Earth's Last Hour: Climate Crisis Defeatism and Green Anarchism in Jack Vance's *The Dying Earth*

by

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Abstract

This thesis argues that the titular "science fantasy" setting in Jack Vance's collection of interrelated stories, *The Dying Earth*, helps to illuminate the harms of the ideology of climate defeatism. In the text, "magical" representations of technology manifest as forms of environmental speculation rather than a lack of environmental thinking. By "bending the truth" of technological applications, such as representing the "echo chamber" phenomenon as a literal force field, Vance demonstrates how defeatism serves as a political tool intended to frame attempts to combat the climate crisis as utterly hopeless, so as not to risk entrenched power positions. In the text, a "green anarchist" society created by overthrowing the ruling class is posited as a necessary ideological shift in a system where "doomerism" has become normalized. The thesis expands on research in green anarchism by demonstrating how the hyper-awareness of climate change can serve as a barrier to environmental movements.

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Chapter One

Introduction

At first glance, it may seem like science fiction and fantasy, while similarly non-realist in nature, are so fundamentally opposed that they cannot be combined in any coherent fashion. Science fiction (sf) is often thought to be primarily extrapolative in nature, "meaning that its events and objects are explainable, if not according to present-day science and technology, then according to plausible developments of science and technology" (Atteberry 236). However, Brian Atteberry remarks that, "Such seemingly magical concepts as time-travel, telepathy, teleportation, precognition, and immortality are allowable only because they can be made to sound scientific" (236). SF is consequently not defined so much by "actual" scientific explanation, or, an explanation rooted in legitimate scientific discourse, than by the appearance of such legitimacy. According to the information provided by the author in a given sf text, "magical" concepts like teleportation can be shown to align with the scientific standards of the non-realist world being presented, but not necessarily those of the reader's "real" world. Such a conception is only partially shared by Darko Suvin, who famously defined sf by the presence of a novum to describe an invention that is scientifically plausible but does not yet exist and thus "deviat[es] from the author's and implied reader's norm of reality"; in other words, it is something new (64). Suvin refers to the method behind the *novum*'s function as "cognitive estrangement," as it follows logical rules in the work but defamiliarizes our present time (66-7). Under this framework, sf works that deviate too far into the fantastical can be swiftly categorized as not "scientific" enough to be "true" sf. But if, as Atteberry points out, the appearance of science is the only thing that separates teleportation from magic, then isn't teleportation, under

this veneer, still magic? The line between magic and technology in sf is blurred much more frequently than it initially seems.

Unlike sf, fantasy is often characterized by a lack of explanation. In the words of Atteberry, "It makes no pretense at scientific explanation. Its worlds are not posited as extensions in time or space of our known universe, nor are its marvels explainable through any development of current knowledge" (236). However, what sets "science fantasy" apart from traditional fantasy is that its worlds are positioned as an extension of our own universe. Indeed, science fantasy has a long history that demonstrates this phenomenon: many of what may now be considered the earliest works of sf can perhaps be more adequately categorized as science fantasy, such as Cyrano de Bergerac's The Other World: The Comical History of the States and Empires of the Moon, whose 1657 publication came when the moon was being widely discussed in the scientific community (Bolt 60-1). Although de Bergerac's text was influenced by prominent scientific studies, there is nothing within these astronomers' observations to suggest that empires and states exist on the moon (Evans 14). Fantasy, in other words, is not always firmly separated from science fiction. Because both genres compel the reader to "suspend their disbelief," there are very few barriers preventing the realization of Arthur C. Clarke's oft-quoted maxim that "any sufficiently advanced technology is indistinguishable from magic" (21).

While it is a scientific fact that stars die very slow deaths and that our Sun will begin to succumb to the same fate billions of years from now, this profoundly apocalyptic scenario is so far from anything we might experience that speculating on what life will be like requires moving beyond this scientific foundation and into the fantastic. This is precisely the premise of Jack Vance's collection of loosely related short stories *The Dying Earth* (1950) [*TDE*], which is set billions of years in the future when the Sun, now dim and sickly red in the sky, is going through

the final phases of star death. TDE is characterized by a profound moral turpitude exhibited by Earth's remaining human stragglers; lawlessness and indolent defeatism abound as a select few use advanced technologies that they present as magic to improve their own quality of life at the expense of the masses. Like other works of science fantasy, therefore, the supernatural and advanced technology coexist in a fantastical setting that is superficially plausible but upon closer examination deeply unfamiliar to ours. The result is that the reader is never sure where the line is drawn between magic and technology.

Although magic and technology are often shown to interconnect in sf, this pairing is far from seamless, especially when it comes to questions of environmental sustainability, where "magical" depictions of technology ring especially hollow with many scholars, due to a perceived lack of serious environmental thinking in the presentation of magic, over that of more "scientifically legitimate" technologies. Graeme Macdonald notes that these depictions are everywhere: "Do we, should we, stop and pause, in the wake of those burning thrusters, and ask: what is powering that Star Destroyer? What future fuel—and what conversion or combustion system—burns those flames? Is it clean? Is it safe? Where does it come from?" Macdonald is reacting to a tendency in sf not to explain how transportation systems are fueled; they are, in a sense, indistinguishable from witches' broomsticks, and as such these depictions do not seem like effective speculation on sustainability. Similarly, TDE is set in a world of scientific "regression," where no character is truly aware of how advanced technologies function, though they may be superficially familiar with how they are used. "Magicians" or "Sorcerers" know how to employ "A strange abstract law ... termed 'Mathematics'" (9) and can use "hard science" to achieve magical results like the casting of a spell, including the ability to create life from "vats" (8) or to surround oneself in a mystical "omnipotent sphere" (29). These Magicians live in isolation, either in separate realities entirely or in "castles," the last vestiges of ancient human dwellings. They maintain their own internal society separate from the general populace, in which each competes for power with the other. Although these "magical" technologies have the ability to hold in abeyance humanity's extinction and improve quality of life for all humans, the magicians choose to restrict their use to purely selfish ends. James Radcliffe, writing on eco- or "green" anarchism, echoes this situation: ignorance of the natural environment in a capitalist society "encourage[s] a political structure which promote[s] anti-democratic forms of decision making in which the choice of technology [i]s determined by the political structure reinforcing the dominant class relations and the power of capital" (195). TDE demonstrates how ignorance becomes a political tool to keep the populace unaware of the realities of the climate crisis and effective ways it can be dealt with, so as not to risk entrenched power positions. When no power positions are entrenched, TDE proposes, nobody benefits from inaction, and action becomes easier.

