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# *A Posthuman Ecophobia Analysis of Hyperobjects in Annihilation by Vendermeer*

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## **Abstract**

The present research analyzes Jeff Vendermeer's *Annihilation* to explore the Posthuman dilemma of Ecophobia, using the thematic framework of Katherine Hayles and Simon C. Estok. The characters' apprehensions and uncertainties are examined through Hayles' Spectrum of Posthuman theory. The study examines how Posthuman alienation from nature has affected humans' autonomy and authority, leading to Ecophobia. The characters' coping mechanisms and the consequences of their actions has been evaluated for addressing the ecological, social, and psychological implications of Posthumanism and managing the anxieties and fears it brings. The study shows that Posthumanism and Ecophobia are interconnected, causing anxieties and fears among Posthumans. Ecophobia is an irrational fear, and it is a political product used to keep the masses away from reality. Further, *annihilation* aptly captures the postmodern dilemma of fears and anxieties. Furthermore, Vendermeer's novel can truly be categorized as a Posthuman



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study of Ecophobia. Overall, this research paper provides a useful insight into Posthuman apprehensions and throws light on how they are affecting us.

**Keywords:** Posthuman dilemma, Ecophobia, autonomy, authority, irrational fear

## **1. Introduction**

Posthumanism is a theoretical perspective aiming at challenging the notion of man's sovereignty and argues that man is not the only entity with agency and non-human entities like monsters, animals, plants and machines also have a significant role in this universe. Blurring of boundaries between man, animals and machine has been investigated in Posthumanism. The outcry of Posthumanism is 'loss of centre' and 'loss of identity' where they blame modern technology for the degradation and downfall of man. This loss of identity invoked certain fears and anxieties in man and provoked him to be aggressive or defensive towards ecology. This paper attempts to explore the fears of Posthumans and how Posthumanism and Ecophobia are interconnected to one another.

Posthuman theorists like Francis Fukuyama, Donna Haraway, Rosi Braidotti, Katherine Hayles, Cary Wolfe and Francesca Ferrando are among the forerunners. Katherine Hayles has pondered over the idea of 'pattern and randomness' where she justifies the role of Posthumans in the vast randomness of this universe. On the other hand, Ecophobia is a relatively new study aiming at investigating man's relation with ecology and its connection with the fear. Simon C. Estok (2009) has defined Ecophobia as 'an irrational fear of environment'. (p.1) Ecophobia and Ecophilia are two of the defining characteristics of Posthumans world. If one explores 'fearful paralysis of nature'; the other abounds in 'unconditional love for nature'. Quan Wang (2019) contemplates over human response to nature in one of the either ways: Ecophobia or Ecophilia. He argues that Ecophilia is 'assimilation of the nature' implying that nature 'becomes their extended identity' and Ecophobia is 'assimilation into the environment' that is 'fearful loss of individual identity'. (p.1) He perpetuates that an idealized realm can only be concretized by the ascent of nonhuman agency and descent of human agency.

The present study investigates the fulcrums of Ecophobia and Posthumanism by linking it to the weird ecology of science fiction. The investigation draws upon the researcher's stance that although both of Ecophobia and Posthumanism are different but there is a hidden connectivity between the two theories. The researcher argues that Posthuman Ecophobia bestows us a better understanding of our present crisis where the representation of monsters in science fiction, weird ecology, horror evocative themes and attitude all have been linked with the dilemma of Posthumans where they are in

search of their identity. In this connection, it has been observed that the Narcissistic impulses further aggravated the situation where the schizoid state of man entrapped him into Ecophobia. Vendermeer has skillfully drawn in his novel a connection between the narcissistic impulses of Posthuman Ecophobia. His characters are constantly in search of a world where they can trace their presence with affirmation of human standards yet the perplexity of Posthuman world has caught them into a whirlpool of Ecophobia.

## **2. Theoretical Underpinnings**

The present study explores how Ecophobia theory of Simon C. Estok can be applied to Hayles' (1999) spectrum of 'pattern and randomness' and 'Distributive Cognitive System' by highlighting the fear and anxiety that arise from the loss of control over ecological systems. Hayles claims that Posthumans do not work as a transcendental being rather, they are a cohesive system of information and body. As natural patterns are disrupted and randomness increases, there is a sense that ecological systems are becoming more chaotic and difficult to understand, which can lead to feelings of helplessness and despair. The present study explores further the true nature of natural calamities and environment by employing the fulcrum of Morton's hyperobjects where he argues that most of our anxieties are connected to our lack of the understanding of natural objects due to the enormity of their size

We find a diversity of opinions in various tenets of Posthumansim and what it really means to be human. Posthuman has been labeled as 'Ex-Man' by Massumi who argues that "species integrity is lost in a bio-chemical mode expressing the mutability of human matter" (1998, p.60). Rosi Braidotti claims that The human being embodies a species characterized by hierarchical structures, hegemonic tendencies, and historical inclinations towards violence, now facing challenges to its centrality due to advancements in science and global economic considerations.(2016) She stresses the need to be aware of what it means to be a human. She argues, we currently occupy states of continual transition, hybridization, and nomadic mobility within emancipated, multi-ethnic societies characterized by significant technological intervention. These conditions are complex and non-linear, marked by multi-layered and internally contradictory phenomena. (2016) Humans mixing with animals, machines and ecology are no more in the central position. They have lost not only their place and authority but are now subject to various disastrous ecological events.

The New Posthumansim is an emerging trend which came into vogue after the dramatic outcry of 'the death of man'. The sovereign state of man has not only been questioned but eroded by the posthumanists. Posthumanists claim that man is not a separate entity. Man is related to animals, nature and machines. Felipe Fernandez-Armesto(2004) aptly

concludes the situation in the following words that In the past three to four decades, we've dedicated substantial intellectual, emotional, financial, and even physical resources to the promotion of what we term as human values, human rights, and the preservation of human dignity. Similarly, the realm of science and philosophy has collaborated to challenge and erode our conventional understanding of humanity. The traditional concept of man is no more in question. Radical scientific innovations such as cloning, genetic engineering, human genome project and AI have forced us to reconsider the very notion of 'man'. In order to assess man, ecology and animals, the traditional standards of humanity are of no use. These major transformations have not only modified man but have also affected animals, ecology and machines to a great deal. It has been observed that a fatal disease abounding man is 'belief in human uniqueness and our exaggeratedly hierarchical relationship with other species" (Goodbody,2019, p.64). Man's arrogance and his belief in hierarchical positioning has blurred his vision and aggravated the situation. Sovereignty of man is shaken and questioned. Hierarchical positioning of man has been replaced by the equality of all the species where no one can claim to have the sole authority.

