Ecotone Aesthetics and the Anthropocene in Krishand's Aavasavyuham: *The Arbit Documentation of an Amphibian Hunt*

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Abstract

Aim: *This paper attempts to decipher how Krishand's movie, Aavasavyuham: The Arbit Documentation of an Amphibian Hunt, mobilizes visual, rhetorical, and ecotone aesthetics to compel viewers to take cognizance of and own up to the responsibility of the Anthropocene, which has visible marks on Puthuvype, an eco-sensitive zone in Kerala. This paper also aims to examine how the movie situates viewers at the ecotone of adjacent ecosystems, themes, cultures, and economies.*

Methodology and Approach: *The authors have analyzed the film Aavasavyuham: Using the framework of ecocinema and filmic ecotones, the paper attempts to fathom how Aavasavyuham has depicted the impact of human intervention on earth's bio-geographical composition.*

Outcomes: *Through the examination of the movie, the researchers have found out that though the wetlands as represented in Aavasavyuham, are home to diverse life forms, they are sites of exploitation, reflecting the inherent tension of ecotonal regions.*

Conclusion: *The shift to anthropocentric models has led to a disregard for the ecological significance of transitional spaces. The ecotonal spaces depicted in the movie expose the environmental catastrophe of pollution and the gradual extinction of highly adaptable vegetal and animal species.*

The concept of the Anthropocene has emerged as a critical focus across multiple disciplines, each exploring the profound impacts human beings have had on Earth's systems. This concept encapsulates a range of human-driven transformations on earth: climate change, pollution, marine and terrestrial toxicity, the alarming rate of biodiversity loss, and the perilous changes in chemical composition of soils, oceans, and the atmosphere. It highlights disruptions to essential natural processes, such as the nitrogen cycle, underscoring that humanity has evolved into a force as potent in shaping Earth as natural phenomena like volcanic eruptions, tectonics, solar activity cycles, and Earth's orbital variations. This era is defined by an increasingly artificial biosphere, escalating temperatures, and heightened risks from catastrophic events, with some scientists even warning of a potential ice-free future.

Clive Hamilton et al in *The Anthropocene and the Global Environmental Crisis: Rethinking Modernity in a New Epoch* (2015), describe the Anthropocene as an age where humanity's influence on the environment is unmistakable. "The atmospheric shift from carbon emissions, alongside the depletion of biodiversity and the rise in extreme weather events, signals a hotter, less hospitable Earth" (Hamilton et al. 5). This narrative of the Anthropocene underlines the inadequacy of depending solely on technological developments to mitigate humanity's environmental impact. It emphasizes the urgent need for transformative changes in human lifestyles, particularly in production and consumption patterns. Addressing this crisis demands a profound reorganization of socioeconomic systems, prioritizing solutions that move beyond technological fixes. Central to this shift is the role of media and art in educating and inspiring the masses for sustainable practices and ecological consciousness. Stephen Rust et al in *Ecocinema: Theory and Practice 2* remark that "In this utopian current, film as medium and cinema as a mode of experience are mediations that suture us back into a world that otherwise slips away…cinema's obligation is to horrify its audience, to force them to change or help them envision some form of survival" (Rust et al. 3).

Eccentric discourses and texts reflecting on the Anthropocene often evoke the concept of ecotone. An ecotone often acts as a thin boundary between ecosystems as is a marshland or a wetland which is located between a river or sea

and the land. Ecotones or landscape boundaries are of great environmental importance as they contain a large variety of fauna and flora that are adapted to both ecosystems and play a part in nourishing the life cycle requirements of many organisms. Ecotones, marked by dynamic biotic-abiotic interactions, play a vital role in managing and restoring changing environments. Ecotones are more sensitive to environmental changes and human activities due to their transitional nature. This makes them critical indicators of ecological health. Research has explored their role in biodiversity maintenance, response to environmental changes, and utility in ecosystem restoration. Their sensitivity to climatic and anthropogenic pressures makes them essential in studies about global changes. Key international projects, such as UNESCO's Man and the Biosphere Programme (MAB) and the International Geosphere-Biosphere Program (IGBP), have underlined their importance in managing global ecological transitions.