Climate change defeatism is another political tool that serves to prevent change. I use the term "defeatism" to refer to perspectives that are incapable of viewing climate change as a problem that can be effectively addressed. While climate change denialism ignores or misrepresents scientific research, defeatism is so aware of the negative conclusions it generates, while remaining unaware or ignoring positive developments, that our collective situation appears utterly hopeless. As Michael Andre-Driussi notes in his own study of Vance's works, "the earth is facing certain extinction and humanity responds primarily with fatalistic resignation. Idle pleasures are pursued: wizardry, roguery, and robbery are the orders of the waning day" (218-9). Writing on this topic, climate journalist Rebecca Solnit remarks that, "A lot of people in this society also like certainty and while it's obviously foolish to be certain we will win, somehow

certainty we will lose isn't subject to the same judgments. That certainty seems to come in part from an assumption that change happens in predictable ways, so we can know the future, or that there are environmental but not social and technological tipping points." In *The Dying Earth*, the certainty of losing takes on a different context as the Earth's inhabitants are imminently aware their lives could be forfeit at any moment due to the cosmological disaster from above; then again, the text contends, maybe not. Although the inhabitants of this "dying Earth" constantly bemoan their imminent demise, the world seems no closer to ending at the text's closure than it did at the text's beginning. The sun's appearance from Earth gives little indication of specifics; they could still have decades, or hundreds, thousands, or even millions of years left. Although the human characters perceive their Earth to be dying, therefore, this is not strictly true: ironically, humanity's end by the hostility of plant and animal life is much more imminent than the Sun's extremely gradual gravitational collapse. In the text, defeatism emerges as a worldview that causes the very conditions it is preoccupied with. While the inhabitants are not "technically" going through a climate crisis, the irony of defeatism is highlighted by them thinking that they are. Their lack of an effective response should not make things worse, and yet, through greed and ambition, it does.

My second chapter, after this introduction, examines this manifestation of defeatism as an anti-environmental, rather than a centrist or neutral, perspective in the story "Mazirian the Magician." The titular Mazirian harbours a malaise concerning all life. Magicians like Mazirian are established as hegemonic technocrats who could do more to save the Earth's climate by using their technology as a means of improving life on Earth for all humans, but decide against doing so due to their short-sightedness and desire to maintain their position of power. I introduce the concept of "green anarchism" in this chapter as an ideological avenue that can prevent defeatism

from taking hold while ensuring technocratic power is held in check. Importantly, the story depicts a moment of revolution in which Mazirian's technology is co-opted to serve a more environmentally conscious agenda.

The third chapter examines the story "Turjan of Miir," and briefly touches on the story "T'sais," focusing on how this revolution can be made possible and why it is necessary. In both stories, the phenomena of "echo chambers," metaphorically represented in the text as magical barriers or force fields, are shown to be an instrumental influence in how climate defeatism is proliferated. Behind these echo chambers lie the technocratic magicians, who can use technology to interpellate others—that is, implant certain ideologies sympathetic to their power position directly into the brains of those they hold power over. Turjan manipulates this system of exploitation to engineer a human whose "deep ecology" and green anarchist ideologies run counter to defeatism. This human acts as an "antibody" to defeatism, matching her conviction with that of the defeatists in order to propagate a necessary ideological shift.

In the end, these stories bring three main points to bear: they caution against indolence in the context of the climate crisis, they emphasize that those who control technology profit from this indolence, and they submit the need for ideological shifts in line with "deep ecological" and "green anarchist" perspectives in order to bring about the necessary technological shifts required for this crisis. The "dying Earth," after first seeming like a non-scientifically rigorous gimmick, or a conventional sword and sorcery setting, is revealed in Vance's society of limited governance, where sword-wielding heroes traverse the land toppling the regime of castle-dwelling technocratic magicians, to be a complicated allegory of the importance of minimizing anthropocentric perspectives on climate issues, especially when they might be disguised as being environmentally conscious.

Chapter Two

Planting Seeds of Hope: Mazirian's Magical Gardening

Is the end of the world beautiful? Mazirian, villain though he might be, certainly thinks so. While TDE's title may plant an expectation in the reader's mind for environmental disaster or the appearance of a post-apocalyptic wasteland that does not align with the collection's actual contents, it is nonetheless partially fitting as it accurately describes the characters' perception of their environment. Although "the glens, the glades, the dells and deeps, the secluded clearings, the ruined pavilions, the sun-dappled plesaunces, the gullys and heights, the various brooks, freshets, ponds, the meadows, thickets, brakes and rocky outcrops" are all components of the Earth's far future environment, "no man could count himself familiar with" them, "in this waning hour of Earth's life," according to Mazirian himself (17). Mazirian seems to contradictorily imply that there is "too much" nature left and that life is simultaneously disappearing. He has convinced himself of this defeatist narrative that blinds him to the reality of the situation. Conveniently, he is part of a select group who benefits from maintaining the status quo of inaction. Because denialism and defeatism end the same way, this story demonstrates that advocating for these ideologies is to advocate for the interests of plutocrats—in this case, wealthy wizards.

