

Symbols Of Degenerating Surroundings In Itaranta's Memory Of Water: An Ecocritical Perspective

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Abstract: The interconnectivity of the various elements constituting the universe, i.e. earth, water, fire, air and space and the negligence or maltreatment of one impacting the other is a harsh reality. The study addresses these related issues in the context of Emmi Itaranta's literary work of speculative fiction, *Memory of Water*. Literature, environment and ecology join hands to project the ill-effects of human activities on planet earth through two major symbols in the work, the plastic waste and the scarce water resources. As per the ancient Vedic philosophy on the existence of life at various levels, citta (memory bank) is not merely a storehouse of information but the instrument of all urges and emotional states. Its extension to human-made or self-created plastic waste mounds, and nature's creation water bodies, shrunken or polluted due to human apathy implies that such features can also store memories and impact the five elements of life through times and space, amplifying gains and losses. While the aspect of memory, i.e. collection in consciousness can be understood through certain ideas of Jung and the Vedic philosophy, those of ecological impacts can be interpreted in reference to ecocritical theories of material ecocriticism, discard studies, slow violence, and water democracy. The imagery created in the text has a metaphoric purpose and provides a significant insight into the interdependence of the elements of life, within and beyond human existence, i.e. in the environmental surroundings, on a cautionary note.

Keywords: plastic-waste water-scarcity memory symbols control technology emotions ecocriticism

Introduction: Unprecedented human induced modifications since the commencement of industrial age have resulted in many a catapulted transformation in the earth's systems. With near indifferent attitude and an apathetic approach, large scale alterations administered on the environment cast long-lasting effects understood in relation to the geologic time –anthropocene. This epoch termed as 'anthropocene' by a majority of field experts, researchers and environmentalists alike invites controversies of sorts. It is heavily debated for its legitimacy, inventiveness and resolute focus against the widely prevalent mind-set regarding human beings as the superior sentients among all life forms, matter, and materials.

Combination of 'anthropo' meaning 'human' and the suffix 'cene' meaning an 'epoch,' the profound visible and invisible evidence of change in the atmospheric, hydrologic, and biospheric elements of earth with accelerated use of carbon-based fuels causing heavy greenhouse emissions, mass species extinctions, and re-contouring of landscape are considered the obvious markers of ongoing anthropogenic or human-induced epoch.

The industrial age has witnessed the launch of numerous new products. Among them plastics or synthetic polymers are considered to be an important invention in the history of humanity. Its versatility ensures its usefulness with its usage in the packaging industry, in 'textile, consumer goods, transport, and construction sectors' (OECD, 2018). The material, however, is known to be recycled and reused lesser than being accumulated in large amounts at various dumping sites throughout the world. The growing plastic waste has made communities and sections of people vulnerable to the toxic environs it creates. Its impact penetrates way beyond the boundaries of dumping zones, encroaching upon usable land mass, and at times invading water bodies as well.

Water is an essential element, required to sustain life on earth. Globally 2.2 billion people lack access to drinkable fresh water (WHO, 2019). With the proliferating human induced changes, this resource, otherwise abundant on the planet, is witnessing a decline in the fresh water reserves (Kundzewicz et al, 2007). Besides, daily human rituals dependent on water render its socio-economic significance, unmatched.

The damage caused – ecological and geographical- along with the health issues posed by mismanaged plastic waste is deteriorating the quality of existence for all forms of life exposed to the entanglements of toxic waste produced by it. Water aquifers are also said to absorb the waste that penetrates into the earth, especially where plastic is dumped in large quantities. Their societal impact can be traced in the growing number of diseases, pollution of space, mismanagement of resources (Thompson et al, 2009) and also the subsequent power struggles generated among the human nature-culture.

The supervening circumstances have seen the birth of conservationists and literary figures who have employed their natural inclinations and expressive language skills to draw attention to the ailing planet and its fragile ecosystem. Among them, i.e. Rachel Carlson, Lawrence Buell, Glotfety, Margaret Atwood, Harold Fromm, Barbara Kingsolver, Ursula K. Heise, Amitav Ghosh and others is a recent entry of Emmi Itäranta, a Finnish writer, who, with her debut novel *Memory of Water* (2015) (MoW), a sci-fi fantasy, lays bare a future hit hard by dump yards and water scarcity.

