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Grievable/Disposable lives in the Anthropocene culture: Ecoprecarity, indigeneity and ecological wisdom in *Kaala Paani*

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Abstract

Traditional media and contemporary digital communication platforms have been instrumental in developing environmental awareness and educating the general public about the entrenched dangers of ecoprecarity. Visual references like ecocinema, short films, documentaries and television series have shown how the Anthropocene is affecting the world and how important human-centred survival models are. These visual references have played a big part in ecological knowledge and shown possible ways to use socio-ecological practices. The present article critically analyses *Kaala Paani*, a contemporary Indian Hindi-language survival drama seven-episode television series, and foregrounds how this series not only represents the ecological issues we face but also fosters a stronger sense of ethical accountability towards the long-term impact of our decisions and actions on the natural environment. Through its focus on dramatizing environmental toxins and the power of indigenous and tribal knowledge to fight them, the series effectively tells viewers about the harmful effects of illegally exploiting the environmental buffer zone and the results of capitalist-driven developmentalism. The series also inspires them to recognize the overwhelming existence of nature that the discourse of the ‘Anthropocene’ has downplayed.

1 | ENVIRONMENT SCREENED: WEB/TELEVISION SERIES AS MEDIUM

The concomitant expansion in many modes of environmental communication over the past 50 years, particularly the emergence and widespread use of visual media, is largely responsible for the apparent

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popularity of the environmental discussion and its terminology. The conventional mediums of print and television, along with modern digital communication platforms, have played a crucial role in establishing the notion and scope of 'the environment' and in raising awareness about challenges and issues pertaining to the environment among all sections of the masses (Hansen & Cox, 2015, 1). Studies evaluating popular representations of the environment have progressed significantly from analysing language and rhetoric to focusing on the visual aspect itself, relying on 'well-trodden frames of reference to make issues recognizable to audiences' (Cox & Depoe, 2015; Hansen & Machin, 2013, 157). These frames of reference, which serve as vehicles for creating meaning in relation to environmental awareness, communication and education, include visual mediums, such as ecocinema, short films, documentaries and television series that address environmental and sustainability issues. The visual medium of the screen environment functions as an 'interrogative structure', exploring the ecological inquiry of 'what-is-it?' through the use of motion and montage (Morton, 2009, 175; Pick, 2014, 32). The interrogative structure in this context challenges or questions anthropocentric discussions and representations of the environment and other structures of power (Takahashi & Meisner, 2012), especially those that have harmful effects on ecosystems, both human and non-human. This mediated depiction prominently addresses an environmental issue, making it an overarching subject in the narrative's underlying message. Some of the environmental issues include conservationist thinking, preservationism, progressive and radical illustrations of the environmental movement, deep and social ecology, ecofeminism, 'cult of wilderness', rights for animals, developmentalism and the Promethean impulse to dominate nature (Ingram, 2004; Ivakhiv, 2008, 4–5).

Screening the natural world has the potential to shed light on previously unnoticed aspects and serves as a means of encouraging and inspiring action. Visual allegories play a crucial role in helping us imagine climate change. Affective imagery, which includes narratives, oral testimonies, graphical representations, emblematic visuals, auditory stimuli and visceral sensations, can effectively convey the impact of climate change, highlighting the loss that viewers from different continents may not have personally experienced. Furthermore, the era of visual representation in the Anthropocene culture signifies the beginning of a new phase of environmental activism (DeLoughrey, 2019; De Gobbi, 2020, 6–10). This suggests that visual media can effectively disseminate environmental education and socio-ecological wisdom. In anticipation of this, contemporary Indian filmmakers have come up with several web series and television shows that address environmental issues, the climate crisis, human–wildlife conflict and the imminent extinction of non-human entities. The most recent examples include *The Jengaburu Curse* (2023), a climate fiction thriller that investigates the plundering of natural resources to meet humanity's insatiable demands, leading to detrimental outcomes. *Poacher* (2024) is an Indian Malayalam-language crime drama miniseries that delves into the grave issue of ivory poaching in India, including the illegal killing of elephants, and emphasizes the urgent need for sustainable wildlife conservation. The series, therefore, addresses environmental justice questions and contributes to fostering a necessary cultural transition that is more inclined to advocate a biocentric perspective that expands our 'conception of global community to include non-human life forms and the physical environment' (Branch et al., 1998, xiii). The premise of folklore surrounding supernatural beings and deities that safeguard the forests and prevent individuals from entering the woodlands, thereby emphasizing the significance of environmental preservation, is explored in *Inspector Rishi* (2024), a Tamil language television series that combines elements of horror, crime and drama. These series aim to capture the various ecocritical efforts that strive to overcome 'the cultural blockages that thwart effective actions against environmental crisis' (Kerridge, 2006, 532), thereby emphasizing environmental justice and planetary sustainability issues, determining alternatives and promoting an equitable future.

Another Indian Hindi-language survival drama seven-episode television series,¹ *Kaala Paani* (Saxena & Golani, 2023), the point of intervention of this article, is set in the Andaman and Nicobar Islands, which are a union territory of India located on the southern rim of the Bay of Bengal. It is worth noting that the Cellular Jail National Memorial, a former British prison that held Indian political prisoners during the freedom struggle, is located in Port Blair, the capital city of the islands. Set in the lush yet treacherous jungles inhabited by indigenous people, this survival drama skilfully intertwines

multiple storylines, including the looming danger of a lethal disease, a struggling government, the capitalist and detrimental developmentalism of a corporation and the unwavering resolve of medical professionals. Although the title *Kaala Paani* alludes to the notorious Cellular Jail located near Port Blair, the azure ocean surrounding the islands acts as both a boon and a bane, highlighting the repercussions of environmental degradation and the imminent catastrophe facing humanity. The series highlights how individuals subjected to ecoprecarity and environmental injustice are confronted with the unavoidable position of crossing the ocean as they make efforts to escape an oncoming calamity. The series effectively depicts the unlawful exploitation of the environmental buffer zone and the valuable lessons that nature teaches us, emphasizing the proposition that only the most adaptable can survive when the encompassing ocean exhibits an enigmatic importance as a natural barrier, eventually proving the overwhelming triumph of nature over human recklessness (Shiruti, 2023). In this context, the series examines how nature's communication impacts the interaction between humans and nature, emphasizing mediation as a means to portray 'nature as co-present, active, and [a] dynamic force in human-nature relationships' (Milstein, 2012, 167, 171).