Although Mazirian is at least somewhat aware of the natural beauty that surrounds him, his synthetic garden highlights his need to distance himself from the perceived entropic forces gradually rendering the Earth unhabitable. As becomes clear, the Earth's environment does not seem to be in its death throes. Although nobody is apparently familiar with the aforementioned glens and glades, Mazirian is intimately aware of every minute detail of his garden. Philosopher

Allen Carlson writes that, "there is an important relationship between environmental aesthetics and environmental ethics—between how we aesthetically appreciate our environments and how we should treat them," and that specifically, "aesthetic appreciation has been extremely influential concerning the preservation and protection of some of North America's most spectacular environments" (1). This relationship heavily informs the representation of contrast between Mazirian's garden and the natural environment outside his castle walls. The ecoaesthetics of his garden is described at length in sensationalized language: it is contrived of

three terraces growing with strange and wonderful vegetations. Certain plants swam with changing iridescences; others held up blooms pulsing like sea-anemones, purple, green lilac, pink, yellow. Here grew trees like feather parasols, trees with transparent trunks threaded with red and yellow veins, trees with foliage like metal foil, each leaf a different metal—copper, silver, blue tantalum, bronze, green iridium. Here blooms like bubbles tugged gently upward from glazed green leaves, there a shrub bore a thousand pipe-shaped blossoms, each whistling softly to make music of the ancient Earth, of the ruby-red sunlight, water seeping through black soil, the languid winds. And beyond the roqual hedge the trees of the forest made a tall wall of mystery. (17)

Mazirian's garden is effectively a semi-closed system; within, he mostly dictates the order of things, while the environment outside is presumably left "untamed" to whatever forces of nature still cling to life. While Mazirian emphasizes the forest's impenetrability compared to his garden, he also seems to be attempting to capture in totality the beauty of the Earth's environment, creating plants that can sing to evoke an idealized feeling of environmental sentimentalism specific to the "ancient Earth" and its "ruby-red sunlight." The connection between aesthetic appreciation and environmental preservation is thus taken to an extreme, as the environment

must be specifically cultivated—not left to flourish separated from human activity—in order to enhance its aesthetic qualities. In other words, it is a perverse mix of anthropocentrism and biocentrism that defeatist perspectives seem to articulate with no issue, as it implies that the problem of climate change is all our fault, yet we are powerless to do anything about it.

Mazirian's "magic" is a horde of ancient spells that are established to be some form of advanced mathematic formulae that can manipulate the fabric of reality. In this sense, though they result in magical effects, they are still explicable by rational means. Through Mazirian, Vance offers a rare moment of contextual information that the lands once "swarmed with sorcerers of every description," but at that time, when authority still coalesced in cohesive systems of government, sorcery became "outlawed." As a consequence, magicians must now piece together the remaining formulae, of which "only a few more than a hundred ... remained to the knowledge of man. Of these, Mazirian had access to seventy-three, and gradually, by stratagem and negotiation, was securing the others" (22-3). Mazirian desires to "secure" magic, much like he desires to "secure" his garden, and the language of hegemony is characteristic of the magicians, as they serve to represent a profit-driven elite that heedlessly pursues the commodity of magic.

When traversing Mazirian's garden, the reader is also increasingly confronted with apparent indicators of his cruelty, as every application of magic he employs seems to serve cruel ends, to the point where his garden seems cruel in his presence. For example, a "peaceful" stroll through one of its many winding ways could suddenly be "jarred" by "agonized screaming" (18). On one such occasion, "Mazirian, hastening his step, found a mole chewing the stalk of a plantanimal hybrid. He killed the marauder, and the screams subsided to a dull gasping. Mazirian stroked a furry leaf and the red mouth hissed in pleasure" (18). Horticulture is far from a new

science even today, but a science it remains. In the world of TDE, supernatural activity exists alongside advanced technology presented as magic. The text never explains how Mazirian grows his sentient plants; it may be an advanced form of horticulture or simply one of the many cases where actual magic seems to interject itself into the narrative. Importantly, Mazirian is deeply invested in conserving his garden, especially from outside threats. He thinks to himself that, "he could call no man friend and had forever to guard his garden," which exists so he can keep a part of "nature" under his direct control: after killing the intruder to his garden, suddenly, "'K-k-k-kk-k-k,' spoke the plant. Mazirian stopped, held the rodent to the red mouth. The mouth sucked, the small body slid into the stomach-bladder underground. The plant gurgled, eructated, and Mazirian watched with satisfaction" (18). Mazirian's garden stands as the only "life" he cares about other than his own, and the above passage seems to suggest he cares about it so strongly only because it serves as an extension of his own cruelty—an additional and novel way for him to inflict suffering. His garden is thus more like an attempt to proliferate destruction than to foster or conserve life. In essence, his garden realizes "the treatment of the world as an object" built for his own pleasure, which "result[s] in the final conception of the earth as ... material" (Radcliffe 5).

Three factors remain relevant to how the decidedly unnatural garden seems to be positioned in the text as a contrast to the natural environment. Firstly, the garden shows that extremely advanced synthetic life is possible; secondly, that it is not self-sustaining, but requires constant maintenance—as demonstrated by Mazirian's careful tending to ensure every aspect of his garden is functioning as he desires; and lastly, that the garden is a mere product of Mazirian's ego and completely unnecessary in this time when resources are scarce and humanity's population is dwindling. As the story continues, it presents an alternate interpretation of synthetic

life in the heroine, T'sain, one that can be self-sustaining and can take the form of something consistent with nature.

It is not altogether surprising, given Mazirian's status as a villain in a fairly conventional heroic narrative, that readers and critics have characterized his garden as simply another monster for the hero to vanquish, another item in his devious bag of tricks. Turjan is a magician himself and appears to be one of the few exceptions to their representation as sequestered hermits obsessed with hoarding life-saving knowledge. Summarizing the first two stories, Michael Andre-Driussi writes that, "in 'Turjan of Miir' the hero is working to make synthetic humans, not monsters, but humans at their best. With 'Mazirian the Magician,' Turjan's synthetic woman T'sain shows her heroic qualities by rescuing him from Mazirian (a monster-maker) at the cost of her own life" (219). What Andre-Driussi does not consider, however, are the different ways synthetic lifeforms are represented: why is T'sain the hero, but Mazirian's plants are monsters? He also fails to impart any agency to T'sain's character, even though she is completely isolated from Turjan until the very end. I argue that Vance presents synthetic life as a speculative technology that can either be sustainable or destructive depending on who uses it. TDE does not present Turjan or his creation T'sais in a villainous light, even though they use the same magical technology as Mazirian, principally because they are not cruel, and are actually shown to be the objects of Mazirian's cruelty, seemingly without any reciprocation. The introduction to Turjan's character sees him attempting to feed a non-viable synthetic human, even though "the creature's mouth ... refused the spoon" (3). Turjan knows the creature will not live through the week, but he tries to ensure its comfort regardless.