Literature is the window to society and it reveals the complexities of cultural and socio-politico-economic lives. Through its language, a range of human emotions, thoughts, ideas and actions are creatively presented to depict specific contexts. It not only presents the shadow of society but also questions and challenges the prevalent notions of a particular time. In the recent years, environmental concerns have also found a voice in literature though it is argued if the creative minds can actually understand the functioning of science and technology amidst the technologic, geologic and biologic evolution. Literary agents have consistently projected the complications faced by society through dramatic presentations, as observed in fiction. MoW creatively portrays the strong changes occurring in the elemental earth and the ecologic crisis storming the environment. It purveys a picture of a society plagued by water wars –the main theme being scarcity of water, it offers insight into the ideology of consumerism, commodification and the rapid changes foraying into lifestyle in the garb of advancement. Along with water scarcity, another significant theme to emerge projects pollution caused by accumulation of plastic waste which holds the power to change the chemical texture of not only the soil or earth, but also of the water, air and space.

An ecocritical analysis of Itäranta's MoW is intended to gauge the impact of gradually accumulating plastic waste and matter. The study closely examines the portrayal of the landscape invaded by mounds of discard and the conflicting situation hit by scarcity of fresh water reservoirs. Itäranta's employment of literary devices, in particular, the imagery, is critically viewed to assess the pitiable plight of common civilians living in the highly toxic environs.

MoW is a fictional work which falls under the genre of Climate Fiction also referred to as cli-fi. Coined by a journalist Dan Bloom in his blog, cli-fi deals with repercussions of changing climate induced through man-made/anthropogenic ecological disasters such as pollution, global warming, and extinction of certain species. Advertently located in the near future times, the genre lays groundwork for the connection of science with the scholarship of humanities and activism. It can be viewed as a literary discourse which blends environmental concerns. The incline for it and the requisite skills rest in the writer's hand who determines his form and style to adapt to the raised thematic concerns as mentioned below:

Literary artists have at their disposal a range of forms and styles to choose from to infuse life into the substance of their thought and imagination. Many of them experiment with the established forms by blending two or more and creating one of their own. (Kaushik, 2015)

Cli-fi, one such style of literary discourse, primarily appeals to young readers given its capacity to motivate and inspire pragmatic action aimed at the fulfilment of its inherently didactic function towards a prospective initiation of urgent social and political change.

Stemming from science fiction, the focus on earth determines cli-fi's claim as a distinct genre in opposition to the former's emphasis on fascinating technologies, and unexplored or faraway planets. The fragmentary nature of cli-fi narratives is often critiqued for locally scaled portrayal of planetary ecological crisis which fails to qualify its entire spatiotemporal scale. However, creative texts retain allegorical rhetoric eliciting broad response from readers and literary critics to address environmental challenges. In envisioning a future world wrought with dystopian images and symbols, Itäranta's *MoW* makes a bleak commentary on a society suffering from ecological degradation, habitat destruction, scarce resources and consequent deficiency of basic human rights.

Creativity in literature finds expression in strategic application of literary devices, for instance imagery and symbolism in *MoW*. A symbol is defined as 'a visual image or sign representing an idea – a deeper indicator of truth' (Bruce-Mitford, 2008). In the novel under consideration, the plastic grave represents undesirable accumulation and degeneration of waste, while the scarcity of water resources emerges as an indicator of toxicity distressing the common folks. The 'plastic grave', a 'toxic-iconic symbol' not only illustrates the abuse of landscape, it also implies a toxic-abusive relationship between the components of ecosphere, i.e. water, fire, air, earth and space, triggering emotions ranging from fear, danger, violence to hopelessness among the characters. Sometimes polluted and sometimes grossly inadequate, the rationed distribution of water among civilians signals power, control, deprivation and destitution. The two symbols viewed as visual representations or mental images of the degenerating surroundings, hint at the otherwise concealed physical sensations and internal emotions of the surroundings. The vivid imagery, overall, through its usage of metaphors, similes, personification and motifs, evinces the spirit of a dystopian future set in the work. '... [I]magery does not occur on the writer's page; it occurs in the reader's mind...' (King, 1980), therefore, the devices used by the author create symbolism in the minds of readers setting off the process of subjective interpretations shared universally with minor dissimilarity.