The underlying subject matter in these four series revolves around promoting awareness of eco-justice and the community at large, which not only addresses the ecological issues we face but also fosters a stronger sense of ethical accountability towards the long-term impact of our decisions and actions on the natural environment. Bowers referred to this as an 'eco-justice pedagogy', which involves a commitment to promoting social justice in both cultural and natural ecological aspects while also preserving the traditions that are crucial to communities that maintain the mutually beneficial and ethical reciprocation of shared resources. To effectively preserve components that contribute to the restoration of ecological and cultural resources, it is essential to have an extensive understanding of the local interests, requirements and practices (Bowers, 2001, 25). Consequently, tribal and indigenous cultures, together with their local ecosystems and traditional ecological knowledge, are significant topics of discussion in these drama series. Considering the fundamental concept of ecocinema and its application in web and television series that address environmental issues, there is a shared element among Scott MacDonald's ethical environmentalism, David Ingram's cognitivism, Adrian Ivakhiv's terming of motion pictures and ecophilosophy as anthrobiogeomorphic machines and Paula Willoquet-Marcondi's emphasis on documentaries. This prevalent element is the recognition of the visual arts as a forum where humanity's connection to the natural world is rediscovered, thereby perceiving this forum as a 'training' ground for changing the understanding of what is beneficial for ecosystems (MacDonald, 2013, 34) and a pedagogic space to understand our 'holistic sense of *worldly reciprocity*' (Landreville, 2019, 101–102). The reciprocity here, in the context of web and television series as well as cultural, media communication and environmental studies in India, centres on 'ecopracticology' (Xiang, 2019, 7) as a legitimate field of scholarly inquiry. Ecopracticology refers to a study of socio-ecological practice and the resulting body of knowledge. This socio-ecological practice, as presented in these series, includes six distinct yet intertwining classes of human action and social processes: environmental planning, design, construction, restoration, conservation and management.

The body of ecopracticological knowledge is based on specific details and examples (Weick, 1999, 138), primarily focusing on both positive and negative instances (McKelvey, 2006, 827). Considering *Kaala Paani* as a means of spreading knowledge about ecopracticology, this article highlights particular circumstances displayed in the series. It discusses negative instances of anthropocentric and developmental impulses, which lead to environmental toxicity and ecoprecarity. Additionally, the article explores constructive instances of how the series decodes ecological wisdom and promotes environmentally conscious and ethical actions.

2 | ANTHROPOCENE CULTURE: A CAUTIONARY NARRATIVE

Kaala Paani commences with a nocturnal scene in the forest, where members of the Orakas, an indigenous tribe of the Andaman Islands, sabotage a water pipeline that supplies the city. This action serves

to emphasize the imminent and catastrophic threat that is about to unfold. Meanwhile, ATOM, a commercial entity, is planning to host a tourism festival called 'Swaraj Mahotsav'. However, they need permission from Dr. Soudamini Singh (portrayed by Mona Singh), the Chief Medical Officer. Dr. Singh is reluctant to give her approval due to her suspicion that there is a disease spreading among the inhabitants of Andaman. Dr. Singh, along with Dr. Ritu Gagra (played by Radhika Mehrotra), a specialist in infectious diseases, is on the verge of uncovering a viral or bacterial pandemic, later named Leptospirosis Hemorrhagic Fever (LHF-27), that was found in the Andamans in 1989. The lieutenant governor, Admiral Zibran Qadri (played by Ashutosh Gowariker) and Ketan Kamat (played by Amey Wagh), a corrupt IPS officer working for ATOM with the hope of revoking his punishment transfer from New Delhi to Port Blair, are not convinced by Dr. Singh's preliminary findings, thereby compelling Dr. Singh to grant the permission. Nevertheless, Dr. Singh, who is apprehensive of the disease, decides to conduct a more thorough investigation by venturing into the dense jungle. She makes a startling revelation there: The entire village has succumbed to the disease. She endeavours to ascertain the root cause of the ailment and is astounded to discover that it originates from the infected water of Jenkins Lake, which is now being utilized as the primary source of potable water for the metropolis.

Dr. Singh, a conscientious environmentalist, intends to convey the message that 'nature is the invisible force that sustains all life on earth, and controlling it is beyond the capability of humankind. Because whatever happens, nature always wins' (Saxena & Golani, 2023). Dr. Singh's message emphasizes that the connection between human actions and the natural environment aligns with Braidotti's (2015, 16) argument that humanity has entered an era where our activities have the power to impact every organism on the planet. This realization can prompt us to re-evaluate how we interact with both humans and non-humans on a global level. With this realization, Dr. Singh exerts her utmost endeavour to halt the provision but unfortunately loses her footing and plummets down the precipice, succumbing tragically. Authorities have notified L. G. Qadri and his associates about the outbreak of the LHF-27 epidemic. The administration promptly declares localized lockdowns in an attempt to manage the crowd, but the circumstances escalate into a mob-like scenario, compelling authorities to inform the public about the epidemic of the disease. Subsequently, a complete lockdown is issued in Andaman, and the central government isolates Andaman from the rest of the country. The decision by mainstream India to isolate Andaman and leave the inhabitants to their own fate is a subject of debate. However, the decision by L. G. Qadri and officer Ketan to welcome a large number of tourists for a lively 'mahotsav' and stimulate the local economy, despite being aware of the potential consequences of an epidemic, sparks a discussion on developmentalism, an important issue that is relevant to modern societies worldwide. The reference to enhancing the local economy underscores the importance of examining fundamental global financial imbalances in order to comprehend the difficulties of modern development (Fischer, 2015, 700). Dirlik distinguished developmentalism from development by asserting that developmentalism is an ideological stance that involves excessively valuing development, perceiving it as an inevitable or even supreme force that human beings can only challenge or question at the peril of experiencing stalemate and impoverished conditions. The ideology obscures the historical events that have influenced the concept of development. Furthermore, it conceals the social and political influences that have played a significant role in granting it the ability to exert control over human consciousness (Dirlik, 2014, 30–31). In a comparable manner, Lieutenant Governor Qadri and his associates, along with law enforcement officers, ignore the historical facts about the waterborne disease and the socio-political and economic dominance of ATOM over the region's administration, persuade others and ensure the festival takes place. The issue lies in the fact that the concept of a 'developmental mindset' in the Andamans, to use Thurbon's (2016) phrase, is primarily seen as a result of external influences rather than originating within the region itself.