As a contrast, we can see how Mazirian is established as an entrenched technocrat who is fueled only by self-interest rather than any respect for nature, while T'sain is introduced as an

almost ethereal being of nature, as there is no separation between her and the natural world. When she is first introduced, for example, Mazirian merely "glimpsed the wanness of her body flitting through a shaft of red light" (18), and he perceives her and the environment to be one and the same in this moment. Moreover, Mazirian's control of magic technology is frequently shown to be flawed, as demonstrated by his desire to "take her to his manse and keep her in a prison of green glass. He would test her brain with fire, with cold, with pain and with joy. She should serve him with wine and make the eighteen motions of allurement by yellow lamp-light" (18). With motivations of perversity and violence, Mazirian's use of magic is easily thwarted or circumvented by mere physical violence. For example, in one instance, Mazirian sits in his workroom, ruminating on a synthetic human in a vat, "which he had cultivated from a single cell. It needed only intelligence, and this he knew not how to provide" (19), and for this reason he keeps Turjan imprisoned, torturing him in an attempt to acquire the knowledge he lacks. When tending to the vat-grown human, Mazirian commands it to "sit up!" It does so, only to "g[i]ve a throaty roar and spr[i]ng from the vat at Mazirian's throat. In spite of Mazirian's strength it caught him and shook him like a doll." Using brute physical force, Mazirian barely manages to render it unconscious by smacking it in the head with a "leaden carboy" (20). Mazirian does not deign to provide his creations with the same level of empathy and comfort that characterizes Turjan's first appearance. Furthermore, without "intelligence," his carefully moulded creation has an innate instinct to kill, which Mazirian also unbefittingly expresses, except with a presumption of enough intelligence to wield magic. The story, therefore, presents magic as neutral until the ethos of the wielder seeps into its application. By doing so, Vance imbues his story with the recurring idea of humans as agents that can provoke both positive and negative change in the environment. For Mazirian, his musings and his own interpretation of his garden

demonstrate a deflection of human agency in his present time in favour of an idealized "living" Earth. In other words, the way he interprets his garden suggests that humans have no control over the exterior environment, which reinforces climate defeatism.

After Mazirian enters the forest, he enlists the help of its inhabitants. He enquires after T'sain's whereabouts from a "tiny man-thing mounted on a dragon-fly," called a "Twk-man" (24). Unknown to Mazirian, the Twk-man had been paid in advance by T'sain to lure him to travel in a certain direction away from T'sain's actual whereabouts. Shortly after, Mazirian asks a predatory humanoid called a "Deodand" the same questions. The Deodand attempts to distract and pounce on him, but Mazirian immobilizes the creature with "Phandaal's Gyrator Spell." Under the threat of this spell, Mazirian extracts from the creature that T'sain has gone down a path leading to the den of an ogre named Thrang. After this admission, he uses the spell to spin the creature so fast that its "frame parted. The head shot like a bullet far down the glade; arms, legs, viscera flew in all directions. Mazirian went his way" (26). His relentless pursuit of T'sain, whom he desires to torture for his own personal pleasure, mirrors eco-socialist conceptions of "capitalist economic practices," that, "have created intensive and extensive conditions of ecological destruction ... ensuring a continual and growing antagonism between human beings and nature" (Bradley J. Macdonald 40). Once again, the casual cruelty that characterizes Mazirian's every interaction with living things mirrors the cold-heartedness of authority figures under an anti-democratic capitalist system.

Mazirian's fixation on T'sain, and his use of magic for self-serving reasons, creates a series of instances where Mazirian must defy both the fatal advances of the natural world and humane moments of empathy and self-awareness. At one particularly telling juncture, T'sain unwittingly enters the lair of an ogre-like monster named Thrang, who has captured several

women and placed them in a cage. Mazirian, wanting T'sain alive, intervenes with his magic and dispatches Thrang; in the commotion, T'sain slinks away again. Spying her fast-receding "white form running along the river toward the lake," Mazirian "took up the chase, heedless of the piteous cries of the three women in the pen" (27). Vance has set up a scenario in which the empathetic path could not be easier to take. In this moment, Mazirian chooses instead to continue pursuing his personal vendetta that serves no purpose other than to satiate his lust for power. This scene serves as a representation for the capitalist elite's unfailing need for ever-greater control and domination without consideration for this pursuit's wider effects on society. In Mazirian's mind, the "profit" of his domination becomes the experience of the chase itself; unable to accommodate his need, the captive women get left behind. Furthermore, Mazirian clings to an image of the Earth's lost beauty while ignoring his own clear role in the perceived moral degradation of society; this demonstrates a cognitive dissonance that parallels defeatist thinking, because such thinking similarly allows people to ignore and/or justify the damage they are doing to the environment by shifting the responsibility to someone else, usually past generations whose Earth was not "dying" to the same degree.

When Mazirian's pursuit of T'sain reaches its climax, the natural environment turns from an aloof obstacle to a hostile force operating independently from the perceived moral positioning of the chase. After Mazirian catches a fleeting glimpse of T'sain through the trees, he further struggles to differentiate between her and the forest, and she consequently uses his moment of hesitation to disappear underwater, while leveling taunts at him. Mazirian "call[s] his charm, the Spell of the Omnipotent Sphere" (29), which summons a force field, exactly as the name suggests. To T'sain's grim surprise, Mazirian doggedly continues his pursuit. Left with no further options, "She retreated, keeping the innocent patch of [vampire-weed] between them" (29).