The concept of Anthropocene features prominently in contemporary eco-themed discourses in literature, cinema, and other media. Several visual and cinematic texts have referred to the catastrophic signs of the Anthropocene apart from raising alarms about the current planetary predicament. In the book *Inhospitable World: Cinema in the Time of the Anthropocene*, Jennifer Fay looks at cinema as a "technological product of the Anthropocene," and demonstrates how an "unnatural and unwelcoming environment as a matter of production, a willed and wanted milieu, however harmful… is inseparable from but also made perceivable through film" (Fay 4). She observes that Cinema plays a critical role in helping us confront the Anthropocene, as it "enables us to glimpse anthropogenic environments as both an accidental effect of human activity and a matter of design" (4). Viewing through this lens, Fay suggests that films reflect human impact on the environment and actively shape our understanding of these built landscapes as both unintended and purposeful outcomes of human endeavour. Fay opines that as human development escalates, it often deteriorates rather than enhances the quality of life, transforming the world into an increasingly "inhospitable" place. This paradox highlights a shift where the promise of progress and improvement is overshadowed by adverse impacts, leading to new forms of displacement and insecurity.

When used in cultural texts, an ecotone can be considered as a zone of tension which reveals what is called the edge effect or the changes in population and community (not necessarily only human) that happen at the boundary of two habitats. Apart from being the buffer zone and the bridge of gene flow from one population to another, an ecotone can be considered as a literary trope, a narrative strategy, linguistic style and a cultural symbol. These create a subtle, immersive shift that mimics natural ecotones that are highly dynamic and diverse, making them vibrant zones of ecological interaction. Filmic ecotones aim to replicate this richness, providing a fluid yet engaging transition in thematic or narrative spaces. In the article "Cinematography in the Landscape: Transitional Zones in Themed Environments" Benjamin George and Dave Gottwald observe how the diversity of an ecotonal landscape contributes to its vibrancy. They state "Again, we stress our approach is metaphorical. In considering this complexity—structured, layered, and rich—experientially, we find that the multi-modal approach to transitions creates spaces which are also vibrant. The diversity of filmic grammar employed results in a transition between themed areas which feels uncannily natural and unplanned to the theme park guest. As in the natural world, intermixing often equals richness" (George 59).

George and Gottwald continue to illustrate how multimodal transitions in movies such as *Galaxy's Edge* layer multiple design elements, lighting, structural features, and cinematic techniques (e.g., cuts, dissolves, or irises) to create a subtle, immersive shift that mimics natural ecological edge conditions where biodiversity thrives. According to them, this method enriches both cinematic and thematic spaces, helping transitions feel authentic rather than forced. One might consider ecotone and edge effect as critical categories in the analysis of ecologically themed narratives that are set simultaneously on land and water.

The concept of "filmic ecotones," a metaphorical approach to creating rich, layered transitions in thematic or cinematic environments can be effectively applied in the study of A*avasavyuham*. Made in the style of a mockumentary, *Aavasavyuham* progresses through several narrative voices, about the life and death of the protagonist Joy, who had metamorphosed into an amphibian before being killed. The narrative extends over to different timescales ─ Joy's life at Azhikode, his friendship with Vava and Kochuraman at Puthuvype, the

transformation into an Amphibian, interviews with locals after Joy's murder, and real-life footage of protests happening in Puthuvype against unsustainable development. Nevertheless, these are layered in a way that feels coherent and organic. The film is a documentation of the ecological and societal consequences of anthropogenic climate changes. Much of the movie is set in Puthuvype, Azhikode, and surrounding places. Because of the proximity to coastal habitats, the wetlands in Puthuvype and Azhikode, support a high degree of species diversity. The movie's main characters belong to the fishermen communities in Puthuvype and Azhikode. Krishand chronicles their life and struggles in the context of establishment of Kochi LNG Terminal – a major Liquid and Natural Gas regasification terminal. Puthuvype is also located close to the Kochi Port and its International Container Transshipment Terminal (ICTT), also known as Vallarpadam Terminal, which serves as an important node for maritime trade in Kerala.