### **3. Analysis**

#### **3.1. Anthropocene Monsters and Posthumanism**

Bruno Latour (2011) in his article 'Love Your Monster' has presented a detailed analysis of Mary Shelley's Frankenstein: a product of man's dilemma to surpass the Nature. In this novel, the monster is Frankenstein's desire incarnated. But when he turns his back towards his own creature in disgust and hatred, it evokes feelings of awe, shame, regret and dread among the readers. In the delusion of his knowledge and arrogance, Dr, Frankenstein believes that he can defy the laws of Nature and create an image of his own, but once created, he turns his back in loathe and fear. Latour terms it as 'an all-purpose modifier' for ecological and technological crimes. (2011, p.21) Latour also draws our attention towards the real crime sin of "Frankenstein's real sin . . . he abandoned the creature to itself" (p.21) Latour has studied and defined Frankenstein as a 'parable for political ecology' but we have demolished the earth by our waste agency and negligence of ecological changes which have been caused by us. Latour has skillfully portrayed a link between ecological disorders like global warming and climate change with monster of Frankenstein by hinting it as the real cause of our suffering. He opines that we must try to embrace it instead of ignoring it. Timothy Clark has also made parallels between humans and monsters by alluding to Thomas Hobbes's Leviathan. He argues that "The environmental Leviathan, symbolizing humanity's planetary impact, is akin to a "psychopath" when contrasted with Hobbes's formidable figure, which epitomized the emerging liberal commonwealth of seventeenth-century Britain (2015,).

Evident as it is, depiction of monsters in science fiction and weird literature is an allegorical depiction of nature's degradation revealing itself in distress and anxiety. The need of the hour is to acknowledge the monsters of ecological collapse by restructuring the modern set of the mind, where Latour urges for the need to 'Attachment to Nature' instead of 'emancipation from Nature'. The modern trend of obsession for monsters has been related to Anthropocene monster by many a cultural critics and feminists. Donna Haraway's 'Promises of Monsters' is significant in this regard as she traces the allegorical figure of monster to think in binary oppositions thus interlinking nature and culture instead of separating them as different 'sites of Knowledge'. (1992, p.66) Both Latour and Haraway argue that we need to shift our thinking from the binary issues to resolve the present crisis of Anthropocene. The image of monster provides a way to examine the differences prevailing in the ecological disorders.

The image of monster highlights the tensed space between the real and the weird. Though present age monsters have a close affiliation with Frankenstein's monster but they can also be assessed in the light of Timothy Morton's 'hyperobjects'. Hyperobjects can be defined as 'events and objects such as global warming that are massively and unfathomably distributed in time and space, (2013, p.1). Morton's hyperobjects evoke "oppressive, claustrophobic horror" (2013, p.132) because of the enormity of their size and seem monstrous owing to their negative effect on humanity and planet. Morton has given the reference of Lovecraft's iconic figure of monster Cthulhu to exemplify the horrific nature of hyperobjects. He states that through grasping hyperobjects, human cognition has conjured entities reminiscent of Cthulhu into the realms of social, psychological, and philosophical discourse. The modern philosophical fixation on the monstrous offers a liberating departure from human-centric perspectives. It is profoundly beneficial to acknowledge the existence not only of monstrous entities but also of beings that defy straightforward conceptualization, whose essence transcends mere thought (2013). Lovecraft argues that we conceive nature as a "reserve on which to discharge all bad consequences of collective modernizing actions" and is the ultimate reason of global warming and ecological collapse. He further militates that The resurgence of environmental repercussions, such as global warming, is viewed as a contradiction or even a monstrosity, which it indeed is, though solely within the framework of the modernist narrative of liberation from the natural world. (2012) What Lovecraft suggests is a complete transformation of mentality to resolve the anthropocene issues where binary oppositions of nature/culture, society/barrenness, human/animal need to be ignored. We may contend that new weird is all about attachment to Nature instead of Emancipation from Nature. Adam Trexler argues that climate change, "changes the literary potentialities of setting, conflict, the organization of characters, and the fundamental way that diverse characters and nonhumans interact in narratives" (2015, p.234) This has been further elaborated by Timothy Clark who is

of the view that a reorientation of Anthropocene will help the literary and eco-critics to have a better understanding of place of humans not only in this world but also in relation to ecology. Later on, he argues that it prompts us to contemplate human existence on significantly larger spatial and temporal scales. The Anthropocene, perhaps too vast to grasp or comprehend fully (undoubtedly a "hyperobject"), compels us to reconsider unconventional relationships regarding scale, impact, perception, understanding, depiction, and quantifiability (2015).

Here we can draw a comparison between Clark's 'counter-intuitive relations' (which means the relations expanding upon time and space and not easy to comprehend) with Morton's hyperobjects and eco-mimesis. Clark claims that a restructuring of environmental criticism can help to 'save the world'. The same idea has been projected by Morton when he asks for the reconceptualization of the notion 'nature' in Hyperobjects. Here, he urges the need to develop "weird ecomimesis" which can be compared to Cartesian Dualism and finds echo in the works of Latour and Haraway. Morton defines it as a process by which one tries to dismantle ingrained separations between nature and humanity. This endeavor aims not only to articulate but also to offer a practical framework for erasing the boundary between subjectivity and objectivity, a dichotomy often regarded as the underlying philosophical rationale for humanity's environmental degradation. If we could not only comprehend but also directly sense our interconnectedness with the world, then our inclination to harm it would diminish (2016).

