment). Salience was created by the background of industrial area, depicting smoke coming out from the factories and heaps of empty cans scattered around the bunny.

Visual analysis of figure 2:





Representational Meaning:

The context of 2nd visual is to highlight the callous attitude of builders and manufacturers as environmental terrorists. The frame of 2nd image is divided into two parts in the first part three images are representing the human beings depicted as Actors and the recipients are forming the goal (who are viewers). It is transactional. Three images of human beings are demanding action, from the viewers to reform themselves. Their eyes and laughter are significant in terms of forming vertical angles to show power and authority. The second vector formed by their hands is also important which is also forming a vertical angle towards money which depicts the irrational materialistic approach of human beings. In the second part of the frame image of bunny is portrayed to depict the Satire on the human beings as suffering from Alzheimer, diabetes, obesity and malnutrition. Bunny and half face images of humans also form vectors, but these types of vectors are different from the vectors of the first part, their vectors form request and demand action from the viewers to contemplate reality. It is also not a conceptual process because it appears in the form of actions and events that happened instead of portraying participants in terms of their more generalized and stable representation. Images are offering binaries between human/animal and class distinctions.

Interactive Meaning:

The second metafunction in visual grammar is interactive meaning and is further divided into four of its functions: Contact-Demand and Offer, Attitude, Distance, and Modality. The participants are interactive with the viewers. The bunny and half human face demand rational approach from the viewers. Moreover, within the category of "contact", the first frame images focused on demand while the second frame is based on offering the information. In the category of distance, it is an extreme close-up frame which shows that both the participants have an intimate relationship. From the perspective of space and geographical location which constitutes circumstance, it is daytime. In addition, the fourth and last category of interactive meaning is "Modality". Fig. 2 can be analyzed using visual modality values of color saturation which is white and black color saturation. Black and white panel has been used to present the contrast between reality/allusion and rational/irrational approach towards ecological crisis of modern society which shape the behavior of individuals. The Blackened shades portray something negative, but the lightened shades represent pure and good images. Black and white colours represent two lifestyles to show binaries of oppressor and oppressed. Black and white colours also refer to anthropocentric behavior of human beings. The two colors represent different situations in the first frame black is representing wickedness while in the second frame it is representing psychological and emotional turmoil. The "Sensory" code shows the highest modality as a sense of sight is being portrayed as significant by using the image of one-eyed bunny, manufacturers and half faced man suffering from Alzheimer.

Compositional Meaning:

Information value is depicted in the speech bubble as left aligned (given information). It is up (idealized information) and centralized (important information). The compositional meaning foregrounds the context of the visuals which is environmental awareness which seeks viewer's involvement. Salience has been created by depicting the half face of Alzheimer patient, one eyed bunny and visuals of manufacturers.

Visual analysis of figure 3:



Representational Meaning:

The context of the 3rd visual is to highlight the importance of plantation. Speech bubbles highlight the rational approach of tree plantation. The image shows two girls as actors involved in the discussion about the significance of plantation. It is transactional. The visual of the girl on the left forms the vector with the plant while the gaze of the girl standing on the right forms the upward vector by looking at the tree. One of the girls is forming vectors through her limbs (arms holding the tree). Images of girls demand action, from the viewers to consider plants as a part of ecology. Images of eco-conscious girls are also demanding action from the viewers to think about plantation. It is also not a conceptual process because it appears in the form of actions and events that happened.

Interactive Meaning:

The second meta function in visual grammar is Interactive meaning and is further divided into four of its functions: Contact-Demand and Offer, Attitude, Distance, and Modality. The participants are interactive, that's why communication happened. Both girls are depicted in the visuals interacting with each other on environmental protection. The visual is based on offering information. In the category of distance, it is an extreme close-up frame which shows that both the participants have an intimate relationship. From the perspective of space and geographical location which constitutes circumstance, the location is foregrounded with the visuals of the plants. The hole in the tree as shown in the visual is significant in referring hole-nesting bird community. In addition, the last category of interactive meaning is "Modality". Fig. 3 represents the continuation of the same colour saturation which is black and white. The contrast of contextualization is significant in figure 3 in which white and black colour has been used for rationality however, in figure 2 it has been used for portraying evil characters.