The multinational corporation ATOM is entirely responsible for this epidemic, as its pipeline project distributes contaminated water from Jenkins Lake to the entire island. This contamination of the lake water draws attention to the initial scene as Orakas damages the water pipe. A member of the Oraka tribe notifies the rest of the tribe about the city dwellers 'releasing the curse', which refers to the recent outbreak of the transmissible disease from water that afflicted their tribe many years ago. The word

'curse' in this context refers to the premise of the 'Anthropocene', which implies that human activities have caused the Earth to transition from the Holocene epoch, a period of environmental stability, to a state of unpredictability and instability. These human activities have become so widespread and significant that they now rival the powerful forces of the natural world (Crutzen & Stoermer, 2000; Steffen et al., 2007). Jeremy Davies highlighted that the notion of the Anthropocene primarily revolves around the significant changes occurring in 'Earth's atmosphere, oceans, rocks, plants, and animals'. These changes are substantial enough to signify the conclusion of one geological epoch and the commencement of a new one (Davies, 2016, 2). Orakas realize this anthropocentric activity of ATOM, and thus, one member of the tribe suggests intervening by deliberately damaging the water pipe in order to rescue the city residents from the imminent catastrophe. Nevertheless, the remaining members of the tribal community hold a different opinion, as they are concerned that if the urban population becomes aware of the disease, it would not take them long to discover Orakas' resistance to it. This might potentially lead to medical investigations into them and jeopardize the safety of the entire tribe. Orakas' concern about the city people and their imprudent conduct emphasizes how these metropolitan elites are leading 'towards a putative new epoch – the Anthropocene –' (Lidskog & Waterton, 2016, 395), which is heavily influenced by their conduct, despite their little knowledge about it.

The accounts of the Anthropocene and developmentalism in *Kaala Paani* generate autonomy, illegitimize decisions and stimulate acts by establishing a collective comprehension of environmental toxicity and catastrophe and scrutinizing the viewpoints and actions of individuals. During the progression of events, Ketan presents an article from the news to Saurabh Wani (played by Rajesh Khattar), the boss of the project, which reveals how a graveyard might serve as a repository for resistant strains of antibiotics. He references 'Attavous', which is Oraka terminology for the cemetery, and draws a comparison to ATOM's project, 'ATTAVUS'. Throughout the ages, those who succumbed to LHF were consistently interred in a shared burial ground known as the Bogart Hills, referred to as so by the British and now recognized as Jenkins Bio Park. Ketan highlights the laboratory data that validates the presence of LHF bacteria in the soil of the graveyard, which can be attributed to the deceased bodies. The Orakas bury the deceased in that location and also plant the seeds of a plant called Andamani Echinacea, realizing that this plant is a natural remedy for the dreadful disease. Unaware of the plant's importance, ATOM removes it from the region to create a helipad, making it more convenient for their CEO, Brandon Shaw, to access. A wealthy individual's decision to construct a helipad within an environmental buffer zone is responsible for the suffering of thousands of people. The ATTAVUS project exemplifies the detrimental impact that an individual's self-centred motives can have on the population as a whole. The ATTAVUS project symbolizes the worldwide hazards that arise when the human aspect of the 'social-ecological system' surpasses and dominates its environmental counterpart. Saurabh Wani's commitment to anthropocentric and developmental notions represents a microcosmic representation of worldwide environmental risk. This risk 'refers to a threat (to human beings and what they value) resulting from human-induced environmental change, either systemic or cumulative, on the global scale' (Heurtebise, 2017, 1331). The dangers facing humanity in the Anthropocene era arise as a result of the continuous worldwide transformation of nature through a profit-seeking mentality, 'industrial civilization, and advanced technologies' (Bostrom & Cirkovic, 2011, 28).

Although recognizing the magnitude of the current crisis can motivate mankind to take action to avert it, it is important to acknowledge that 'even when we see the catastrophe staring at us we do not believe what we know to be the case. In part this is because the willingness of a community to recognize the existence of a risk depends on the degree to which it is convinced that solutions exist' (Dupuy, 2020, 26–27). This is partly due to the fact that the propensity of a society to acknowledge the presence of hazards is contingent upon the extent to which it is persuaded that feasible alternatives are available. As a consequence, human beings' ability to exert a significant and far-reaching influence on the natural world has resulted in unforeseen repercussions that surpass their ability to anticipate environmental crises and catastrophes (Griner, 2002; Heurtebise, 2017). Thus, when Ketan inquires about Saurabh's motive for demolishing the specific graveyard located within the environmental buffer zone, particularly when there are thousands of acres of land available to construct a helipad, Saurabh

nonchalantly asserts that it was simply a human mistake. In order to further underscore the supremacy of humans over nature, Saurabh contends that,

Every other day, there is news that plastic in the ocean is killing dolphins and turtles. Those who litter the beaches with plastic want to kill those animals? No! They do it because they can. That's it! Every big city on earth is built on the graveyard of jungles, Mr. Ketan, and people like us help build them! (Saxena & Golani, 2023)

Saurabh's remarks highlight how in the Capitalocene, multispecies assemblages were characterized by economic exchanges as well as power disparities and cultural and ecological factors that influence the ways in which beings, commodities and resources might exist and perish (Haraway, 2015; Moore, 2016). Furthermore, Saurabh's unequivocal assertions about the impact of humans on shaping and governing nature highlight his transition to a critical juncture in his conventional approach to acquiring ecological knowledge. This transition, in turn, prompts environmentalists to pose profoundly untainted and even post-disciplinary inquiries, such as 'With what means, methods and senses can we encounter the world of our own creation?' (Scherer, 2014, 4). Regrettably, Saurabh's approach to exploring the Andamans, combined with Ketan's intricate assistance, has led the authorities to implement a complete lockdown. Consequently, this puts both the mainlanders and native communities in a state of vulnerability and ecoprecarity.