Thus, weird ecomimesis is a co-existence instead of having a binary distinction between the objects. Morton explains in this connection that there has been a "gradual realization by humans that they are not running the show, at the very moment of their most powerful technical mastery on a planetary scale" (p.164). Here it would be interesting to note that by denying the binary oppositions which is another instance of counter intuitive relations, Morton also unveils a paradox lying at the heart of Anthropocene issues. He implies that humanity seems to be a geological agent but without having an agent. He espouses that by coming out of our exaggerated pride, we can assess that humans are embedded in, or according to Morton, enmeshed in their environment.

Another tendency traced in Posthumanism is its denial of 'Anthropocene crises' to which end it refuses any impending ecological disorder. Colebrook asserts that As life faces potential extinction, decline, or transformation beyond recognition, people increasingly emphasize the sanctity of life while simultaneously struggling to directly confront the escalating threats endangering the present (2014).

The ecological collapse has been termed as ‘Anthropocene disorder’ by Clark who relates it to the degradation of ecology due to human waste, technological and scientific expansions and ignorance.

On confronting ecological collapse, humans experience either paralysis or denial. Paralysis may further lead to anxiety and fear whereas denial leads toward ignorance. Paul Robbins and Sarah A. Moore(2012) introduce “ecological anxiety disorder” (EAD) for the “recent anxiety, discomfort, conflict, and ambivalence experienced by research scientists in fields confronting ecological novelty in a quickly-changing world” (4) It has been identified that certain communities and individuals envision anthropocene issues as monstrous, appalling and fearful. It has been observed that ‘cosmic paralysis’ appears on confronting the planetary-sized issues which seem to be too big to be comprehended or tackled by the humans. Gry Ulstein argues that “Just like Dr. Frankenstein, humanity has turned away in dread, shame, and self-righteousness at the birth (and growth) of their own many-headed monsters: global climate change, deforestation, mass pollution, and species extinction.” (2017, p.3)

The transformation of man from authority into subjection has been a sight of mere anarchy and distress. Disturbing and distressing depiction of man in science fiction, weird literature and cli-fi has promoted a negative image of man. It also calls into question some of the current ideas about the negative formation of a new sense of ‘the human’ as bound together by shared vulnerability in relation to the possibility of extinction. (Braidotti, 2013, p.13) She has propounded the idea that Posthuman knowledge is an amalgamation of humans, animals, cosmos, and machines which needs a restructuring of our perception of man. She claims that Posthuman knowledge includes historiography, environmental humanities, scientific inventions etc. In this connection, she has given the example of ‘One Health Movement’ which declares that the health of humans, animals and ecology is interconnected and interlinked. This movement was based on the concept of ‘zoonosis’ of Rudolf Virchow who projected the idea of similar medicine for animals and humans. Braidotti has argued that Posthuman notion is a nature-culture continuum where we observe a rejection of hierarchy of specie. She further argues that Posthumanism observes ‘a colossal hybridization of the species’ where man seems to lose hold of his supremacy as the crown of creation which has been attributed as ‘anthropological exodus’ by (Hardt & Negri p.215).

The idea of anthropological exodus is further explored and expanded by Katherine Hayles and Cary Wolfe. N. Katherine Hayles (1999) has given her idea of ‘distributive cognitive system’ where she argues that Posthumans are afraid of the universe owing to its randomness and enormity. By implying her definition of Posthumanism, we may

contend that human are just one pattern of species out of several ones in a universe where they seem not to be dominating the randomness of the universe. She is of the view that “the Posthuman both evokes terror and excites pleasure” (Hayles p.4). Posthumanism can pave the way towards happiness owing to its denial of hierarchical patterns and promising a better future by embracing the ‘other’. Posthumansim perceives the universe as an intricate pattern of randomness where our survival can sustain by acceptance of animals, plants, humans and monsters as different patterns of the universe.

Hayles has given a different dimension to the subject of Posthumanism. She has here taken the stance of those theorists who hold the universe as a cosmic computer program working with coded unit having two states either ‘on’ or ‘off’ like the cellular automata. She refers to “Edward Fredkin and Stephen Wolfram [who] claim that reality is a program run on a cosmic computer. In this view, a universal informational code underlies the structure of matter, energy, spacetime—indeed of everything that exists” Peterson 4 (Hayles 11) Hayles claims that Posthumans do not work as a transcendental being, rather they are a cohesive system of information and body. Hayles has given a theory of “distributed cognitive system” (p.289) where cognition operates with the help of agents outside of human body and it can be any outside agents including animals, ecology and machines.

### **3.2. Ecophobia**

The implications of Posthumanism were further explored and there emerged a need to study the impact of hybridization, blurring of boundaries between humans and non-humans and to redress the new ecological issues such as global warming, oil spills and hurricanes. The impact of all these things revealed itself in various psychological and mental disorders. Various anxieties and phobias emerged in the backdrop of all these new trends and innovations. Ecophobia emerged on the horizon of ecocriticism to address all the uncertainties and complexities. The term first appeared in an article by George F. Will ‘The Politics of Ecophobia’. Later on, this term was used by Simon C. Estok and David Sobel in their articles and books.