Compositional Meaning:

Information value is depicted in the speech bubble as left and right aligned (shows given and new information). It is up (idealized information) and centralized (important information). Connected speech bubbles depict the continuity of ideas. The compositional meaning foregrounds the context of the visuals focusing on creating awareness regarding plantation. Salience has been created by depicting the eco conscious discussion of two girls holding the tree and pointing towards significance of plantation.

Ecosophical Textual Analysis:

The totalizing aspect of modern problems, resulting in actual political, social, and cultural aspects, was suggested by Felix Guattari's ecosophy. According to Maffesoli (2010), ecosophy is a paradigm shift in which man recognizes that he is inextricably linked to the environment. Ecosophy is a way of thinking about the environment that is based on a true philosophical framework and directed toward action, both through political engagement and everyday action. The selected novel 'As world burns' presents the bleak picture of ecological disaster. It represents the doomed world and the collapsed environment. Animals shown in the are more rational and doing a better job than human beings to create visuals of graphics awareness regarding ecological issues as depicted in the speech bubbles of bunny, crow and fox in the novel. Jensen communicates a reformative message and manages to sneak it through engaging the reader's sense of contemplation, drawing style and patronizing language.

Environmental ecosophy:

Environmental Catastrophes have been depicted in the speech bubbles of the images through noun modification patterns i.e. add the cans, millions of other cans, big money for builders, melt them down, spew toxins, countless people. Pre-modifier adjectives like millions, big, spew and countless are significant in making the distinction between big and progressive. Human beings are irrationally hankering after collecting heaps of money which is not contributing positively to the future of mankind. Environmental disaster has been depicted in the postmodern lifestyle of humans which caused destruction not only for the environment but for human and non-human entities on the planet. For example, in figure 1 speech bubbles show Drinking Soda, increasing obesity, malnutrition and diabetes due to polluted environment and mistaken view of human towards life and environment. It has been proven scientifically that pollution is associated with obesity and cardiovascular diseases. According to the American Journal of cardiology (2017) 'There is overwhelming evidence that all the forms of smoking have major detrimental health effects like cardio metabolic diseases (p.2). Vulnerability of nature has been depicted by highlighting the spew of Toxins into the air caused by the smoke of the factories (see figure 1). Rational Approach towards the solution of environmental crisis has been suggested through the visuals i.e. plant a tree, stop cutting down a tree. The role of plantation in rehabilitating degraded ecosystems is enforced in the visuals.

Social Ecosophy:

Social ecology illustrates people's cultural and social connections. The present study's analysis offers a logical framework for the creation of new ecological, socio-environmental, and most importantly, human condition knowledge in the modern day. Binary oppositions in form of pronouns (Us v/s Them) have been utilized to indicate in group/out group identities in the visuals i.e. They will add the cans (figure 2). Visuals reinforce the collective efforts to solve the environmental issues i.e. single tree will absorb one ton of co2 during its lifetime (figure 3). The visuals focused on the totalizing dimension of contemporary issues by providing the Juxtaposition with non-humans. Unequal relationships between human and non-human entities have been shown focusing on the idea of the care and wellbeing of nonhuman entities as part of ecosphere. The social and cultural ties of individuals with non-human entities are depicted in the visuals of selected graphic novels. Derrick Jensen in his novel As the World burns channeled through the dialogues of one-eyed bunny and two girls in the visuals raised the issue that our social and cultural alienation from the nature is literally paving the way towards the environmental destruction.