3 | SACRIFICE ZONE AND ECOPRECARITY: NECROPOLITICS AND GRIEVABLE/DISPOSABLE LIVES

Through the processes of domestication, growing urbanization and industrial development, humans have not only successfully adjusted to nature but also impacted nature in accordance with their own societal requirements. Nevertheless, in recent times, humanity has come to the realization that they have been the very first victims of their own Pyrrhic triumph over the natural world. Michel Serres (1995, 12) put it aptly: 'having conquered, the world is now conquering us'. Initially a prey, then a predator, mankind should strive to evolve into a 'creative protector', not only safeguarding the environment from its own actions but also shielding itself from the inclination to capitalize and dominate (Heurtebise, 2017, 1331). Unacceptably, the imprudent actions of ATOM as a predator not only result in environmental catastrophe and a mandatory lockdown throughout the entire island but also force everyday people to endure the cumulative effects of contamination, toxicity and disease. The authorities in charge of ATOM are unaware that the onset of the LHF-27 epidemic and the subsequent harmful effects of hazardous dangers might build up over multiple generations, causing accumulated contamination to have a delayed impact on the present and immediate future (Murphy, 2013, 107).

Despite providing assistance to the administration and local residents by supplying essential survival items, their intention to escape with the assistance of Ketan proves unsuccessful due to the growing agitation of the local mob. The result is the forcible separation of children and young adults from their parents and extended family members. On a separate occasion, in order to safeguard their lives, they enter into an official deal with the government. This agreement allows them to leave the island to relocate themselves to their own property, known as Huxley Island, temporarily. They must transport numerous uninfected individuals with them in exchange for this privilege. The primary motive for the relocation of ATOM officials is Mrs. Swasti Shaw's (played by Poornima Indrajith), the spouse of ATOM's Chief Executive Officer, Brandon Shaw, pregnancy. Staying in the Andamans poses a potential risk to her health and the well-being of her unborn child. This argument emphasizes how the adverse impacts of toxicity and infection are evident in real-life experiences of living in 'hazardscapes', areas with high levels of hazards (Mah & Wang, 2019, 1967). The term 'hazardscapes' in this context symbolizes the combined hazards present in a specific geographic location, like the Andamans. These hazards include not only measurable health risks, but also the way individuals

like Mrs. Shaw and Saurabh Wani think about the risks for both current and future generations. Unfortunately, Mrs. Shaw becomes infected along the course of events, compelling the administration to search for a possible remedy and develop an antidote for the epidemic. These cases demonstrate how the climate crisis will undoubtedly intensify the already-existing inequality that the capitalist system has created. Certain individuals, such as the ATOM authorities, may temporarily reap the benefits at the expense of ordinary people living on the islands. However, as Chakrabarty (2009, 214) pointed out, during times of climate crisis and catastrophe, even the wealthy and privileged will not have any means of escape. Eventually, the gap between the rich and the poor will diminish as maintaining privileged status becomes inconceivable in an environment that cannot sustain it (Höglund, 2020, 448). This hazardous state of the environment becomes more apparent when local residents, tourists and indigenous people are exposed to the ecoprecarity and politics of the decision-making process.

Although the Andamans are potentially seen as hazardscapes for wealthy and powerful individuals like ATOM authorities, the islands become a 'sacrifice zone' (Lerner, 2012) for the local population and tourists from mainland India, as well as the endangered indigenous tribes, the Orakas. A sacrifice zone refers to an area where inhabitants endure severe environmental health impacts due to their proximity to significant sources of contamination, such as huge industrial facilities involved in the processes of extraction, refinement, energy generation and petrochemical manufacture (Scott & Smith, 2016, 371). The presence of ATOM's Jenkins pipeline project and the unregulated and abandoned 'ATTAVUS' issue have turned the entire island into a focal point of environmental degradation. This has turned the islands into a sacrifice zone that has been consistently subjected to ecological deterioration and lacks proper environmental regulation (Bolados García, 2016). The negative consequences of uncontrolled and anthropocentric actions are vividly portrayed through the unfortunate and pathetic situation of a family, Mr. Santosh Savla (played by Vikas Kumar) and his wife Gargi Savla (played by Sarika Singh), who are visiting Andaman as tourists with their two children, Parth Savla (also known as Guchhu) and Vidisha Savla (also known as Kaddu), as well as a nurse named Jyotsana Dey (played by Arushi Sharma), who returns to her home to sell her inherited residence, as it is currently unoccupied.