According to Fisher (2017), David Sobel has given us a psychological definition of Ecophobia where he has linked it to natural disasters and ecological changes made by man. Sobel has linked feeling of helplessness and dread with environmental crisis which according to Fisher is an oversimplification of the problem. Here it would be quite useful to study Ecophobia from different perspectives. According to Fisher (2017), Ecophobia was defined by Shaffer in the following words, “Ecophobia speaks to the challenge of keeping active, healthy, and hopeful in the wake [tsunami?] of sorrowful environmental trends.”(p.109) His treatment of Ecophobia is superficial and thus not for Fisher. On the



other hand, Estok (2009) declares it, “an irrational and groundless fear or hatred of the natural world, as present and subtle in our daily lives and literature as homophobia and racism and sexism” (Estok p.4). Estok has extended the horizon of Ecophobia and correlated it to sexism and racism thus he has given a political and social perspective to the notion of Ecophobia. Fisher argues about Estok’s treatment of Ecophobia, “his view of Ecophobia is a whole lot more sociopolitical and cultural than the individual psychological approach of Sobel.”(2017, p.13) Thus Ecophobia is not limited to a clinical and psychological condition where a human is afraid of natural calamities owing to the harms inflicted by man. The basic contention according to Fisher is, “between Sobel and Estok—respectively, between a modernist ‘clinical’ discourse frame and a postmodernist ‘political’ discourse frame.”(2017, p.14) Estok articulates in this connection, “Ecophobia is a subtle thing, involved both in the production and reception of the [eco-] narratives. (2009, p.132)

Another compelling feature of modern day is its psychological complexity and anxiety disorders abounding Posthumans. These psychological complexities sometime reveal themselves in relation to environmental crisis where human beings consider ecology as a hostile power working against them. Waste material, pollution and climate change have always had a lingering effect on humanity. Ecology is related to man as much as man is related to ecology. In this connection, Jane Bennet (2010) argues that Convening a public through environmentalism poses challenges in recognizing animals, plants, or minerals as legitimate constituents, as non-human entities are often categorized merely as passive components of the environment.

Thus, there was a clear tendency of a clash between ecology and humanity. The situation was further aggravated with the advent of global warming, air, water and land pollution, oil spills, tsunamis and hurricanes which not had a negative impact on the ecology and world but also complicated the relationship of humans, animals and ecology. It is in the backdrop of all these circumstances that Ecophobia emerged on the horizons of Ecocriticism. He further elaborates his conception of Ecophobia and the hatred connected to it on a wider perspective. He unveils the hidden agendas or motives behind a monstrous picture of nature and states, “to denote fear and loathing of the environment in much the same way that the term ‘homophobia’ denotes fear and loathing of gays, lesbians, and bisexuals.”(2009, p.213)

The fearful paralysis drawn by media and ecological critics has aggravated the link and relation between ecology and man. The representation of Ecophobia in a much broader term helped the theorists to identify the root cause of environmental crisis and tensed relationship of man and ecology. In this connection, Fisher(2017) is of the view, “Estok moves the psychological diagnosis into an expansive cultural-political, philosophical

and truly (potential) emancipatory discourse formation (p.16) The treatment given by Estok is much more aligned and in connection to posthumanists as it has been observed, ‘we are in a dynamic complex system where there are ‘no guarantees’ of clean diagnose and clean cures.’ (2017, p.18) To reveal the political and cultural implications of this agenda Fisher claims Ecophobia ‘is not reducible to individual psychology but is more a toxic worldview, a toxic ideology, a toxic politics and ultimately an insidious “culture of fear” itself that is producing individuals who act out the fear(ism)—or, in this case, Estok would say, are acting out Ecophobia without really seeing what it is made of and how it is embedded and works in the oppressive systems of ‘normal’ everyday life and history, including all the ‘free’ choices.’(2017, p.19) Fisher argues that Estok does not seem to be hopeless about the future of humanity. He seems to be aware of the true potential of humans where they can have a better perspective to aspire, to be in harmony with nature and to have a better understanding of all their problems related to ecology, man’s psyche and his political and cultural tensions. Estok is not completely pessimistic of the potential for humanity to change its ways toward a truly more sane and sustainable life-style and structure. Analyzing Ecophobia allows us to develop an entirely new ethical paradigm within which to house our thinking about nature [and fear itself].

Yet another tendency of Posthumanism which needs to be addressed is the hybridization of species. Theme of hybridization introduces impurity and degradation of Posthumans. Hybridization occurs due to sweeping advancements in the fields of science and technology. Maria Goicoechea asserts, “Fields of knowledge such as genetics, nanotechnology, microelectronics, and communications have produced such spectacular scientific advances that they produce anxiety and fear.” (2008, p.2) Fear and anxiety are the dominant traits of Posthuman world. Fear is a celebrated part of traditional societies where it has been used to maintain a balanced relationship between nature and culture. This process is termed as sacralization of nature producing fear and awe thus nature/culture nexus is created. This kind of fear has been termed as Eco-fear and fisher labels it as “deep fear of nature” (p.4) which is induced owing to “hurricanes and wildfires and global warming and flooding ... including earthquakes and tsunami” (2017, p.4) He further explains that Eco-fear portrays nature as enemy and leads to a tensed relationship between the humans and nature. Contrary to Ecophobia, which has been labeled as irrational by Estok, Eco-fear has been a referential fear. Eco-fear is celebrated in the traditional communities where nature is sacralized. The desire of immortality in Posthumans has introduced a solipsistic tendency and entrapped him in contradictory impulses of control and freedom. Failing to conceive nature of hyperobjects owing to their enormity of size in time and space evoke fear and awe. We can label these objects as monsters as they cause “oppressive, claustrophobic horror”. (2013, p.132) By referring and assimilating Ecophobia and Posthumanism, we may claim that man’s desire to get control over ecology and his quest for immortality has strained his relations

with that of nature. When studied in the backdrop of fear and anxiety, we may assert that Posthuman cyber culture has introduced certain psychological complexities. Science fiction reveals how man's desire to get control over nature has degraded man and ecology. Mary Shelley's *Frankenstein* has been one such example where desire to surpass nature revealed itself in the form of monster. Species impurity leads to monster studies and addressed in science fiction.

The novel *Annihilation* revolves around four women entering into the Area X that is an abandoned area for thirty years. Southern Reach, a government agency, is trying to explore the true nature of that Area and has been sending its expeditions since it was abandoned. We meet a group of four women who are the members of 12<sup>th</sup> expedition and they include a psychologist, a surveyor, an anthropologist and a biologist. The story is narrated by the biologist who is the only survivor. She relates various incongruities found in that Area for example a dolphin with human eyes, a tower resembling the shape of chromosome, the throbbing walls of that tower, the writing with plants on the walls of tower and a crawler which inhibits that tower. The psychologist, the leader of that group, uses hypnotic suggestion to control all three of them. The anthropologist is killed by the crawler, the psychologist jumps from the roof of lighthouse and dies while the surveyor is killed by the biologist. The only survivor is the biologist who decides to live into that Area and novel ends.