Unfortunately, "Mazirian chanted his last spell—the incantation of paralysis, and the vampire grass grew lax and slid limply to earth" (29). With a few precious seconds bought, T'sain decides she has no choice but to enter a "grove" of "dread shade" (29). As she runs through this grove, "great whip[s]" start to "beat at her," until one

blow twisted her around. So she saw Mazirian. He fought. As the blows rained on him, he tried to seize the whips and break them. But they were supple and springy beyond his powers, and jerked away to beat at him again. Infuriated by his resistance, they concentrated on the unfortunate Magician, who foamed and fought with transcendent fury, and T'sain was permitted to crawl to the end of the grove with her life. She looked back in awe at the expression of Mazirian's lust for life. He staggered about in a cloud of whips, his furious obstinate figure dimly silhouetted. He weakened and tried to flee, and then he fell. The blows pelted at him—on his head, shoulders, the long legs. He tried to rise but fell back ... She reached her feet, and reelingly set forth. For a long time the thunder of many blows reached her ears. (30)

Mazirian's death scene at the hands of non-cultivated carnivorous plants recontextualizes the supposed "monsters" found in his garden. In his pursuit of T'sain through the forest, he encounters at every avenue as much hostility from the natural environment as an intruder would encounter in his garden. Unfamiliar with the various threats the natural world can level at an intruder, he interprets his dominance within his garden as easily extending to other environments. While he does not go down without a fight, without access to his "magic," he is eventually overpowered. Importantly, no head-to-head battle with T'sain—or even a carefully laid trap—occurs at the climax of this story. Mazirian's own ignorance and rage prove to be his demise, as much as any carefully laid plans by T'sain as his struggle allows her to escape (though still

mortally wounded to a lesser degree than Mazirian). Additionally, he is described as possessing a "lust," rather than simply a desire, for life. This language thus highlights the idea that Mazirian's garden and his chase of T'sain are grounded in an animalistic desire for pleasure. Under the hegemonic authority of the technocrats, in other words, an "appreciation" for life veils their desire to control. Mazirian's death further demonstrates the end-game of defeatism, where the dominant class is left unprepared to deal with the issue of an increasingly hostile environment—both natural and social, as the lower class also rises up to resist being controlled—and this defeatism masks the idea that hegemonic control is a human construction by suggesting that nature does not care whether Mazirian controls magic.

Notably, "Mazirian the Magician" ends not cynically with Mazirian's gruesome death but rather with T'sain's death scene, which serves as a stark contrast to the former, emphasizing that technology can improve quality of life if it is not caged behind the indolence of technocratic despots. As T'sain returns to Mazirian's castle, she notices that his "garden was surpassingly beautiful by night," and she proceeds to offer a similarly sensationalist description as the one provided earlier by the magician: "The star-blossoms spread wide, each of magic perfection, and the captive half-vegetable moths flew back and forth. Phosphorescent water-lillies floated like charming faces on the pond and the bush which Mazirian had brought from far Almany in the south tinctured the air with sweet fruity perfume" (30). Even an enemy of Mazirian's, barely clinging to life, finds beauty in his garden. This echoes J. Baird Callicott's self-evident but rarely articulated point that what "kinds of country we consider to be exceptionally beautiful makes a huge difference when we come to decide which places to save, which to restore or enhance, and which to allocate to other uses. Therefore, a sound natural aesthetics is crucial to sound conservation policy and land management" (106). Indeed, Mazirian's garden is explicitly shown

to be attempting to conserve the Earth in a state prior to widespread environmental disaster: "T'sain, weaving and gasping, now came groping through the garden ... Faintly to be heard was the wistful music of the blue-cupped flowers singing of ancient nights when a white moon swam the sky, and great storms and clouds and thunder ruled the seasons" (30). These passages suggest that the way the garden—and the magic of technology more generally—is represented is dependent on who is caring for it and how it is used. Although associated with wickedness, Mazirian's garden is not only evil.

Nostalgia for a supposedly "lost" time when the climate crisis was perfectly fixable and its negative affects had not yet materialized is a primary talking point of climate defeatism. Liz Georges, the senior director of climate communications for the World Wildlife Fund, writes in 2024 that, "What [she] fear[s] most about climate doomers is that their message of despair and helplessness will sap us of our motivation. We can't afford to wallow in our fears of the future. Climate change isn't going to stop, and that means we can't either. Doomerism is a lie designed to strip you of your power." Wallowing in his garden, Mazirian can safely ignore the conditions of his planet that threaten his power position. However, the sounds his flowers make and the images they inspire, while beautiful, are not tangible.

Eventually, T'sain enters the room where her creator Turjan had been kept imprisoned shrunken into a small glass jar and brutally tortured by Mazirian. Quickly, "She flung the glass crashing to the floor, gently lifted Turjan out and set him down. The spell was disrupted by the touch of the rune at her wrist, and Turjan became a man again" (31). Immediately after confirming Mazirian's death, the final lines of the story contain a bittersweet message of hope: "She slumped wearily to the stone floor and lay limp ... 'T'sain, dear creature of my mind,' he whispered, 'more noble are you than I, who used the only life you knew for my freedom ... but I

shall restore you to the vats. With your brain I build another T'sain, as lovely as you. We go.' He bore her up the stairs" (30-1). The contrast between these two death scenes thus illustrates the irony of defeatism. Mazirian is content to toil away in his tower, hoarding his seventy-three spells while lamenting the hopelessly sad state of the world right until his status quo is disrupted. His indolence reflects what many climate justice activists assert: the harmfulness of "this defeatism among the comfortable in the global north, while people in frontline communities continue to fight like hell for survival" (Solnit). In T'sain's death, however, there is a possibility for Mazirian's technology to be used in a way that cuts through the indolence and allows for change to occur. Moreover, Vance advocates for an eco-socialist ideology to topple the technocratic elite who have monopolized both sustainable and non-sustainable technologies.