In his research article "Promoting the Recovery of a True Mangrove-Avicennia Marina in Ecogeographic Area of Puthuvypeen, Kochi, Kerala", Sreekanth P M describes how the mangroves in the Puthuvypeen area, classified as *Avicennia* mangrove forests, which could once withstand extreme salinity, poor freshwater inflow, and pollution has now become severely damaged. He observes that large-scale destruction of mangroves for infrastructure development, such as the LNG terminal and associated road construction, has caused significant ecological damage. The remaining mangroves are degraded, with stunted, juvenile, and dead trees dominating the landscape. He adds: "Migratory birds sit on top of these stumps, looking confused at what was once home to their parents. Mangroves of this area are systematically destructed by dumping mixtures of slurry and chemicals" (PM Sreekanth 34).

Aavasavyuham serves as a documentation of the delicate wetlands and coastal areas of Puthuvype. It highlights the detrimental impact of industrial developments, as cited in Sreekanth's study, on local ecosystems and also on the livelihoods of fishing communities. The movie impels the audience to reflect on the environmental and social costs of flawed and unsustainable development practices. In *Aavasavyuham*, the mangroves represent a transitional zone that supports rich biodiversity and mediates between land and water. Krishand's

movie skilfully employs the aesthetics of ecotones to critique the destructive impacts of the Anthropocene by weaving together multiple forms of transition.

The film's mockumentary format, combining cinema and documentary aesthetics, lends authenticity and layers to the narrative. The use of multiple narrative voices and perspectives reflects the diverse and often conflicting viewpoints on sustainability, development, and conservation. There is a blending of documentary-style narration with surrealist imagery, creating a hybrid space where both human and ecological perspectives coexist. This resonates with the "multi-modal" approach of filmic ecotones, which use multiple narrative and cinematic techniques to transport audiences between contrasting environments. It portrays literal ecological transitions through spaces like wetlands, where water meets land, highlighting their significance and vulnerability. The protagonist, Joy, undergoes a physical transformation into a half-amphibian, symbolizing the merging of species boundaries and humanity's complex relationship with nature. The film juxtaposes natural hues with lifelike, documentary-style imagery, creating a compelling blend of realism and artistic expression. Thematically, it blends the mode of magical realism with the narrative techniques of documentary making. Krishand makes use of a variety of techniques like dissolves, crossfades, drone shots and handheld camera shots to transition between narrative layers (people talking to the documentary camera and the people in Joys world). The narrative swings from centering on conservation to calling attention to survival, suggesting the intensifying exigency of ecological crises. Through these interwoven transitions, *Aavasavyuham* delivers a poignant critique of humanity's environmental impact while underscoring the interconnectedness and fragility of ecosystems.

Puthuvype, the setting of *Aavasavyuham*, is characterized by physical ecotones such as mangroves, beaches, and ports. The mangroves, transitional zones of wetlands between freshwater and saltwater, serve both as biodiversity hotspots and as powerful metaphors for the fragile equilibrium of coexistence. The film opens with an aerial shot, capturing a breathtaking expanse of a waterbody framed by dense mangroves. This airborne perspective establishes a sense of ecological magnificence, whereas the next shot of a girl rowing a small boat brings in the human element, preparing the audience for a narrative on the

coexistence of natural and human worlds. The juxtaposition of the vast landscape and the solitary figure creates a visual and thematic interplay that foreshadows the film's exploration of ecological fragility and human impact. The film captures the wetlands through deeply saturated hues, and intense imagery, almost rendering them as a character in their own right. Close-up shots highlight the rich diversity of animals, insects, and birds navigating the waters. The presence of multiple species, such as frogs, snakes, and birds in the shots, underscores the edge effect, where biodiversity flourishes at the ecotone. However, this richness is contrasted with the vulnerability of these species to habitat destruction. The film's depiction of these species serves as a metaphor for coexistence and the tensions inherent in transitional spaces, reflecting the broader clashing yet symbiotic relationships in the Anthropocene. These images are put side by side with shots of man-made structures in the estuaries and sea, including fishing nets laid out for the catch, emphasizing the interplay between nature and the built environment.