Marking the islands as a sacrifice zone isolates the entire area, jeopardizing population well-being in favour of development and wealth accumulation. Consequently, the people of the region encounter many forms of vulnerability and ecoprecarity. The notion of ecoprecarity arises from the understanding that ecology (specifically the environmental crisis) and precarity are closely intertwined in the current era known as the Capitalocene, which specifically focuses on the inter-connected histories of 'power, capital, and nature' (Moore, 2017, 595). Thus, ecoprecarity refers to both the uncertain and vulnerable existence of humans in the face of ecological disasters, as well as the precarious condition of the environment caused by human actions (Höglund, 2020, 450; Nayar, 2019, 7). However, Chiranjeevi Prabhu (also known as 'Chiru'; played by Sukant Goel), a local taxi driver, persuades Santosh and Gargi to go to Neil Island, thereby planning to transport illegally obtained turtle eggs from Port Blair to Neil Island. Meanwhile, Guchhu and Kaddu remain in Port Blair. With the announcement of the lockdown, Santosh attempts to leave Neil and make his way to Port Blair in order to locate his children. Unfortunately, Gargi succumbs to death due to the epidemic, leaving Santosh in a vulnerable, helpless and precarious state and compelling him even to forcibly take away someone's boat and leave for Port Blair to find his kids. Meanwhile, the Orakas also depart from their typical forest habitat and move to a different location in order to protect themselves from any environmental hazards. These instances emphasize the detrimental impact of ecoprecarity, a condition generated by the Anthropocene era and capitalist drives, on the humans and the environment. The human race has extensively excavated, damaged and deforested the environment as a whole, thereby exerting significant stresses on the environment to the extent that the capacity of its ecosystems to 'sustain future generations can no longer be taken for granted' (McKibben, 2007, 18) and symbolizing an ecoprecarious condition where both humans and nature are impacted.

An unseen danger has surpassed the challenges of planetary instability, ecoprecarity and societal vulnerability in the twenty-first century, exposing populations worldwide to heightened levels of vul-

nerability and imminent risk (Wilson et al., 2020, 439). Isolated from mainland India and without external support, the people of the Andaman and Nicobar Islands find themselves confined within a naturally formed penitentiary, surrounded by water from all directions. During the lockdown, ordinary individuals experience significant vulnerability, danger and health risks. They face tremendous difficulty accessing drinking water and life-saving medications. Additionally, they suffer the loss of loved ones and are at a high risk of infection and premature death. These instances of self-sacrificing death include Chiru's mother, who devoted her life to safeguarding the Orakas and ultimately perished after contracting the disease. Another instance is Guchhu's decision to leave the abandoned Japanese military bunker where Basu Uncle resides in order to keep Jyotsana and Kaddu safe and uninfected. The precarious and vulnerable condition in this context illustrates how the characters here are impacted by the socio-cultural and political frameworks of their environment and lose their lives because of a lack of environmental regulation and protection. The reliance of humans and other organisms on infrastructure on the island reveals a particular vulnerability that these individuals experience when they lack assistance. This occurs when the infrastructure that shapes their socio-economic and political existence begins to deteriorate or when they face extreme vulnerability due to ecoprecarity or apparent environmental dangers (Butler, 2016a, 19; emphasis added). Meanwhile, Chiru's mother's death has fuelled his fury, leading him to speculate that the Oraka tribes are responsible for the epidemic and devastation. Chiru, feeling precarious and vulnerable, begins to question whether the natives should receive any preferential treatment, especially upon discovering that they are unaffected by the disease. To uncover the secrets of the Oraka tribe's disease-fighting methods, Chiru kidnaps Enmae, a member of the Oraka tribe, and with Chiru's (un)intentional help, police also capture him, thereby subjecting the entire tribe to a different layer of precarity. This form of precarity, as Butler (2009, ii) argued, refers to a condition of extreme vulnerability and exposure that is caused by political decisions. It affects communities that are subjected to unjustified harm by the state or different kinds of abuse that the authority fails to safeguard them against.

During their investigation and medical experiments on Enmae, Ketan and Ritu learn that the tribe members have been consuming 'Andamania Echnemia' for many generations, which has developed their immunity to the bacteria responsible for LHF-27. However, the extinction of the plant has left the peptide's essence exclusive to the bodies of the Orakan tribals. Nevertheless, this extraction process of the peptide has the potential to be lethal for Enmae and result in her complete annihilation because 'Orakas are neither immunized nor they have pharmaceutical resistance' (Saxena & Golani, 2023). Upon learning of the doctors' intention to perform surgery on Enmae, Chiru reveals that he possesses immunity to the disease as well, due to his half-Oraka background. He willingly undertakes the process to safeguard Enmae, recognizing that he is the one putting Enmae's safety at risk and feeling a sense of obligation towards the entire Oraka tribe. The extraction of this peptide is crucial, as the well-being of non-infected individuals relies on the health and safety of Mrs. Shaw. If any harm befalls her, escape from the Kaala Paani would be impossible, emphasizing the interdependence between the safety of non-infected individuals and Mrs. Shaw's well-being. This conditional scenario emphasizes that as long as human cultures exist on Earth, there will continue to be lifeboats available exclusively for the wealthy and elite. If we consider environmental degradation as an apocalyptic event, we experience it not universally but rather in an unequal and inter-connected manner (Malm & Hornborg, 2014, 66–67). This initiates discussions about the Anthropocene era, the division between the wealthy and the poor, and the political aspects related to ecoprecarity.

Dr. Shashi Mahajan (played by Chinmay Mandlekar), the Deputy Chief Medical Officer, promptly informs L. G. Qadri and SP Siva Kumar (played by Kannan Arunchalam) about the beneficial effects of Chiru's AMP reserves, which have successfully saved the lives of four critically ill patients, including Mrs. Shaw. He anticipates that utilizing a single sample will allow him to save dozens more lives. The revelation strikes Siva with optimism as he ponders the potential of utilizing the entire Oraka tribe to save hundreds of thousands of lives. Siva Kumar proposes that the LG should find the Orakas, who are known for their friendly demeanour and love for the environment, arguing that they would willingly sacrifice their lives to assist the LG and save others. In response, an enraged Dr. Shashi poses