This ending is the first instance of a pattern in *TDE* that presents individuals who work to topple the technocratic regime as heroes. Indeed, if anything aside from the setting can be said to link these stories, it is how the heroes prevent authority figures from rendering the Earth completely unlivable for anybody but themselves; aside form Turjan, the magicians do not come out on top in any of them. As earlier noted, Andre-Driussi contends, "throughout the six stories that make up *TDE* there is a quiet drive among heroic individuals to prepare for the universal death by rediscovering the human animal and all of its lost accomplishments. In 'Turjan of Miir' the hero is working to make synthetic humans, not monsters, but humans at their best" (219). This heroism does not exclude the "fatalistic resignation" that so characterizes these stories, and even among the heroes "Idle pleasures are pursued" (Andre-Driussi 218-9). Nonetheless, complete resignation evades those whom the stories reward. At the end of each story, the dominant power structure has been weakened in some way so that a little bit of "magic" is redistributed among the larger population. There are no barriers to Mazirian's garden now, no

roadblocks to stop Turjan from creating more heroic individuals. The situation seems to improve when these heroes take action. In structuring his stories this way, Vance is engaging with a long history of ecosocialist critique in sf, and his inclusion in this tradition has never before been considered. Eric C. Otto writes that, "Ecosocialism stands for the supersession of capital by a system of democratized socioeconomic organization that assures social justice and maintains ecological integrity" (101). However, an aspect of Vance's writing that renders it worthy of being studied in an environmental context is his insistence on injecting a little more fatalism and a little more pragmatism than is conventional in heroic figures, which ensures *TDE* never outright proposes a new "democratized system" of organized socio-political power. When the magicians are supplanted, the power vacuum they leave behind is never actually filled. What seems to happen instead is the persistence of a biocentric society more aligned with green anarchism.

In much eco-anarchist writing, the earth is similarly envisioned as containing "an element of the sacred," the absence of which promotes viewing the world as "ha[ving] no other value than" something "man-made and therefore no other end than as a waste product." Much like *TDE*, there is a persistence in this school of thought that "this alternative sacred world-view was a feature of past or 'primitive' cultures, and it was part of an historical aspect of alienation that involved a search for the true nature of humanity" (Radcliffe 196). As Andre-Driussi suggests, the core of *TDE* is largely composed of heroic figures finding ways to resist the dominant power structures despite a largely indolent populace. The end result is usually a newfound appreciation for human goodness in this world of imminent catastrophe. John Zerzan, the leading thinker in the anarcho-primitivist "branch" of green anarchism, echoes this sentiment of hope by ironically employing racist and colonialist terms: "Renunciation and subjugation in modern life have long been explained as necessary concomitants of 'human nature.' After all, our pre-civilized

existence of deprivation, brutality, and ignorance made authority a benevolent gift that rescued us from savagery" (1-2). Zerzan's observations also follow the attitude of humans in TDE's future. However, far from representing a lack of formal power structures negatively, as is conventional in hero narratives, Vance ensures "there is no license for anyone to make life into a hell on Earth" (Andre-Driussi 219), by rewarding individuals who work to maintain this lack of social structure, techno-capitalist or otherwise. Zerzan's philosophy is similarly injected with a large degree of idealistic hope, as he contends that modern anthropology has allowed us to "see that life before domestication/agriculture was in fact largely one of leisure, intimacy with nature, sensual wisdom, sexual equality, and health. This was our human nature, for a couple of million years, prior to enslavement by priests, kings, and bosses" (2). The attempt to "return" to this "lost" state of nature against the whims of the priests, kings, and bosses of the far future is predominantly how conflict manifests in the text, as heroic acts of vanquishing evil are veiled depictions of social revolution. While Vance never strays into the aftermath of these revolutions, in "Mazirian the Magician" he demonstrates how inaction perpetuates hegemonic power structures that seek to suppress the will of the majority and how defeatism is at odds with a genuine respect for the environment.

Chapter Three

Ideological Force Fields: Confronting Pandelume's Echo Chamber

According to data gathered in 2023 by the Yale Program on Climate Change Communication, approximately 72% of Americans think climate change is occurring, 64% are worried about it, 70% think it will harm future generations, 79% support investment in renewable energy sources, and 62% think Congress is not taking adequate action (Marlon et al.). In Canada, the data reveals similar patterns: research conducted in 2022 by the University of Ottawa finds that 7 in 10 Canadians support action to address climate change, and 19% and 20% find federal and provincial governments to be respectively "very poor" and "poor" at addressing it ("Views of Canadians"). In both countries, most people seem to care about the environment and to support action to combat climate change. However, remaining under the crucial 1.5°—the goal of global temperature change established by the Intergovernmental Panel for Climate Change—by 2030 continues to appear less likely with each passing summer (Masson-Delmotte, et al. vii). People in both countries seem to agree that more legislative action needs to be taken. Without it, increased apathy risks proliferating climate defeatism, which is already a major challenge in climate change communication. Furthermore, the current system of social and political organization appears less and less able to sufficiently challenge vested power interests who seek to profit from environmental deterioration.

The lack of "good news" is one factor that can lead to an increase in the phenomenon known as "echo chambers," which are defined by Cinetti, et al. as "environments in which the opinion, political leaning, or belief of users about a topic gets reinforced due to repeated interactions with peers or sources having similar tendencies and attitudes" (Cinelli et al). In the

world of *TDE*, absent the presence of social media, self-interested technocrats use advanced technology to propagate spaces similar to echo chambers. Echo chambers are a particularly potent tactic in the context of climate defeatism, as constant exposure to negative news creates a false impression that there is nothing positive occurring, which further justifies this stance in the eyes of those who hold it. *TDE*, through the stories "Turjan of Miir" and to a lesser extent "T'sais," demonstrates how a self-interested elite can use technology to wield this malaise towards action as a means to quell resistance to their practices, which in turn exploit the defeatists themselves. Under the maxim that, "Living creatures, if nothing else, have the right to life" (Vance 33), technologies, especially sustainable ones, can be de-monopolized and co-opted by those with less social power to ensure exposure to different perspectives, thereby working to dismantle the cognitive barriers that allow disinformation and echo chambers to flourish.