Mental Ecosophy:

In the graphic novel "As the world burns", ecosophy is portrayed as a philosophical outlook that emphasizes critical thought as a means of redefining the relationship between nature, society, and humans. It demonstrates the unbreakable link between "human" and "nature," emphasizing the importance of human subjectivity, social variety, the defense of human rights, and the environment. This graphic novel depicts how nonhuman entities are interconnected with nature sharing the same planet. Facticity patterns have been depicted in the visuals to create new thoughts i.e. coal-burning plants (figure 1). Subjective Semiotics is constructed to show the physical and mental vulnerability linked with environment i.e. every cell in my body wants recycling, love nature. Understanding human relationships with non-human entities is focused on the visuals to build the subjective semiotics i.e. you know (figure 1). Capitalist lifestyle is depicted to represent a particular mind set of modern men 's desire to dominate nature and the way of conquering weak people and natural resources (big money for builders (figure 2) Nominalization i.e. A single tree will absorb (image 3) has been used for framing device of non-human environment. Hyponymy hierarchy has been shown in the visuals to indicate that the human interest is not only the legitimate interest of eco system. The ethical framework of graphic novel is to establish a connection between Human and non-human entities (animals and plants). The hole in the tree in figure 3 invites viewers to extend their subjective semiotics to the hole-nesting bird community. The representation of landscape is not merely a scenery in the visuals but representing the inseparable relation of men with nature. Thus, mental ecosophy embodied in the novel 'As the World Burns' considers human and

nonhuman domains to be one. The graphic novel "As the World Burns" reinforces the same notion by representing participants as aggregate i.e. if we stop someone, you love nature etc.

Findings:

How do the graphics of 'As the world burns' involve in the meaning making semiotic process to investigate ecosophies?

The researcher analyzed the visuals of the graphic novel 'As the World Burns' to investigate the ecosophy which is constructed by images. The comprehensive frameworks of Kress and Leeuwen and Guattari's ecosophy helped to meet the task. The images clearly demonstrate the supremacy of transactional processes, which calls for readers to approach the content logically. Analysis of narrative processes in which participants express concern about the ecological disaster also suggests relationships between individuals. Taxonomies are often emphasized in relation to the superiority of humans over other animals on Earth. This draws viewers in and helps them comprehend ecosophies as the only sane way to consider the unbreakable link between nature and humans. The close-ups used in the pictures convey the sense of closeness between man and environment. The link between participants and viewers is strengthened by frontal horizontal angles. More attention is given to the animal characters in the visuals i.e. one-eyed bunny and crow in the visuals, so that the viewers can identify themselves as part of the planet.

How does the Visuals of 'As the World burns' incorporate an ethos of accountability to the natural environment in terms of Felix Guattari's ecosophy?

The graphic novel "As the World Burns" emphasized environmental conservation concepts via the lens of the Guattari ecophilosophies through its images. The images symbolized the reflection on the ethical and ecological crises facing humanity. The wording used in the speech bubbles portrays humanity's social and moral need to address environmental issues, both individually and collectively. The images call attention to subjective semiotics, which raise awareness of environmental solutions in society. The current study advanced arguments in favor of an ecosophic lens as a means of bringing about a shift in perspective within our social and ethical spheres. The pictures underlined the need for coherence and unity to rationally conceptualize ecological challenges. i.e. the conversation between two eco-conscious girls on the issue of plantation. 'As the World Burns,' is a transition from egocentricism to ecocentrism. In other words, Guattari's ecosophy demands a rational approach that human, non-human and any other existent form are interconnected. Thus, the researcher found that visuals of 'As the World Burns' shed light on various perspectives of ecological crisis which demand accountability of the natural environment.

Conclusion:

Visuals were analyzed in the present study to represent and document environmental destruction. The results of this study showed that ecosophy is a way of thinking about how human relationships and the environment are being destroyed in modern society, in addition to being a philosophy of ecology. The framework of visual Grammar has added meaning to the interpretation of the three ecologies. Understanding these three ecologies is necessary for us to reconcile our relationships with non-human organisms on our planet as an indivisible part of the ecosystem. According to the study, having an eco-aware mindset can lower the likelihood of environmental problems and human interaction with the natural world. According to Gonçalves (2008), ecosophy questions how humans interact with their surroundings and how they may be both rational and unique while yet being a part of the same natural ecosystem.

Moreover, the importance of visual representation in expressing and creating the environment as a focus of public and private concern is significant. It can be concluded that environmental deterioration reduces our quality of life and threatens the long-term viability of our communities, ecosophy can be useful in informing attitudes and practices. The interaction of sign is nothing other than interaction of people. Hence, Visual Grammar can be utilized as an ethical —ecological dimension of meaning making.

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