The author paints the plastic grave in sombre colours. Terrain dumped with plastics from the past is 'ever-changing, eye-betraying.' Itäranta describes it as a 'rubbish mountain' 'spilling over on the edges with old junk people had left around it'. The pile of waste is laced with 'skeleton[s]' and 'carcass' of

'wrecked' objects, which stand as reminders of the failure of the past world technology and the knowledge which had been lost over the transitory period of 'twilight' era, hence oil wars tormented the predicament of not only the humans but the landscape alike. This plastic mound spread over vast tracts is representative of the degeneration, exploitation/abuse, pollution and 'death' of landscape and of the virtuous prestige associated with imparting intrinsic value to all matter and material.

In a similar fashion, the hardship of people struggling with scarcity and the rationing and privation of fresh water finds itself positioned as a centripetal force, securing the sub-themes in the fictional work. The unparalleled substance and utility of water as a vital element in the everyday ceremonial rites makes it a high-ranking symbol readers connect with. In MoW, the shortage of water divulges the disadvantages common people encounter regularly. Water shams and frauds, 'stricter quota plans', sickness, disease, extreme poverty, water crimes and at the same time –rejuvenation, purification, refreshment, life and hope –define the symbolism of water as an archetypal agent of creation and destruction, of life and of death.

Both plastic grave and the elemental water become agents driving the narrative and eliciting a pathological response to the rhetoric of a near dystopian future where the 'past-world bleeds into ... present world, into its sky, into its dust'; the military controls existence and mortality of the citizens under extreme circumstances of mass poverty, water scarcity and potential resource based wars in the background. Fresh water is an elitist resource available easily to the top-ranked officials and a few prestigious tea-masters. The 'disposable people', i.e. the poor are the most at the risk of a struggle for survival, lacking basic human rights and suffering deprivation of social justice as is visible in the contemporaneous world. The elite represent 'full-stomach' and the dispossessed 'empty-belly' environmentalism, as put forth by Ramachandra Guha and Joan Martinez-Alier in *Varieties of Environmentalism*, 1997.

The Narrative on the Ailing Environs

Simultaneously written in Finnish and English, Itäranta's MoW is a narrative depicting socio-politics of Scandinavian territory diseased by water crimes under Chinese occupation. It foregrounds the journey and plight of a young girl in a water scarce area where the tradition of tea masters still exists, and the landscape is filled with 'technologies of the past world' depicting toxic environs and the consequent anxieties of the residents living at the edge of life and death.

Owing to the ceremonial traditions entwined with the cultural legacy and her apprenticeship with tea masters, Noria Kaitio is bequeathed with the existence of a secret fresh water spring. With awakened sensory perception concerning elemental earth, she develops an understanding of the flow of water –its silence, stillness, the touch and its taste, even the smell of its stagnancy. One tea ceremony changes the course of narrative as a newly transferred Commander Taro harbours suspicion against the tea master, rattling the entire family with his shrewd yet sly discernment in connection to not only the ‘pure-tasting tea’ but also the setting in which they lived.

Hereafter, military raids are conducted and families are penalised for water crimes. Excavation of Kaitio’s grounds reveals nothing but ruins of an old and dry well. As Noria comes to live by herself, her confrontation with circumstance of conflict, wretchedness, and struggle of the common people leads her into confiding the kept secret in her best friend –Sanja and together they resolve to venture a trail set by three apparent ‘water criminals’ who explored the ‘Lost Lands’ –in the hope of discovering hidden and abundant water for the world at large.