a disconcerting inquiry: What are the consequences if the Orakas deny providing assistance? What if they are unwilling to jeopardize their own well-being and the futures of their children for the urban population, the majority of whom have shown little concern for the welfare of the Orakas? (Saxena & Golani, 2023). The presented debate illustrates how ecological deterioration, despite presenting considerable obstacles to staying alive and well, not only jeopardizes global sustainability but also disrupts many established understandings of existence, politics and social interactions. This further highlights the notion of ecoprecarity, which emphasizes how politics and ecology are inseparable and require evaluation together, by demonstrating that precarity is exclusively the result of the (lack of) action deeply embedded in the socio-political structures of the Capitalocene (Samanta, 2021). The political dimensions become evident when doctors oppose the use of Orakas to save other people, but government officials take a broader perspective and are willing to terminate the indigenous tribe to extract the peptide. This initiates the discourse or debate on the possibility of sacrificing one group of individuals to preserve the lives of others. L. G. Qadri's theatrical address on the 'trolley problem' provides a more detailed explanation of the moral conundrum that the show revolves around. This philosophical thought experiment poses the question of whether one should permit a train to continue on its current path, resulting in the deaths of five individuals who are working ahead, or if one should instead divert the train by flipping a switch, causing it to change tracks and result in the death of one innocent person.

This 'trolley problem' underscores Mbembe's understanding of necropolitics, which is a further development of Foucault's (2003, 2008) notion of biopower, a governmental approach that centres on controlling populations and overseeing life. Mbembe (2003, 2019) elucidated the concept of necropower and necropolitics, wherein existence within a biopolitical framework is inherently subjected to and influenced by the dominion of death. In this context, necropolitics questions the distributive system of life and death in contemporary politics, scrutinizing who lives and who dies, thereby presenting an alternative hypothesis to Foucault's biopower theory. Therefore, rather than demonstrating the equal influence of life and death as tools of control, necropolitics investigates the unequal factors that determine who is allowed to live and who is condemned to die (Quinan & Thiele, 2020, 2–3). The troubling questions in the explanation of the trolley problem are: 'Under what practical conditions is the right to kill, to allow to live, or to expose to death exercised? Who is the subject of this right? What place is given to life, death, and the human body (in particular the wounded or slain body)? How are they inscribed in the order of power?' (Mbembe, 2003, 12).

Mbembe's understanding of necropolitics, when taken into the context of ecoprecarity, environmental degradation and the Anthropocene culture, emphasizes the political dynamics of interpreting lives in two distinct ways: as either grievable or disposable. Grievable lives refer to lives that are considered deserving of grief when they are lost. As stated by Butler (2016b), for something to be considered grievable, it must first be acknowledged as a life, and this acknowledgment is influenced by how that life is presented or shown. This highlights that culturally rooted patterns of communication characterize certain people as more or less worthy of grieving, whereas certain populations are completely disregarded as deserving of grieving. Butler (2020) asserts that a framework for creating meaning is necessary to understand and value life and death. Furthermore, the frameworks that structure and regulate our perception of the world are consistently inadequate and imbued with power (Schippers, 2014). The government officials and L. G. Qadri perceive the deaths of urban residents as concerning, as they are numerous, influential, often belonging to the elite and actively involved in the government's decision-making and administrative procedures. Therefore, the loss of these lives is a cause for mourning, as they are grievable, and preserving the remaining lives is crucial. The arguments put forward by government authorities emphasize the importance of recognizing the grievability of urban dwellers. It is crucial for them to understand that their lives are valuable and that any loss of life is significant. Their bodies should be treated with care and given the opportunity to thrive. Efforts should be made to minimize their vulnerability and provide conditions that promote their well-being (Butler, 2020, 59; emphasis added). Therefore, in order to save 5000 lives that are not infected, L. G. Qadri disregards the anthropocentric and business-oriented policies of ATOM authorities and ignores even

contemplating questioning them about their harmful developmental strategies. In addition, the government regards ATOM's Huxley Island as a 'safe haven' for non-infected individuals to reside, as well as a location for conducting medical camps and research aimed at developing an antidote for LHF-27.

The concept of grievability perpetuates and establishes a political system that views some individuals as disposable, valuing only those deemed productive citizens and ignoring those deemed less productive. This further underscores the close connection between the disposability of certain individuals and their status as politically marginalized subjects, resulting in their exclusion from mainstream discourses (Spratt, 2022). The 400 Orakas, who are already an endangered indigenous tribe, find themselves in a precarious state of existence and survival due to political factors, rendering their lives disposable. L. G. Qadri resolves to persuade the Orakan tribes to willingly surrender themselves in order to bring an end to the pandemic. He grounds his decision-making on Darwin's principle of 'survival of the fittest', perceiving the smaller population of the Orakans as an indication of their vulnerability and expendability, which grants him the authority to capitalize on the tribes. Dr. Shashi, upon hearing this, comments, 'Irrespective of how big or small the number is, we cannot choose between human lives!' (Saxena & Golani, 2023). This statement demonstrates how, within the context of the necropolitical Anthropocene, certain lives are consciously nurtured for survival and reproduction, whereas others are systematically designated for death, creating a constantly changing boundary between individuals considered 'productive' and 'lawful' (Quinan & Thiele, 2020) and those who are marginalized and deemed unworthy.

L. G. Qadri is convinced that he made a highly developed decision that could potentially save humanity and elevate the Orakans to the status of martyrs, suggesting that labelling 'a group or population as ungrievable' and thereby disposable implies that 'they can be targeted for violence without consequence' (Butler, 2022, 93). It is worth mentioning that ATOM's geo-strategies and planning have always seen the forest on the island and the tribal communities as 'place of disposable lives and cheap nature' (De Souza, 2021, 226), even before any actual contamination activities started there. Later, in times of ecoprecarity, crisis and survival, these tribal communities were also considered disposable by the government. L. G. Qadri, ATOM officials and capitalist mongers consider the Orakans to be lives that are beyond grievance, as they exist in a zone that is already lost and wiped out. This means that when they are forced to sacrifice their lives for the extraction of peptide, no additional destruction will occur (Butler, 2016b, xix; emphasis added). Following Bauman (2014), the Orakans have become 'redundant' people – individuals who are deemed unnecessary in society at large and are either isolated in enclosures or completely eliminated. The Orakas are considered disposable due to their ecocentric lifestyle, which contradicts the principles of a neo-liberal framework that emphasizes capitalism, self-interest and self-development as necessary for a life that is considered worthy of grieving. The Orakas' predicament, along with the government's and corporations' stance towards this vulnerable tribe, exemplifies how real-world mega-projects in the Andaman region can result in the Shompen's extinction, an extremely isolated tribe that has coexisted with the abundant natural environment of Great Nicobar Island for potentially centuries, if not millennia, with minimal interaction with people from outside.