In "Turjan of Miir," the persistent need to isolate from the supposedly "dying" Earth displayed by members of the technocratic elite is taken to an even further extreme than that exhibited by Mazirian. Turjan is a magician, like Mazirian, but he is characterized by a desire to strengthen human character. His primary "mission" is to create a synthetic human from a "vat" (3), but he admits that, "always I fail, from ignorance of the agent that binds and orders the patterns" (7). Though the nature of the magicians' "abilities" is often ambiguous, this is one of the few moments when the text makes clear that technology seems to be at play with minimal magical intervention; still, the language Vance uses to describe these vats and how they function is not markedly different from his description of spells. Both rely on references to "patterns" in the universe, further hinting at the interplay between technology and magic and the natural world. As earlier noted, Andre-Driussi contends, "throughout the six stories that make up *TDE* there is a quiet drive among heroic individuals to prepare for the universal death by

rediscovering the human animal and all of its lost accomplishments. In 'Turjan of Miir' the hero is working to make synthetic humans, not monsters, but humans at their best" (219). The difference between the two being that synthetic "humans" are part of the interconnected processes that define how nature functions, while a "monster" seeks to disrupt nature, or otherwise exploit natural processes for their own sole benefit.

To aid him in his mission, Turjan seeks out the "Master Mathematician" Pandelume, who is widely considered to be the most powerful magician, because he is the only person who knows every spell, even those that are lost among the "normal" magicians. He has such a command over reality that he has chosen to live in "the land of Embelyon" (4), which can only be accessed using a long-forgotten spell. Embelyon is thus strongly implied to be a separate reality or dimension that exists independent from the Earth. Pandelume refers to them both as separate places and notes that the unchanging, arcadian, and idyllic characteristics of Embelyon would not be possible on a decaying and dying Earth. In Embelyon, there is "nothing wicked or foul" (33), and when Turjan first arrives he asks, "Was Embelyon of Earth? The trees were Earth-like, the flowers were of familiar form, the air was of the same texture... But there was an odd lack to this land and it was difficult to determine" (5). In particular, he notes "the horizon's curious vagueness ... the blurring quality of the air, lucent and uncertain as water" (5), before "He looked to the horizon and thought to see a black curtain rising high into the murk, and this curtain encircled the land in all directions" (6). This final detail leaves the impression of a land within a glass dome, self-sustaining and operating under its own laws independent from the reality outside. Importantly, Turjan never mentions the Sun at all, but he does describe the sky as "most strange ... a mesh of vast ripples and cross-ripples, and these refracted a thousand shafts of colored light ... he now perceived that the colors of the flowers and the trees were but fleeting

functions of the sky, for now the flowers were of salmon tint, and the trees a dreaming purple" (5). To this point, the sun and sky are very prominent in descriptions of the landscape, and the latter is always described as "fathomless dark blue," almost black, which is a symptom of the Sun's own waning glow. To have a sky of many different shifting colours that in turn influences the colours of plant life on the ground is directly opposed to the "dying" conception of Earth. It also establishes once again the importance of "patterns" and "cycles" in this story, where the appearance of the sky dictates the appearance of the ground and thereby produces a visual uniformity.

Embelyon thus appears to represent a domed environment that could conceivably be technological in nature. Rather than a literal dome, however, Turjan interprets it as a "black curtain"—an image associated with concealment. This literal example of a chamber hidden behind a curtain with no outside interference illustrates how echo chambers function by "trapping" individuals in an environment that distances them from others and that remains invisible to others as well as those within them. Recent research on echo chambers shows that they "can act as a mechanism to reinforce an existing opinion within a group and, as a result, move the entire group toward more extreme positions" (Cinelli et al.). A notable aspect of echo chambers, in other words, is that the perspectives of individuals within them become gradually more intolerant and embedded. Every aspect of Embelyon's environment is similarly designed to isolate Pandelume and conceal his existence from the outside world, and it thus represents the ultimate gesture of defeatism: rather than working to fix the Earth, Pandelume lives in his own ecosystem because he has given up on humanity.

Using the image of an isolated reality where nothing from "outside" penetrates

Pandelume's magical barrier, Vance creates a literal echo chamber that has drastic effects on the

humans that are created here. As Turjan acquaints himself with his surroundings, suddenly, "the sound of galloping hooves approached; he turned to find a black horse lunging break-neck along the bank of the pool. The rider was a young woman with black hair streaming wildly," who "flourished a sword" in one hand. This woman is T'sais, and without provocation she "[strikes] out at [Turjan] with her sword" and begins to "[fight] with a crazy violence" as Turjan "drag[s] her to the ground" (6). Upon threatening her with magic, T'sais replies, "Do as you please ... Life and death are brothers" (6). In response to this forthright indifference, Turjan demands, ""Why do you seek to harm me? ... I have given you no offense." You are evil, like all existence ... If power were mine, I would crush the universe to bloody gravel, and stamp it into the ultimate muck" (6). While much more overtly nihilistic than is conventional in climate defeatist perspectives, which hardly advocate for the extermination of all life, T'sais nonetheless illuminates how the absence of hope can fester in isolation from other perspectives and create a kind of radicalized defeatism. After meeting Pandelume, Turjan also asks about the identity of T'sais, to which Pandelume replies,

This girl T'sais I created, but I wrought carelessly, with a flaw in the synthesis. So she climbed from the vat with a warp in her brain, in this manner: what we hold to be beautiful seems to her loathsome and ugly, and what we hold ugly is to her intolerably vile, in a degree that you and I cannot understand. She finds the world a bitter place, peopled with shapes of direst malevolence. (8)

T'sais' supposedly intrinsic nihilism is further ingrained by her entrenchment in Embelyon, as she is never exposed to alternate perspectives that can pierce the cognitive barrier she was created with. Living in an echo chamber, where the supposed ugliness of her environment is constantly exposed to her due to her "defect", she has become the ultimate defeatist, as she not

only hates the world but also finds nothing to be hopeful for and is indifferent as to whether she lives or dies.