In the parallel narrative, environmental activists, scientists, and academicians recount the devastating toll of unchecked development on biodiversity, stating that the planet has lost "204 plant species, 21 species of fishes, and 238 species of birds on the pretext of development"(*Aavasavyuham* 0:57:08 - 0:57:14). An environmental activist further emphasizes the gravity of the situation, adding, "200 acres of mangrove has been removed in the area" (*Aavasavyuham* 0:57:30). He also highlights how the proposed development projects have completely disregarded the livelihoods of local fishermen. The visual then transitions to a scene of fishermen sitting despondently on the coast, their fishing nets lying unused. The vulnerability of ecotonal regions is further emphasized through references to Cyclone Okhi. Madhusmita's account of her son's death in the cyclone and the scene where the inhabitants of Puthuvype and the media ask the district collector about the yearly sea flooding at Chellanam is deftly placed in the narrative to draw attention to the escalating threats posed by climate change and rising sea levels in these fragile zones, backing the movie's critique of development narratives that prioritize profit over ecological and human well-being.

Aavasavyuham exemplifies the use of ecotone aesthetics to provide an impressive framework for exploring the tensions between human activity and

ecological fragility. The accounts of key narrative voices like Susheelan Vava and Murali illustrate the disruptions caused by industrial development and invasive species, offering layered metaphors for the Anthropocene's clashing yet interconnected relationships. The mangroves are destroyed by landfilling for projects like the LNG terminal, says Vava to the documentary camera. The destruction of mangroves for landfilling projects, as highlighted by Vava exemplifies how such disruptions of transitional spaces undermine ecological balance. Mangroves, which serve as dynamic transition regions, are typical instances of areas where the "edge effect" plays a significant function. This phenomenon, takes place at the boundaries between different ecological groups and results from the juxtaposition of contrasting environments within an ecosystem. Salit Kark explains, "Edge effect refers to how the local environment changes along some type of boundary, or edge and how biodiversity is affected by such edges" (Kark 233). The removal of mangroves not only disrupts this delicate balance but also diminishes the biodiversity they support. As Robert M. Ewers et al. observe, "Understanding edge effects is crucial for effective management and conservation strategies in fragmented landscapes, as they can have profound implications for species that are negatively affected by habitat boundaries" (Ewers 1). Thus, the destruction of mangroves weakens critical ecological processes and indicates the broader consequences of unsustainable industrial development.

The film underscores environmental catastrophe through recurring references to dolphins, significant as the destruction of mangroves affects dolphin populations that rely on the abundance of prey and the ecological balance in these edg e regions. For example, when Madhusmita recounts finding a strange amphibian in her house,later revealed to be the metamorphosed Joy, the police say: "It would have been a dolphin, as it is a very common phenomenon there, and they move in through the backwaters" *(Aavasavyuham*1:20:29), stressing the normalized presence of dolphins in these areas before human activity disrupted their habitat. Dr. Sebastian Paul further explains this phenomenon, stating, "When saline water flows into the backwater, these dolphins travel alongside into the land" (*Aavasavyuham* 1:21:27). However, another character draws attention to the fact that it was after the establishment of Vallarpadam and the Vypin LNG terminal that dolphins stopped moving toward the inside. This observation links

the fall in dolphin movements to industrial developments. However, when he adds that "During Covid times, in 2020, the sea traffic decreased and dolphin sitings became more frequent during high tides at Fort Kochi" (*Aavasavyuham* 1:21:37), it draws attention to the cascading effects of these changes. The correlation between human absence and ecological recovery performs as a critical assessment of the effect of anthropogenic pressures on fragile ecotone. These nuanced accounts highlight the consequences of environmental degradation, particularly in regions like Puthuvype, where mangroves and backwaters once nurtured rich biodiversity. Krishand skilfully focalizes dolphins and frogs as the keystone species of the ecotone, implicating that with the disappearance of these creatures the concerned ecotone too will vanish. In the article "Defining the Anthropocene" Simon L. Lewis and Mark A. Maslin observe how human actions, such as the movement of organisms across regions, can lead to unintended ecological consequences, including species invasions and homogenization of ecosystems:

> Species removals are non-random, with greater losses of large-bodied species from both the land and the oceans. Organisms have been transported around the world, including crops, domesticated animals, and pathogens on land. Similarly, boats have transferred organisms among once-disconnected oceans. Such movement has led to a small number of extraordinarily common species, new hybrid species, and a global homogenization of Earth's biota. (Lewis et al 172)

Vava's account of snake eggs transported in soil from eastern Kerala for landfilling in Puthuvype illustrates a localized example of how human-induced translocations disrupt native habitats. The vipers adapt and spread, thriving in the altered ecosystem, symbolizing the unpredictable ecological shifts in liminal spaces disrupted by human interference. The presence of these snakes reflects the tension inherent in ecotones, where the interplay between native and foreign species creates both ecological enrichment and conflict. Also, Dr. Sebastain Paul and Murali recount how African snails arrived as stowaways on timber ships from Burma. These invasive snails, flourishing in the transitional zones of Puthuvype, destroy crops and further disrupt local ecosystems. Their spread underscores the Anthropocene's broader narrative of unintended consequences, where global trade and industrialization create ripple effects in fragile ecosystems.

The many metaphors present in the narrative illustrate the ecological truth that boundaries between ecosystems are not rigid. "The land is no different from the ocean. Look at the turtles. We find them in land and water. Snakes are sea snakes in the ocean and checkered keelbacks on land. Dogs on land are seals in the water. Crabs in water are spiders on land. The ocean has plants and the ocean has trees. Horse is sea horse. however, the land doesn't have blue whales. Sea doesn't have humans either" (*Aavasavyuham* 0:04:31 - 0:04:57). By identifying parallels between terrestrial and aquatic species Kochuraman highlights how ecotones serve as bridges where life adapts and thrives in transition. His reflections set the movie's tone and context for the audience and poetically emphasize the fluidity and interconnectedness of life across terrestrial and aquatic ecosystems. In wetlands, this blending creates unique opportunities for life forms to exploit both environments.

The transition of fishermen to alternative occupations illustrates how boundary crossing occurs in ecotones, even though boundaries play a crucial role in maintaining the balance and identity of these spaces. It also calls attention to the socio-economic impacts of industrial encroachment on traditional livelihoods. In one scene, Raghavan expresses his intent to leave fishing to work as a construction labourer, symbolizing the diminishing viability of his ancestral profession. The government's bounty system for eradicating snails, and fishermen like Raghavan breeding them for profit, illustrates the socio-economic complexities inherent in ecotones. This paradox—profiting from ecological degradation—encapsulates the tension between survival and sustainability that defines life in these transitional spaces, mirroring the broader, conflicted relationships of the Anthropocene. The fishermen like Raghavan and Vava view survival and conservation as both intertwined and conflicting ideas, highlighting the ethical dilemmas they face. Vava's lament that he avoided fishing for a long time because he would only get plastic or very little catch highlights the direct consequences of environmental degradation on daily sustenance. However, when Joy comes to live with them, both Raghavan and Vava experience an unprecedented period of successful fishing. Krishand's narrative suggests that a harmonious connection with nature—personified through Joy—enables not only ecological balance but also a fulfilling and sustainable livelihood, reinforcing the

film's central theme of coexistence. Lissy and Kochuraman, deeply attuned to the rhythms of nature, are the only characters who fully understand and accept Joy, further dissolving the boundaries between human and non-human perspectives. Lissy's attraction to and Kochuraman's empathy for Joy symbolize a rare harmony with the natural world, contrasting sharply with the exploitative tendencies of capitalist ideologies. Together, these threads illustrate how reconciling human lives with ecological systems can enable both to thrive in the fragile spaces of ecotones.