Set in a post-apocalyptic, post-climate change and post-air-conditioning world, the Scandinavian territory carries life on –liberated from the conventional usage of Carbon-based Energy Systems. Coastal boundaries are ‘lost to salt and water’ and rivers have ‘merged into wider waters’. Wars over possession of last reserves of oil have rendered vast tracts of water and land uninhabitable. Preservation of pure, clean or non-contaminated ecosystems has ensured the expansion of reserved areas. Loss and uncertainty rob people of cultural knowledge. The ‘Dead Forest’ with its ‘bare trunks and branches’ evokes annihilation of life –

Life no longer circulated in them, their veins were brittle and broken, their skins frozen into letters of a forgotten language, near-incomprehensible marks of what had once been. Some trunks had wrung themselves into the ground, where they lay speechless, still. (Itäranta, pp. 203-204).

The ‘past-world’ technological machinery is trapped in huge mounds of ‘plastic grave’. Clean solar energy is the norm of land, however, the desolate landscape, instead of reflecting sublime is toxic and poisonous to its core.

Theoretical Bases for Insight into Ailing Environs

The recent discourse in the field of ecocriticism has witnessed questioning of anthropocentric approach to viewing human development, civilization’s progress, human/nature/ environment hierarchies and

their interrelationship. Among them Material Ecocriticism, Discard Studies, Toxic Studies, Slow Violence and Water Democracy stand closest when decoding and interpreting what Itaranta's work of speculative fiction purports by way of stripping the damages caused to environment, immediate and long drawn. Given the theme of ecological disaster, and the concern for the improvement of the entire ecosystem, Itaranta's fiction is entitled to an ecocritical analysis with a 'study of relationship between literature and the environment conducted in a spirit of commitment to environmentalist praxis' (Buell, 1996). Literature constantly unearths 'better ways of imagining nature and humanity's relation to it' (Buell, 1996) and represents it with an 'earth-centred approach' (Glotfelty, 1996) 'largely from the perspective of anxieties around humanity's destructive impact of the biosphere' (Marland, 2013). Ecocriticism is based on 'application of ecology and ecological concepts' to the 'reading, teaching, and writing about literature' (Rueckert, 1978).

Material Ecocriticism: Material ecocriticism stands to erase the nature/culture dualism and conceives that 'thick with stories, matter is a site of creative becomings and dynamic expressions' (Oppermann & Iovino, 2014). Human and 'more-than-human' materiality collectively embodies ontological assemblages capacitated with generation of material semiotic expressions (Iovino & Oppermann, 2012), legitimizing it to be read as 'text' (Iovino & Oppermann, 2012). Therefore, rocks, fossils, plastics floating in the oceans, all are 'vibrant matter' nuanced with 'vital materiality' (Bennett, 2010) articulating extraordinarily compelling tales exploring new ways to fathom the entangled connection between human and nonhuman.

In the work under scrutiny, matter and narrative agency is imparted to the accumulated plastic and the elemental water to understand the 'unmappable landscapes of interacting biological, climatic, economic, and political forces' (Alaimo, 2010) between the two and to fathom the impact both have on life forms with special focus on humans. The depiction of a near future, wherein the populace battles against scarcity is the foundation of the storyline. Water, plastics, and things respond to the treatment accorded to them over the centuries and not stationed as silent and mute spectators in the setting.

Buell's Toxic Discourse: Toxic discourse heightens the consciousness of readers to the environmental state of locales through depiction of toxic or poisoned spaces, places, and bodies in works of literature (Buell, 1998). Toxic exigencies are characterized as frameless in spatio-temporal levels, 'invisible,' and said to 'surpass the capacity of science to specify physical, let alone emotional, risk' (Couch & Kroll-Smith, 1991). Enlisting the status of victimized communities, Beck (1996) points out that 'poverty is hierarchic, smog is democratic' in the context of global North transferring waste and toxic discard to the

global South. Disposed off in hidden areas, the invisible impact of waste being democratic is felt by the rich and the poor alike.

In MoW, plastic grave is 'dangerous,' brimming with 'rubbish spilling around the edges' and poses lethal challenges to life. Similarly, the plight of water bodies is marooned in a tale of shortage and control. Inaccessibility to fresh water leaves people at the risk of drinking it from contaminated sources poisoned with the essence of the grave and its contents. The risk of salt water being sold off to the vulnerable community is in contrast with the circumstances of the elitist military and tea-masters, who enjoy bigger and better water ration. Sickness and disease follow men, women and children as they are deprived of quality water and live in unclean surroundings.