4 | INDIGENEITY AND ECOLOGICAL WISDOM

To save the lives of those infected, L. G. Qadri has instructed law enforcement officials to thoroughly search the entire Oraka tribe and apprehend its members with the objective of extracting the peptide from them. The police have successfully carried out this order by capturing Chiru and Enmae, hoping that this capture will provide a means to locate the remaining Oraka members. This instance of placing an already impoverished, marginalized and endangered community into disposable lives signifies the failure of those in power to acknowledge the numerous ways in which 'hyper-neo-liberalism' has made them vulnerable, as well as their failure to recognize them as living beings. The premise of the disposability of the Orakans, which has been predominantly impacted by the virus outbreak, highlights how

their disability revolves around their invisibility, making them insignificant within a political economy that prioritizes the capitalist, developmental and consumerist aspirations of a specific segment of society over human life. This circumstance exemplifies what Giroux refers to as the 'new biopolitics of disposability': disadvantaged individuals not only have to independently cope with life's hardships, but they are also expected to do so without being acknowledged by the prevailing society (Giroux, 2006, 175; Spratt, 2022, 483). Similarly, the television series concludes with a positive and impactful moment as the indigenous Orakas engage in a conflict with the police who are attacking them, thus disproving L. G. Qadri's flawed interpretations of Darwin's theory of evolution and illustrating the importance of indigenous resistance as an alternative to the politics of disposability. This indigenous resistance, as outlined by Avila (2018, 609), refers to the assertion put forward by this tribal community to address the difficulties they have in preserving their way of life and cultural heritage. This includes safeguarding communal structures, asserting their right to self-governance and maintaining cultural autonomy. Chiru and Enmae are both rescued by the other Orakas, and they surround the cops with bows and arrows and drive them into the clear, pure waters to protect themselves from being coerced into doing something against their own free will.

From a broader perspective, this television series envisions the development of an alternate society through the combination of ecological knowledge and wisdom. In most locations on the planet, there is a wealth of information and knowledge available regarding human and environmental events and processes. What we are missing is the discernment, namely the ecological practical discernment, or ecophronesis, as referred to by Xiang (2016, 55), to effectively utilize 'that information and knowledge to shape communities that are safer, healthier, more productive, and beautiful' (Steiner, 2019, 33–34). Within the framework of socio-ecological practice, wisdom denotes an individual's ability to both think (sophia) and take action (phronesis) in order to cope with the intricate challenges of the socio-ecological system (Xiang, 2016, 55). The Orakas demonstrate their capacity for cognition and action through their traditional ecological knowledge and profound comprehension of their natural environment, as exemplified by their concept of 'tinnotu'. This term, albeit fictitious, denotes the Orakas' remarkable aptitude for anticipating natural calamities. 'Tinnotu' refers to Orakas' inherent and deep ecological knowledge of their natural environment, and they have formed this cultural heritage and genetic inheritance over many generations of living on these islands. As a result, the Orakas are highly attuned to even the most minute changes in the environment and can anticipate approaching disasters. For instance, this ecological wisdom enables Orakas to protect themselves from tsunamis, thereby empowering them to adapt by leaving their habitats and relocating to higher areas. In this context, the series underscores the significance of the 'place-based' (Swidrovich, 2023) knowledge that tribal people possess, shaped by their geographical and ecological surroundings. Additionally, it is noteworthy that the Indian film *Kantara* also underscores the significance of place-based knowledge by showcasing the rituals, performances and ceremonies practiced in the coastal village of Kaadubettu in the state of Karnataka, India. These cultural practices are essential to the local community's perspectives and beliefs. In both the instances of *Kaala Paani* and *Kantara*, these customs are intricately connected to tribe-specific historical narratives and have been passed down and safeguarded mainly through oral tradition, storytelling and local cultural customs (Karmakar & Pal, 2024, 123).

Ecological wisdom is a form of wisdom that centres on combining ecological knowledge with a place-specific understanding of socio-ecological activities, thereby maintaining a peaceful coexistence between humans and the natural world. Because all scientific discoveries reflect our understanding of the natural world, ecological wisdom facilitates the recognition of applicable findings when addressing a specific issue in a particular area. This wisdom further encompasses the diversity of ecosystems and the actions of many species, providing insights on what should be preserved (Heavers, 2023, 146; Wang, 2019, 28). The Orakas possess a profound ecological understanding, a lifelong commitment to understanding their fellow people's life cycles and subsequently determining what needs preservation within their environments. Consequently, upon discovering that 'Andamania Echnemia' possesses natural antibiotic properties against the bacteria responsible for LHF-27, the Orakas have not only consumed it for many generations to develop immunity, but they have also planted the seeds of this

plant in graveyards to prevent bacterial growth and preserve the plant, thereby fulfilling both objectives. This profound commitment of the Orakas demonstrates how, in diverse and transitional phases of capital and human-centric developmentalism, different indigenous groups and communities have assumed varying degrees of ethical responsibility and mutuality, necessary to ensure the preservation of life by passing on knowledge about the planet's systems to future generations. Several indigenous and non-dominant communities have existed in unique ways outside the matrices of market-driven capitalism, not driven by the parameters or aspirations of nation-states. These communities representing 'living thresholds of systemic sustainability' have in diverse manner embraced practices of minimalistic living and are identified as 'exemplary ethical communities' (EEC) for their remarkableness in protecting the traditional indigenous knowledge and the ability to persist through self-sufficient means (Conversi, 2021, 5582). These communities primarily live in isolation and celebrate principles of harmonious living in collaboration with the natural and ecological alterations. The depiction of the Orakas, in *Kaala Paani*, serves as a telling demonstration of such exemplary or extraordinary ethical communities (EEC), who, via a collective and experiential understanding of living in complicity with nature, offer vital insights on multiple dimensions of living, specifically on what can be the meaningful modes of human interactions with nature and coping strategies for thriving in difficult environments (Posay & Balick, 2006). The Orakas, who live in seclusion in the Andaman and Nicobar Islands, away from the Indian mainland, have embodied the principles of holistic living and have constructed a sustainable relationship with nature. The resilience developed by the Orakas, thus, implicates 'the possible chances of a subsistence of the future' (Bold, 2019, 123) for the urbanized individuals who are driven by a categorical and profit-oriented mindset.