Hayles(1999) projected the idea of “distributed cognitive system” (p.289) where she pondered over the idea of interconnectedness and dependency of all the entities over one another and argued that it is analogous to “Pattern and Randomness”. The researcher found Hayles’ model more useful and more applicable to the selected text of *Vendermeer*. Hayles projected her theory of Pattern and Randomness to describe how entities, machines and tools present outside of human embodiment can assist in the cognition process. To elaborate it further, she contends, “Located within the dialectic of pattern/randomness and grounded in embodied actuality rather than disembodied information, the Posthuman offers resources for rethinking the articulation of humans with intelligent machines” (p.287). By applying Hayles, theory we may argue that humanity is not a presence which is dominating a world occupied otherwise with absence. Instead of that, Halyes implies that human species is one pattern out of several others in a universe filled with randomness. Hayles further illustrated her point in the following words, “If pattern is the realization of a certain set of possibilities, randomness is the much, much larger set of everything else” (p.286). Her theory of pattern and randomness can help us to analyse Area X more accurately instead of relying solely on presence and absence to elaborate the working of cognition. Hayles’ idea of Posthumansim is a process to categorize a collection of patterns. Some of these patterns cannot be easily categorized under any classification and these have been termed as

“hyperobjects”, a term devised by Timothy Morton(2013). Hayles is of the view that Posthuman condition allows us to view machines, animals, humans and ecology as the constituents of “distributed cognitive system” thus allowing all the species to work in collaboration. The text will give a deeper understanding of the working of distributed cognition system projected by employing the hyperobjects, introduced by Morton, which are causing Ecophobia. Modern psychological fears and anxieties are directly proportional to Ecophobia. Simon C.Estok(2009) has taken in the stance of Ecophobia in the backdrop of political and cultural perspective. He claims that it is, “A uniquely human psychological condition that prompts antipathy toward nature”. (p.1) It can result in “fear, contempt, indifference, or lack of mindfulness” (p.1). He further clarifies his stance in this regard and contends, ‘We may define Ecophobia as an irrational and groundless hatred of the natural world, as present and subtle in our daily lives and literature as homophobia and racism and sexism. (p.1) We may infer that Estok has brought all the anxieties and threats under the umbrella term of Ecophobia and declares that it has always been there in the unconscious of man. Considering it a serious condition, that afflicts people from all walks of life and from every community, Estok claims that it is man that has strained his relationship with nature. Blaming man’s activities, the ultimate reason of all psychological complexities, Estok urges us to rediscover our relationship with man. He perpetuates that we try to forget or ignore the things we abhor the most. For this he gives us the example of our waste material which we throw away. Getting rid of waste material is a form of escape from Ecophobia. He further argues that we inhabit garbage as much as garbage inhabits us. His concern over man’s indifference towards garbage hints Posthuman’s plight to handle their problems related to ecology and other living entities.

Fear is one of the most important themes of weird horror and science fiction where horror evocative language, monster depiction, anthropocene issues and enigmatic power of ecology introduced in science and weird fiction evoke repulsion and dread in the characters and readers alike. Fear of global warming, environmental degradation, oil spills are some of the favourite themes of Western Literature. Timothy Clark has labelled the fear of cosmic issues a kind of dread evoked by ‘hyperobjects’ due to the enormity of their size and incomprehensible nature of things occupying a vast place in space and time. (2013, p.1) The incomprehensible nature of ecological issues like global warming has been the dominant theme of this study where we will try to study Posthuman fears and anxieties.

The study in hand will give an insight to N. Katherine Hayles’ concept of ‘distributive cognitive system and randomness and pattern’ where hyperobjects ,introduced by Morton, of Area X will elaborate her idea of randomness and pattern about which she states that humans are one of the several patterns emerging out of randomness. She

mirrors the randomness of the universe to the patterns of humans, ecology, animals and plants and claims that humans are not in distinction to other species rather they are also a pattern like several other patterns abounding the Earth. She further contends that all things have their own cognitive system and follow their own intelligence patterns. The study in hand will also explore Timothy Morton's hyperobjects. He states that lack of familiarity with the hyperobjects of cosmos embeds fear paralysis, which is the fear of contamination, in the unconscious of Posthumans. It will be insightful to study ecological fears in the backdrop of Ecophobia which has been a controversial theme of our Posthuman world.

To assess the fear paralysis of cosmic powers among Posthumans and relate it to Ecophobia, Simon C. Estok declares that fear of ecology had always been there in our culture and played a significant role in shaping the future of science fiction. He blames media and governments for portraying ecology as something alien which needs to be abhorred and avoided. He terms it Ecophobia and calls it 'irrational'. He argues that Ecophobia is a counter response of human beings in order to overcome an inherent fear of being dominated by nature. Thus, Posthumans dominate nature in order to combat fear of ecology embedded in their psyche. Moreover, Lovecraft has also asserted that "A certain atmosphere of breathless and unexplainable dread of outer, unknown forces must be present." (p.1043) The present study explores Fear of contamination that has been a key subject of Annihilation, hinting at Posthuman plight which later on turned into Ecophobia. In the novel this fear of contamination has been broached at one occasion where the Biologist refers to it as:

*"We were to attempt no outside contact, for fear of some irrevocable contaminations." (p.9)*

In this token, the biologist talks about the fear of contamination of our world through Area X in Annihilation. Fear of contamination is embedded in the psyche of the expedition members entering into that Area in the novel. The biologist, who is the narrator, unveils that they were not allowed to make any 'outside contact'. Her emphasis on the word 'irrevocable contamination', illustrates the grimness of the situation. It suggests that whoever enters into Area X cannot turn back to the normal world nor is there any safe passage through which they can leave that Area in the novel. We also discover that fear of contamination from ecology is embedded in the unconscious of all the members as a political construct. Vendermeer has cautiously delineated schizoid state of posthumanists where they are unable to grapple the root cause of ecological disorders and are trying to dominate it to overcome their fear of ecology (Estok 2009). The lack of understanding of ecological issues has forced the Posthuman world to overcome it by contaminating it through waste material agency or cutting down of trees.