Discard Studies: 'Discard Studies' looks at 'wider systems that make waste and wasting the ways they are' and deems that the facets of waste humans deal with are clearly mysterious and veiled (Discard Studies Blog, 2021). It claims that –

. . . waste is not produced by individuals and is not automatically disgusting, harmful, or morally offensive, but that both the materials of discards and their meanings are part of wider sociocultural-economic systems... (Discard Studies Blog, 2021)

Still booming, it is a strong movement challenging and questioning the allotment of unvalued and left behind material as waste. MoW represents a similar predicament when Noria and Sanja muse over the value and usage of numerous plastic and metal devices buried as past-world and redundant technology. The materiality of this matter, derived from fuels makes it hazardous to the contents of soil, water, air, sky and fire as well, the last directly connected with fuels causing pollution –the classic elements, enmeshment of which formulates materiality of all life on planet earth.

The crucial and apparently decisive arrangement of materials in the grave such as 'broken toys, unrecognizable shards, useless dishes and the endless mouldy shreds of plastic bags' (Itäranta, p. 24) resonates with present day angst of millions who preach against the consumerist culture –based on a fictional economy, and aimed at improving the lifestyle and well-being of a diminutive section of society.

Although Sanja advises her against the preoccupation, Noria frequently contemplates mass production of superfluous, low on quality –gadgets, objects and machines ending up in the dumps.

... their past-world bleeds into our present-world, ... I look at the sky and I look at the light and I look at the shape of the earth, all the same as theirs, and yet not, and the bleeding never stops. (Itäranta, p. 26)

The argument posed by the girls, echoes the dilemma individuals confront. Questioning the roots of the discard generation is substantial and capable of eliciting a response to the ideological foundations of why it is produced in the first place without considering it as a toxic energy form.

Slow Violence: Defying spectacular and instantaneous categorization, 'slow violence' –neither 'immediate' nor 'explosive,' is characterized as being invisible, as its 'calamitous repercussions are postponed for years or decades or centuries.' It occurs when –

climate change, the thawing cyrosphere, toxic drift, deforestation, the radioactive aftermaths of wars, oil spills, acidifying oceans, and a host of other slowly unfolding environmental crises confront us with formidable representational obstacles that hinder efforts to mobilize for change. (Nixon, 2011)

'Transnational' effect of slow violence intensifies vulnerability of self-sustaining ecosystems, leaving 'disposable people' at the expense of 'social conflicts that arise from desperation as life-sustaining conditions erode.' Representation of 'junk plastic and metal' hoarded in plastic grave and unavailability of fresh water emerges in the ordeals humans face. The degenerated land and water resources activate readers' response to invisible microbiological changes materialised by contemporary dumping of industrial waste, loading of nutrients, altering of natural course of water bodies and likewise reflected in the loss of ice caps, constantly shrinking, contaminated, expensive, and rationed freshwater resources. Global warming, rising sea levels, incremental frequency of vigorous storms, droughts, species' extinction, habitat destruction are entangled through materiality as essential component of visible and invisible changes directing abuse on ecosystems. Hence, slow violence lurks on the edge of manifesting itself in the form of disease, sickness, rotting, depletion, pollution and life altering changes breaking transnational borders.

Water Democracy: Emphasising on water as the cause of probable world wars in the ongoing century, Shiva vocalises the tale of water as that of 'greed, of careless technologies, and of taking more than nature can replenish and clean up.' Contending 'democratisation' and 'decentralisation' of water resources, she insists that 'Ecological Democracy' can be attained by preferring ecological solutions over technological ones (Shiva, 2002).

By endowing a vibrant and material agency to plastics and water, slow violence inflicted on environment with special focus to the elements –i.e. earth or soil, and water along with human life is brought under lens, probing the nature and origination of discarded material, and availability of water as a basic human right and a democratic resource.

The elements - earth, water, air and fire, are considered sacred in Persian, Greek, Buddhist, Indian and Chinese traditions. In Vedic literature, space is the fifth element, viewed as the formless. These elements present in the environment are also extended to human body; the absence or imbalance of even one element results in contamination or pollution of the environment as well as the human body.