Therefore, ecological wisdom in *Kaala Paani* necessitates a transition from a human-centred viewpoint (both anthropocentric and developmental) to valuing the non-human world. It also promotes a conservation ethic that encompasses the preservation of plants for medicinal purposes, indigenous traditional medical knowledge, the community at large, biodiversity and the natural world, all with the long-term objective of attaining sustainability. To accomplish this, individuals must develop humility and empathy in their actions and engage in the process of seeking and pursuing the correct course of action (Schwartz & Sharpe, 2010, 5; Xiang, 2014, 67), while acknowledging the constraints of human knowledge. The right course of action is demonstrated by the transformation of Chiru, who initially, harbours disdain for the Orakas, but later he rescues Enmae and joins the tribal resistance against the police. Chiru realizes that, as a half-Oraka, he has a responsibility to protect the Orakas, just as his mother did throughout her life. In addition, the corrupt officer Ketan disregards the orders of ATOM officials to transport Dr. Ritu to Huxley Island and proceed with the extraction of peptides. Ritu's remarks about the potential to save thousands of lives through her journey to Colinpur and her conviction on the empathetic side of Ketan profoundly impact him. Despite being aware that his own freedom depends on her safe journey to Huxley Island, Ketan chooses to do so, even knowing that he might face severe consequences, including harsh punishment, for not following the established chain of command. Chiru and Ketan's transformation and their decisions 'are vehicles for connecting with and caring for the world around us' (Meyer, 2008, 18), highlighting that humans have the ability to empower themselves and actively contribute to their own growth by responding to changing circumstances in times of survival and environmental catastrophe. Aligning with Austin's (2018, 1012) perspective on adaptation, this type of transformation goes beyond mere coping methods and necessitates a reconsideration of our individuality, the nature of an ethical existence and the optimum configuration of our socio-political and ecological structures and biodiversity.

5 | CONCLUSION: HOPE IN THE ANTHROPOCENE

If one views environmentalism as a means to perceive the damages inflicted upon the world, then ecological wisdom and its fundamental knowledge propose possibilities for rejuvenation and hope. Hope in the Anthropocene envisions a healthier environment or a more desirable way of existing within

the world, thereby striving for a sustainable society collectively. It is essential and advantageous to have a cautious but optimistic perspective within the context of the environmental crisis, as feelings of hopelessness may impede progress (Meijer, 2022, 153–154). As McKinnon (2014, 19) argues, ‘hope keeps open a space for agency between the impossible and the fantastical; without it, the small window in time remaining for us to tackle climate change is already closed’. In accordance with Bloch et al.’s (1986) perspective that hope necessitates individuals who actively engage with the ongoing process of environmental change, of which they themselves are a part, Dr. Ritu and uncle Basu embark on a journey to various locations in the islands in search of the elusive Andamania Echnemia plant. They are aware that the plant may have already become extinct, but their quest serves to sustain hope for a society free from LHF-27, as envisioned by Dr. Soudamini.

Current discussions on environmental matters closely link an understanding of the ‘unseen’ to the perceived limitations of colonial–capitalist and modernist modes of thinking, such as L. G. Qadri’s assumptions regarding the Orakas. These approaches are, as *Kaala Paani* emphasizes, overly reductionist, excessively intangible and excessively conventional because they fail to acknowledge or comprehend anything that deviates from or goes beyond the anticipated standard. As a result, L. G. Qadri never anticipates that the weak and vulnerable Orakas can resist in order to ensure their own survival. The goal of hope is to bring the invisible into understanding. Hope, as exemplified by Orakas’ decision to fight and resist the unlawful intrusion of government authority, is an attempt to make people cognizant of the ‘unseen presences’ (Chandler & Hathout, 2023, 95) in the Anthropocene. On the other hand, Chiru’s decision to join the Oraka tribe, his personal development and transformation, his mother’s selfless act to protect the Orakas and his brother’s persistent efforts to raise awareness and advocate for the preservation of the Orakas, the island and the environment all serve as powerful symbols of the tangible and significant dangers posed by the Anthropocene era, including the imminent risk of climate change (Moellendorf, 2022, 202–203). In this scenario, *Kaala Paani* envisions a world that should achieve the desired level of well-being and somewhat mitigate the problems of disease, indifference and impoverishment. *Kaala Paani*, the microcosm of environmental buffer zones, strives to hope for a future where the resources of the planet should be appreciated and where more legitimate discussions should arise regarding capitalism and developmentalism, which often disrupt the natural environment and jeopardize its stability.

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ENDNOTE

¹ Given that this television series comprises seven episodes, each with a duration ranging from 57 to 70 min, only significant events relevant to this page will be discussed. We recommend viewing this series on Netflix (<https://www.netflix.com/in/title/81314368>) for a thorough exploration. The article suggests visiting websites, such as Rotten Tomatoes, IMDb and StreamingDue, for a comprehensive plot summary and criticism.

CONFLICT OF INTEREST STATEMENT

The authors declare no conflicts of interest.

DATA AVAILABILITY STATEMENT

Data sharing is not applicable to this article as no datasets were generated or analysed during the current study.

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