Estok states that the fear of ecology forces Posthumans to be aggressive towards ecology that is why Southern Reach is constantly hiding the truth of that Area from the masses and sending expeditions to discover its true nature. Thus, fear of contamination has been depicted as a political maneuvering by the Southern Reach; the agency which is handling this Area X is introduced as Southern Reach. Vendermeer has skillfully unveiled how Posthuman phobias and fears are inculcated in our unconscious. The biologist is the member of the 12<sup>th</sup> expedition to study Area X. Her expedition and all the other expeditions sent into Area X in the Annihilation novel confront it under a penetrating fear of being killed, attacked or suffocated by an alien force. As it has been stated the true nature of Area X in the novel is not yet discovered. Southern Reach has no idea whether there are some aliens, monsters or anything other than human which is occupying that Area. Thus, it is the fear of unknown and contamination which forced the expeditions to take different actions against nature. The depiction of Area X by the biologist reveals that there is no alien force. It seems that nature has started taking its revenge by camouflaging it from the outside world. Thus, the fearful paralysis of cosmic horror echoing in Lovecraft's literature through his depiction of Cthulhu finds its parallel in Jeff Vendermeer's Annihilation where animosity between nature and Posthumans has been the subject of discussion. Biologist's depiction of Area X and Southern Reach's precautionary measures taken against it approve Lovecraft's fearful paralysis found in Posthuman world. Lovecraft has talked about cosmic horrors through his depiction of Cthulhu, the monster, whose incomprehensible nature and enormous size made the humans feel helpless and powerless in front of it. Here we may argue that a comparison may be drawn between Cthulhu and Area X because both are difficult to be assessed and both evoke horror and dread among the humans. Fear of contamination is further explored where expedition members were not allowed to use their names, or anything related to their recent technology. The biologist states,

*“we were always strongly discouraged from using names.” (p. 10)*

All the expeditions stepping into the Area X acknowledge fearful presence of some alien forces. The schizoid state of psychologist (the leader of the expedition), anthropologist and surveyor (members of the expedition) in Area X and confronting the wild nature demarcates a line among humans, animals and ecology. Hayles idea of pattern and randomness seems to be fully operational in the text where Vendermeer suggests how all these patterns are embedded and interconnected to one another. Lack of understanding on the part of Posthumans has aggravated the situation where embodiment seems to be annihilated to reveal how man is dependent and just a pattern of randomness. Estok contends and I believe that this schizoid condition of Posthumans has been the result of our alienation towards nature and our misconception about hyperobject nature of cosmos which has further complicated and aggravated the

complexity of situation and driven the man further away from nature as it has been illustrated in the novel.

Posthumanism has introduced a new concept of the universe where all the living entities seem to be woven into a single thread. The removal of one thread may spoil the whole pattern. Thus we may argue that a new pattern emerges out of this new system of species though it annihilates the approved pattern of 'living beings' as Hayles put it in her conception of pattern and randomness. She argues, "Although these models differ in their specifics, they agree in seeing randomness not simply as the lack of pattern but as the creative ground from which pattern can emerge" (Hayles, 1999, p. 286) Humans are as much dependent on nature and animals as they are dependent on him. A fatal disease abounding man is 'belief in human uniqueness and our exaggeratedly hierarchical relationship with other species' (Goodbody, 2014, p. 64). Man's lack of understanding of his inter-connectivity to other species emerges in the form of Ecophobia. Southern Reach Trilogy details how Ecophobia and Posthumanism are interconnected to one another where alienation from nature leads to anxiety, fear and depression. The fear of ecology portrays man's dilemma in Annihilation where Biologist utters out;

*"Our instruments are useless, our methodology broken, our motivations selfish."(p.150)*

In the given instance, the use of phrases like 'motivation selfish', 'methodology broken' and useless instruments' highlight the need to reassess our position and connection with nature. The selfish aims of man have alienated him from other living entities and ecology where he has started making it a junkyard for all of his wasteful activities. Estok is of the view that the fear of garbage exhibits itself in the form of Ecophobia where garbage is considered a non-human agency trying to inhibit our world. Estok claims that garbage is not an outer agent rather it is an inner agent of humans. Vendermeer reveals hypocrisy and double-standards of Posthumans. Comparing Ecophobia with that of ecology provides the biologist a safe haven to draw her analysis. She audaciously claims that Posthumans have lost the capability to win over the battle against nature. Area X seems to have started reclaiming its place by not only occupying a specific area but also by expanding and replicating itself. Posthumans are immersed in self-annihilation where their perplexity lends itself to the shores of Ecophobia. The rendering of ecology as an enemy divulges the anxiety of posthumanists. Area X represents not the ecological collapse but rather human collapse. (Tompkins n.p.) Portraying human degradation alludes to a blurred demarcation between humans and animals.

### **3.3. Depiction of Tower:**

When the properties of one species are found in another one, it is termed as hybridization; a recurrent theme of Posthumanism. In scientific terms, it has been defined in the following words, “the process of interbreeding between individuals of different species [...] or genetically divergent individuals from the same species” (Wittler 2002). Blurring the boundaries between humans, animals and plants correlate Ecophobia and Posthumanism, where fear of hybridization places ecology man’s ultimate enemy. Vendermeer cautiously reveals this blurring of boundaries where Area X is mixing humans, animals and plants in a strange mysterious way. When biologist and other group members descend into the tower, she observes that tower resembles to a living creature. She blurts out,

*“The tower was a living creature of some sort. We were descending into an organism.” (p. 41)*

In the above-mentioned sentence, the biologist has revealed the interbreeding of living and non-living beings. She reveals that ‘tower was a living entity having its heart beat and feels like she is descending into the body of a living creature. There is no boundary-line between living and non-living beings in the novel. Vendermeer has quite skillfully employed the device of personification to highlight the humananimality of tower. The very first image of humananimality is ‘the tower/tunnel’. It does not fit into the category of building, human or animal yet it is made of living tissues. Tower is an example of Ecophobia where Advocates of Ecophobia negate polarity between humans/animals, living/non-living. The strange working of Area X as a living being is realized through tower. The biologist and the reader get a better understanding of area X through that tunnel. The knowledge of Area X being alive makes us realize the truth of this world where earth is providing us a living but is being exploited and polluted by the humans. It provides a bare subsistence not only for humans but also for animals but human arrogance is not allowing him to take care of it.