Discussion on Plastic and Water Discourse

In the novel, 'plastic grave' is described as a place which strikes a reader as a landfill or a dump. 'Grave' is literally a place where dead bodies are interred and here, the wordplay with 'plastic grave' suggests a place jam-packed with dead plastic. The author describes it as

. . . large, craggy, pulpy landscape where sharp corners and coarse surfaces . . . rose steep and unpredictable. Its . . . valleys of waves and mountain lines kept shifting their shape. People moved piles of rubbish from one place to the next, stomped the plains even more tightly packed, dug big holes and elevated hills next to them in search of serviceable plastic and wood . . . under layers of garbage. (Itäranta, pp. 23-24)

The presence of a 'shallow, muddy brook' issuing near it awakens the creative tendencies as the concept imitates realistic rendition of innumerable dump sites located in the world. Being 'dangerous to walk on' with 'toxic' grounds, Noria recalls that her mother never allowed the two girls to even wander near the grave let alone 'scavenge' through its contents as the girls preferred to (Itäranta, p. 23). The air hovering over the grave is 'pungent' and although the citizens of New Qian earlier resisted the usage of water being discharged from the 'brook that [ran] near the edge of the grave', in time of need, scores of people queue up to fill empty 'waterskins' and buckets (Itäranta, p. 135). The grave is not a stationary or passive entity standing in space and time; it is alive and has an 'eye-betraying terrain' which exhibits that it is constantly in the state of becoming while intermingling with the elemental earth as well as its life forms.

It is noteworthy that in the given situation separating the agential impact of accumulated plastics penetrating into earth and the aquifers is impractical as the chemical released from the garbage piles change the microbiological and chemical structure of both the elements.

Plastic is an important tool and a resource for people of New Qian. This futuristic world has professional 'plasticsmith' who mends entities made up of superior quality plastics. The narrator refers to 'past-world plastic' as 'poor in quality' which takes 'centuries to degrade' (Itäranta, p. 21). The grave is satiated with 'junk plastic' which cannot be 'moulded into anything useful'. Noria's deliberations reveal the presence of 'useless random pieces that h[ave] nothing to do with each other'.

The best finds were the parts of broken technology of the past-world, metal and plastic intertwined and designed to do things that nothing in our present-world did anymore. Occasionally a piece of abandoned machinery could still be fairly intact or easily repaired, and it puzzled us why it had been thrown away in the first place. (Itäranta, p. 21)

Hence, the grave consists of not just useless material but also the 'abandoned machinery', which could still be working. The primary question in Discard Studies deals with understanding of why and how systems produce waste and this is actually reflected in how Noria feels perplexed over the items thrown in the grave. The excerpts given above are a reflection of reality of the contemporary world, capturing the current scenario spread across continents, making a terse commentary on waste creating social sections and waste receiving dumping sites.

In the gradually developing the 21st century, the world's legal landfills and illegal dumps have arrived at the point of containing staggering amounts of post-consumer, mismanaged waste interacting with the elements of earth. The matter released at dump sites thwarts thin boundaries of anthropocentric dualism. The usage of the plastics is unsustainable, germinating health impacts such as –transference of toxic chemicals and 'ingestion or entanglement' of life forms, specifically in the wildlife (Thompson et al, 2009).

'TDK' embossed translucent cassette tapes, massively ignite Sanja's curiosity, and their magnitude is colossal in the development of plot. The content of the tapes details a 'log of the [illegal] Jansson expedition,' to the 'Lost Lands' eventuating in the twilight century. Noria unfurls how a war-criminal and the daughter of a tea master narrated the nature of expedition 'investigating the drinkability of the water and the recovery of the areas from the catastrophe' and claimed the presence of 'pure, fresh water in the Lost Lands'. 'There is,' she said. 'And we want it to belong to everyone, not just the military.' (Itäranta, pp. 150-151)

This statement inspires Noria to depart for a similar expedition, hopeful of success mediated by people rebelling, revolting and travelling to a land where water runs free. Sanja, earlier reluctant, eventually

concedes to accompany Noria in her quest to uncover the truth of the Jansson expedition, the military, and the Lost Lands.