Joy, the protagonist of *Aavasavyuham*, embodies the liminality inherent in ecotones, serving as a living metaphor for the transitional spaces he inhabits—mangroves, beaches, and wetlands. As a half-human, half-amphibian figure, Joy's dual identity parallels the amphibious nature of these ecotones, where land and water intermingle to create spaces of ecological richness and vulnerability. These hybrid landscapes, which are characterized by their biodiversity and inherent tensions, are mirrored in Joy's body itself, which becomes a site of thriving biodiversity. For instance, the doctor who treats Joy reveals that his body harbours worms, and later, a lab analyst recounts how these worms, when sealed in a glass jar, transformed into a self-sustaining ecosystem with leaves and flowers in a Kafkaesque transformation. In the film's epilogue, Joy's skeleton, displayed in the French Museum of Natural History, houses frogs and worms, further reinforcing his body as an ecotonal space—a threshold where life emerges and adapts. Joy's existence blurs the boundaries between human and non-human, much like ecotones merge distinct ecosystems into hybrid zones that are both fertile and unstable. His metamorphosis recalls transitional species such as frogmanders, which once thrived during evolutionary history but have since been lost due to ecological disruptions says the character of the biologist in the media discussion. By embodying the precarity of ecotones, Joy becomes a symbol of the Anthropocene's destabilizing impact on ecological edges and biodiversity. His transformation draws attention to the vulnerability of these transitional spaces, serving as a haunting reminder of the irreversible consequences of human intervention in the natural world. Joy's metamorphosis, positioning him as both a victim and a witness to environmental degradation is a reminder of the role of the Anthropocene in erasing species and destabilizing ecosystems.

In *Ecomedia* Sean Cubitt observes how films like *Soylent Green* and the *Mad Max* series depict dystopian futures where unchecked industrialization and technological domination lead to ecological collapse. He highlights how industrial and mechanistic thinking are often depicted as antagonistic forces in eco-apocalyptic narratives "In these movies and many more, military or industrial machines, implicitly or explicitly, have to bear the blame for the destruction of green world. Worst still, such movies draw on a Romantic tradition stretching back through Emerson to Blake, in which machines and mechanistic thinking stand between the human and the green world, barriers to vision and communication" (Cubitt 16).

The destruction of this fragile ecosystem by human encroachment and industrial development embodies the mechanistic thinking Cubitt critiques, where short-term economic gains take precedence over ecological balance. The film portrays these ecological disruptions not only as physical damage to the environment but as a cut-off of the intricate communication and interdependence between humans and the non-human world, echoing Cubitt. The voices of scientists (though fictional) and activists bringing attention to ecological concerns, are consciously intermingled with the contrasting capitalist voices that drive industrial projects, creating a sense of an ecological edge condition (a space where human intervention disrupts but also interacts with natural ecosystems.) Furthermore, *Aavasavyuham* uses ecotone aesthetics to emphasize the vulnerability and importance of these liminal spaces. By focusing on the amphibious protagonist and the mangrove ecosystem, the film visually and narratively positions the ecotone as a metaphorical barrier. Just as Cubitt discusses machines as barriers to vision and communication, the mechanized destruction of mangroves in *Aavasavyuham* symbolizes humanity's disconnection from the natural world, severing the "green world" from the human sphere.

Aavasavyuham is a critique of anthropocentric paradigms that disregard the ecological significance of transitional spaces. Krishand draws on ecotone aesthetics, to represent the wetland ecosystem at Puthuvype, by blending documentary-like narrative spaces, pseudo-scientific explanations, and fictionalized accounts. He creates a collage that underscores the necessity of preserving these fragile boundaries and encouraging a rethinking of

industrialization and development to re-establish harmony between humanity and nature. The wetlands as represented in *Aavasavyuham*, are home to diverse life forms but are also sites of exploitation, reflecting the inherent tension of ecotones. Weaving together ecological, human, and magical narratives, the film constructs an aesthetics that mirrors the complexity and vibrancy of natural ecotones.

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