Biologist’s exploration of the tower as a living entity is further highlighted by her reference of the walls that were breathing. She feels like descending into a living creature as she reports in her diary,

*“The tower breathed, and the walls when I went to touch them carried the echo of a heartbeat... and they were not made of stone but of living tissue. ...” (p. 41)*

In the given token of the text, the resemblance between the tower and the creature highlights the mingling of living and non-living things. Her mentioning of ‘tower breathed’ and ‘echo of heartbeat’ reveals that Vendermeer has consciously blurred the



distinction between the animate and inanimate things to reflect the Posthuman society where we cannot find any distinction. She also observes that the walls were made of living tissues which hints it to be a monster or a living creature. The tower seems to be another example of hyperobjects where the biologist is unable to categorize it under a single category of living or non-living objects. Morton's hyperobjectivity is related to Ecophobia in a sense that the structure of the building defies the rules of architecture where it is placed under the category of humans thus annihilating the distinction between the living and non-living things. Here Posthuman theorist Hayles can also be referred as her idea of 'distributive cognitive systems' can be fully exploited in this novel where Vendermeer has skillfully blurred the distinction between the binary concept of living and non-living things. Similarly, the confusion of labelling it a tower or a tunnel connects it to Morton's idea of hyperobjectivity where humans are unable to classify it under a definite category. Thus, the whole of the novel is revolving around the theme of connectivity between Ecophobia and Posthumanism.

Tendency to promote 'other' in Posthumanism causes Ecophobia where dystopic illusions and myths of ecology invoke dread and anxiety. Ecophobia advocates mixing of humans, animals and machines. Genetic transformation and interbreeding caused metamorphosis to such a large extent that dolphin in the novel is having human eyes, biologist glows a phosphorescent, psychologists' arm grow stems and blossoms and a face looks like a horseshoe crab. All these images are the instances are of hybridization which evokes feelings of dread and fear among the readers and characters alike. On her encounter with the dolphin she states,

*“and it stared at me with an eye that did not, in that brief flash, resemble a dolphin eye to me. It was painfully human, almost familiar”. (p.97)*

Her use of animal imagery to refer to herself and to others is yet another example of harmonious blending of animals, humans and plants. She writes about herself in the following words, *“I rummaged like the rats and the silverfish” (p.116)* The harmonious coexistence of humans, animals and plants in Area X further extends theme of Ecophobia. Ferrando (2013) explains it thus, 'The human is not approached as an autonomous agent, but is located within an extensive system of relations.' (p. 32) The Biologist's keen observation and her seclusion in that area helps the reader to further explore the relationship between Ecophobia and Ecophobia.

### **3.4. Depiction of Area X:**

The novel portrays Posthuman dilemma of ecology resulting in Ecophobia by the description of Area X. It can be described as “mythical land Away” (p. 31) for

everything happening in that area is strange and unable to be dealt with. Estok is of the view that waste material produced by humans is a living reality and we need to accept it instead of running away from it. It has been contended that human waste and pollution does not exit this world rather that becomes a part of it. Thus the world is a living entity which needs to be acknowledged in order to wrestle with its problems. Morton argues that Understanding the hyperobject Earth and the hyperobject biosphere reveals surfaces so interconnected and complex that nothing can be easily separated or extracted. (2013) In the context of this reference, we may argue that Area X appeared as a consequence of environmental pollution and waste agency. Human waste material is presented in the form of ‘Mythical Away’ and the depiction of Area X awakens us of the power it holds. Estok perpetuates that we need to accept it instead of abhorring it or running away from it. This theory of Estok echoes in the novel where Vendermeer urges us to establish a communion with ecology in order to resolve its mysteries and evils. Morton argues that we need not to commit a suicide by jumping into a honey jar but we need to establish awareness by accepting that we have already entered into that jar. (p.32) Human knowledge will not affect the earth in either way; rather it is earth that will affect the humans so we need to expand our understanding of ecology. When biologist visits the tower, she observes slime left over the stairs by the crawler. Here the word she employs ‘viscous’ resembles the one used by Morton to describe hyperobjects. She utters out,

*“The residue sparkled with a kind of subdued golden shimmer shot through with flakes like dried blood... ‘It’s slightly viscous, like slime,’ I said. ‘And about half an inch deep over the step.’” (p. 53)*

The reference of blood into that slime hints the idea of interconnectedness of humans, animals, monsters and nature. The viscous nature of that slime suggests that Area X is deeply interconnected to human beings. Hayles ‘embodied consciousness’ seems to be at work in the representation of tower as it is having a body and seems to communicate with the others through its written text.