On the other side, among the common populace, the residents of New Qian commit water crimes, i.e. adopting fraudulent practices such as theft to avail and gain access to fresh drinking water. Sanja along with some unmentioned flat characters is tricked when she is sold salt water instead of fresh water in a 'double-pipe fraud'

'Inside the dais there's a secret container with salt water in it. The pipe has two settings . . . The seller offers a taste from the drinkable water, but then changes the pipe setting and sells salt water.' (Itäranta, p. 17)

Situated in the future, not defined particularly in order to portray the insignificance of spatio-temporal boundaries, MoW evidences the inevitability of ecological distress if sustainable and symbiotic relationship for the coexistence of the dual, 'nonhuman' and 'human', is disregarded. Military and the 'water guards,' constantly monitor the Scandinavian domain uncovering the possibility of illegal taps, hidden fresh water springs, and residents partaking in any suspicious activity. The practices are in opposition to what Shiva advocates under 'water democracy'; i.e. 'democratisation' and 'decentralisation' of water resources (Shiva, 2002). She recommends 'ecological' and 'water democracy' which appears to be a far-fetched dream not only in Itäranta's MoW but in the real world too.

Conclusions: Toxically Iconic Setting

An artwork 'expresses human feeling' (Langer, 1957), it reveals 'meanings, pointing to something not easily defined . . . not fully known' (Jung, 1956) through symbols which depict 'not the thing but the effect it produces' (Mellarmé, 1945). Featured as 'polysemic' and 'multivocal', symbolic meanings are 'culturally assigned rather than inherent in the symbol' (Womack, 2005) and literature is replete with symbolic expressions referencing myriad ideologies, socio-cultural artefacts, structures, events, settings, and abstract notions alike.

Iconic symbol is 'a linguistic sign' that has a physical resemblance, rather than an arbitrary relation, to its referent' (APA). Here, iconic symbols of toxicity are the plastic grave and shortage of water reservoirs foregrounds the ongoing and impending crisis. It looms in the face of global citizens. Driven by the agency of water, MoW portrays toxic-abusive relationship of both human and non-human elements. Not just the land but the oceans and waterways also received an overwhelming 8 million tonnes of plastic waste in 2010 (Ritchie and Roser, 2018). The point being asserted that the fantastical notion conceived

by the author in MoW strongly resonates and resembles the reality of many people who live nearby dump sites.

Since the rise in the production of plastics after the 1950s, the world has generated '6300 metric tonnes of plastic waste' as of 2015, of which a mere 9% was recycled, '12% was incinerated, and 79% was accumulated in landfills or the natural environment' (Geyer et al, 2017). Around 359 metric tonnes of plastic was produced in 2018 (PlasticsEurope, 2019). Mismatched Plastic Waste MPW follows an incremental axis year by year.

Research from countless regions has shown deterioration in physiochemical and microbiological composition of elemental earth around the landfills through gaseous emissions and leachate penetration, making water and soil inept and unsuitable, hence, implicating water and food security (Krčmar, 2018; Baghanam et al, 2020; Şchiopu, 2009; Fatta, 1999; Raman and Narayanan, 2008; Ololade et al, 2019; Akinbile, 2012; Pastor and Hernández, 2012). Mismatched plastics inflict invisible 'slow-violence' on landscape manifesting in the form of illness of soil, water, air, and ultimately the life on and of the planet, or change the ecological features of landscape, destruct habitat and displace fauna (Danthurebandara et al, 2012).

Plastic grave in the novel inflames the sensory perception with images of actual open dump sites across cities and towns allowing illegal dumping and accumulation of plastics- and e-waste, besides medical waste. In September 2019, Leonardo DeCaprio, the famous Hollywood actor and an environmental activist directed attention to an apparent 'World's Largest Dump' located in Bantar Gebang, an Indonesian village in the city of Bekasi (Poa, 2019). The New York Times covered the painful tale of the region's scavenging families earning livelihood by 'picking plastic, metal and even bones' along with the impact of pandemic COVID-2019, which gravely uplifted the scale of misery and challenge the poor and unprivileged live through on daily basis. The landfill is spread over an area equivalent to the coverage of 'more than 200 football fields', where trash pickers use 'a metal tool called "ganco"' or even 'bare hands', wherein the 'stench is overpowering' with 'bulldozers distributing the waste across an ever-rising plateau' and landslides are common (Dean & Paddock, 2020).

The undeniable trap of rapid and unstoppable consumerism is recognized as unsustainable, and steps taken to mitigate the issue are not enough. The literal and figurative devices used by Itaranta conjure iconic yet toxic images representing the fate of global accumulation of plastic waste.

Similar is the state of Ghazipur dumpsite in Delhi, India, which receives between 2000-2,200 metric tonnes waste on daily basis (ET). In 2017, few lives were lost as the swelling dump site collapsed and around 50 tonnes of waste fell over vehicles passing by the roadside (TOI, HT).

Alleviation of living standards, expansion of economies, rapid urbanisation, and population explosion are a few emergent factors specifically observed in developing countries responsible for the generation of huge quantities of waste (Minghua et al, 2009). Rich countries such as United States, Canada, China and those from Europe tend to produce more waste, whether it is e-waste, plastic, chemical or other hazardous wastes with 'less than 20% of waste [being] recycled every year', and the rest disposed off into the 'developing nations' (Tiseo, 2020).

Electrical and electronic equipment (EEE) once discarded 'without the intent of reuse' (Step Initiative, 2014) transforms into e-waste with 53.6 metric tonnes of generation in 2019, 'projected to grow to 74.7 Mt by 2030'. E-waste on its own agency produces toxic and hazardous substances like 'mercury, brominated flame retardants (BFR), and chlofluorocarbons (CFCs), or hydrochlorofluorocarbons (HCFCs)' critically desecrating the ecological settings. Ill-effects of unregulated handling of e-waste 'include adverse birth outcomes,' 'altered neurodevelopment,' DNA impairment, weakening of immunity, 'skin diseases,' and 'cancer' (Forti et al. 2020).

'[W]e are symbol-producing, symbol-using and often, symbol-dominated beings; the creation and usage of symbols is central and distinctive in our behavior and in our mental life' (Petocz, 1999). The role language plays in creating meanings with socio-cultural, and evolutionary values and traits is immeasurable. The representation of plastic menace in MoW appears to be a 'toxic-iconic symbol'. Generating a similar response through cognitive faculties of an individual, it symbolises the fear and acceptance of large areas polluting ecosphere in dangerous capacities. Campbell (1969), puts forward that '[e]ach civilisation, every age, must bring forth its own [symbols]'. The presentation of symbols and imagery in ecocritical studies, such as MoW, serve as powerful instruments in not only exposing the so called advancements of science and technological optimism, but also the worldwide economic growth and the percolation of its benefits in the lower strata of society. As is depicted in the novel, the plastic grave is the residual waste of the ever-growing technological equipment –plastic as well as metal, left to depreciate in dump sites instead of being subjected to recycle or reuse. The invisible impact of plastics has a powerful narrative and latest research from France and China demonstrates how nano particles of plastics are unleashed by skies during rains. This toxic and poisonous obsession with the benefits of discounted and mostly single-use, non-biodegradable plastics is relentlessly damaging the entire

ecosystems on land and in water. While plastics symbolize an important advancement in the history of nature-culture, the equilibrium is still lost to the overcompensated and liberal leading towards a socio-politico-cultural and ecological crisis.

Likewise, water bodies throughout the world embrace the impact of human greed and negligence. The holy aspects of purification, healing and rebirth associated with water resources wane owing to the existence of waste being dispersed in them. In the dystopian scene presented in MoW, water is still the savior, however, the uncertainty regarding its purity, abundance, scarcity, management -allocation and distribution is at the heart. It is the cause of great unrest –having submerged the continental land and being contaminated responsible for resource wars, and destruction, strangely imitating the real.

Hence, both ‘plastic grave’ and ‘water resources’, emerge as the iconic symbols of the present day toxicity which is unequivocally meant to travel in the near future.

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