### **3.5. Depiction of the Crawler:**

By expanding on the subject of monster and ecology, we may claim that Posthumanism and Ecophobia stress the need to erode the boundary-line among humans, animals and machines. Monsters defy the common human perception and may be placed under the category of ‘other’. Morton has identified them as ‘hyperobjects’. He defines hyperobjects as the objects which are gigantic and occupy a huge place in time and space. In this regard, the novel is an insightful study of these hyperobjects causing the Posthuman horror which has been deeply interconnected to waste agency. Hayles’ ‘distributed cognitive system’ finds its echo in the figure of Crawler. Depiction of

crawler becomes all the more suggestive on its first encounter with the biologist. Here we observe the same dilemma of classification that has been observed in the categorization of tower/tunnel. She states,

*“It was a figure within a series of refracted panes of glass. It was a series of layers in the shape of an archway. (p. 176)*

The crawler, though categorized as Other in the novel, is also related to humans. The biologist finds human brain tissues in her sample which she collected from the tower. She exclaims,

*‘The cells were remarkably human, with some irregularities’ (p. 72)*

Later on, her confirmation of certain irregularities affirms that monster is not fully made of human cells. Her inability to classify the Monster under a certain category reveals that she has not yet comprehended the deep working of Area X where all the species are interconnected and dependent on one another. She has also not yet realized that Area X has its own intelligence system. Later on, her acceptance of acceptance and respect for the other creatures as equals, reveal her metamorphosis. She has now started exploring the true nature of crawler as she utters out,

*“Perhaps it is a creature living in perfect symbiosis with a host of other creatures (p. 191.*

Here her acceptance of the intelligence of Crawler reveals her realization of the presence of another system that is quite different from the one which we inhabit. Traces of ethical Ecophobia can be envisioned in her agreement of that alien system as an equal and not inferior to the human system. Thus, Morton’s hyperobjects need to be comprehended in order to explore the truth of Area X and its occupants. The inability of the expedition members to comprehend the reality of these things causes Ecophobia. Hence it is proved that Ecophobia is an irrational and groundless fear specifically hyped by media and lack of understanding on our part. Hayles’ idea of ‘distributive cognitive system’ can also be understood fully in the above-mentioned lines where everything is working according to its own cognitive system. A close analysis of the novel reveals that Area X and its occupants are in perfect symbiosis with the ecology where different patterns are in perfect harmony with one another and highlight the necessity to reconsider our relationship with ecology.

### **3.6. Depiction of the Biologist:**

Ecophobia is not limited to Area X and the depiction of the crawler. The portrayal of the biologist is yet another example of Ecophobia. Vendermeer has introduced Posthumanism through her transformation at two levels: biological and ethical. Her acceptance of other life forms as equals exhibits ethical Ecophobia. Her transformation through inhalation of spores exhibits her biological transformation whereupon she develops emotion of compassion and love for creatures other than human. She is now connected to Area X in more than one way. Her life history reveals that she has led a life in seclusion and is more closely connected to nature than other characters introduced in the novel. Her childhood memories of living in perfect symbiosis reveal her profound love for nature. Despite being alone in her childhood, she has developed a deep kinship with animals and aquatic life. Her study of tidal pool both as a child and a professional reveal Posthuman traits in her character where she feels compassion for other than humans. Her troubled marriage further moved her away from society. Her decision to venture into Area X is a proclamation of denial of human life. When they enter into Area X, it is she who finds that they were being tricked and hypnotized by the psychologist. When she inhales spores from W letter, she starts examining physical changes in her body.

***“I had felt something enter my nose, experienced a pinprick of escalation in the smell of rotting honey”. (p. 25)***

Her transformation makes her more than humans as she feels a kind of brightness spreading in her person. Though she is still human but her bodily changes and enhanced senses place her in close affinity with other living beings. Here we can assess her character under Hayles’ definition of ‘embodied consciousness’ as she argues, “We do not leave our histories behind, but rather, like snails, carry it around with us in the sedimented and enculturated instantiations of our pasts we call our bodies” (Hayles, 2003, p. 137). The biologist also develops compassion for other living beings. The brightness experienced by her after inhaling spores is not comprehensible for her. Here Morton’s hyperobjects can be applied to her brightness as she began to experience enhanced senses. The viscous, non-local hyperobjects can be exemplified in her use of ‘rotten honey’ image to illustrate her strange experience of objects. Her metamorphosis initiates after inhaling the spores and interlinks her to the viscous nature of Area X. Her transformation can also be assessed in the light of symbiogenesis; a term employed by Donna Haraway (2014) to explain how all living beings live in perfect harmony with one another even at the minutest level. She argues, “Trying to make a living, critters eat critters, but can only partially digest each other. Quite a lot of indigestion, not to mention excretion is the natural result, some of which is the vehicle for new sorts of complex patterning’s of ones and manys in entangled association.” (Haraway, 2014, p. 112) She is thus a perfect example of Posthumans living in perfect harmony with other life forms

around her. Hayles idea of randomness finds its full potential in the character of biologist where she is just another pattern out of several other patterns abounding earth. We can also see how Area X and the biologist share certain common traits and cells reproduction. When the biologist examines her own cells, she realizes that they have started multiplying at a very fast rate. The character of the biologist reveals traces of ethical posthumanism through her acceptance of other life forms as equally capable and significant as humans. Her respect for the moaning creature, the crawler, the tunnel reveals her gradual transformation. Biologist's character reveals how Ecophobia is inculcated in Posthumans about ecology and human beings are manipulated by the authorities. Hypnotic suggestions employed by the psychologist mirror the working of authorities to control the masses that led towards controlled programming of the humans. In this way, all the objects, people, creatures and environment depicted in the novel is immersed in Posthuman Ecophobia and mirrors the heightened tension between man and ecology.

#### **4. Conclusion**

It is observed in the study that Posthumanism and Ecophobia are interconnected, causing anxieties and fears among Posthumans. Vendermeer has skillfully revealed a link between Posthuman anxieties and ecological monsters in the form of Area X and the Crawler. Annihilation demonstrates that Posthumans need to understand the significance of other living species and be in affinity with nature. The article also shows that Ecophobia is an irrational fear, and it is a political product used to keep the masses away from reality. Similarly, the monster of ecology introduced in the novel needs to be embraced instead of abhorred. To sum up the discussion, we can assert that Annihilation aptly captures the postmodern dilemma of fears and anxieties. Vendermeer's novel can truly be categorized as a Posthuman study of Ecophobia.

Focusing on the interweaved relationship between Posthumanism and Ecophobia, highlighting their impact on anxieties and fears among Posthumans, pave way for future researches. It advocates for embracing ecological monsters rather than rejecting them, emphasizing a shift towards coexistence. In essence, the study positions Vendermeer's novel as a pivotal Posthuman examination of Ecophobia, pointing towards a broader exploration of Posthuman anxieties and their ecological implications in the future researches.

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