T'sais is not the only inhabitant of this echo chamber, however, as the enigmatic figure of Pandelume is also not immune to defeatist nihilism, and he consequently presents himself as generally more aloof and less villainous than Mazirian. Although Embelyon is already completely isolated from the Earth, Pandelume desires an even further degree of isolation within his secure castle, as he has established a "law" that "no one may gaze on Pandelume" (7). This results in a situation of excessive remoteness bordering on the farcical, as Pandelume essentially occupies a second echo chamber, nested within the first, in which he himself is the sole occupant. While not radicalized to the degree of T'sais, he also sees no future for humanity. In "T'sais," the follow-up story from "Turjan," he muses on Earth, describing it as

A dim place, ancient beyond knowledge. Once it was a tall world of cloudy mountains and bright rivers, and the sun was a white blazing ball. Ages of rain and wind have beaten and rounded the granite, and the sun is feeble and red. The continents have sunk and risen. A million cities have lifted towers, have fallen to dust. In place of the old peoples a few thousand strange souls live. There is evil on earth... evil distilled by time... Earth is dying and in its twilight. (33-4)

Although the malevolence that characterizes Mazirian's disdain for the Earth is not present in this passage, the idealisation of the past is. Earth was once a world of great natural beauty that is now worn down by time. Pandelume's perspective on Earth also contributes to T'sais' own defeatism. Although Embelyon is *superficially* beautiful, as Pandelume's creation, it is predicated upon his belief in the ugliness and death of *reality*. T'sais' constant exposure only to Embelyon

and no other environment, in turn, leads to her adopting aspects of that foundational belief in her own perspective.

Despite Pandelume's certainty in the decrepit state of Earth, other characters seem certain of its beauty. T'sain describes Mazirian's garden as beautiful, and a (now semi-reformed) T'sais responds to Pandelume's lamentation by noting that she "ha[s] heard [that] Earth is place of beauty" (34). Pandelume is "silent" in response to this, before acquiescing to T'sais' desire to go to Earth, without making mention of the content of her statement (34). Why is Pandelume so determined to characterize Earth as decrepit and "evil" despite indications to the contrary? More importantly, why does he insist on this characterization despite the immense power he possesses?

Pandelume's fixation on the Earth's degradation also surfaces in the process of T'sais' creation and the ensuing "biological defect" it engenders, which is an example of ideological "interpellation." Introduced by Marxist philosopher Louis Althusser, interpellation is the process by which "ideological state apparatuses" "transfor[m] the individuals into subjects" via every day social interactions (85). In this light, T'sais' hopelessness is a metaphor for her indoctrination by a technocrat within his own echo chamber. The idea that a technocratic elite can physically implant certain ideological stances into "brains in vats" also mirrors Solnick's argument that "the fossil fuel industry and other vested interests" are the main cause of barriers to preventing climate change and the main power positions that benefit from widespread defeatism. In the case of Pandelume, he benefits from T'sais' defeatism because it does not disrupt his own placid existence, within which he holds no obligation to use his technology to help Earth. In this case, the story uses magical technology to make literal many of the barriers to change utilized by entrenched power structures that operate "invisibly" in our own lives. A literal curtain enshrouds T'sais' environment, while a literal mental barrier prevents her from shifting her perspective to

one less toxic. T'sais has essentially been reduced to a single ideological point: that there is nothing to hope for in life. She is not an "individual agent" with full control over her actions, but rather an "ideological subject" (Althusser 86), whose every action and thought is dictated by her interaction with Pandelume. Pandelume has, in a sense, created a method that ensures T'sais "looks down" at the lack of beauty in the world to prevent a scenario in which she "looks up" to see the "black curtain" pulled over her by the very same Pandelume. Furthermore, he has artificially created a demand for his own worldview by engineering a person that destroys everything in sight without provocation, his own engine of decay to mirror the fallen towers of a million cities.

Recent research on echo chambers presents a way to interpret Pandelume's unusual fixation on misery: "Selective exposure and confirmation bias (i.e., the tendency to seek information adhering to preexisting opinions) may explain the emergence of echo chambers" (Cinelli et al). In Pandelume's case, the only other people he is exposed to are magicians who, thanks to their technocratic control, are the sole demographic capable of traveling to Embelyon. Similarly, they are also the sole demographic he is interested in engaging with of his own volition, due to his thirst for power and knowledge, to which only other magicians can pose a threat. This is demonstrated by his bargain with Turjan:

Willingly will I aid you ... There is, however, another aspect involved. The universe is methodized by symmetry and balance; in every aspect of existence is this equipoise observed. Consequently, even in the trivial scope of our dealings, this equivalence must be maintained, thus and thus. I agree to assist you, in return, you perform a service of equal value for me. A man lives in the land of Ascolais, not far from your Castle Miir.

About his neck hangs an amulet of carved blue stone. This you must take from him and bring to me. (7)

Because the technocrats are interested in competing exclusively amongst themselves, other perspectives are few and far between. The only thing Pandelume can think to do with the power brought on by his technology and sequestration is to use these things as a way to acquire still more power. He talks of an immutable need for "balance," and yet he benefits from an extremely imbalanced system. Pandelume himself is supposed to embody the ultimately imbalanced figure: where other magicians know but a handful of spells, he knows hundreds and controls a monopoly on still more kinds of magic. Vance thus points to the irony of those who hold defeatist perspectives and often choose to be defeatist about environmental issues in particular while ignoring the privilege inherent in being able to do so. It is easier for Pandelume to dismiss the Earth as a lost cause because he is distanced from its supposedly imminent demise. So, too, does defeatism rest on the assumption that "demise" is imminent, as its premise relies on the "end point" being too soon for change to have any noticeable effect. In the case of a gradual collapse, defeatism loses its cogency, as there is no singular moment of sudden darkness but rather a slow and steady dimming. Additionally, defeatism's profound self-interest is shown when the defeatists themselves assume they will die before the worst environmental degradation happens, so they may as well enjoy life now, as highlighted by Pandelume's sequestration.

Pandelume's self-centered and defeatist worldview is further demonstrated by his tutelage of Turjan. Over the course of his instruction, Turjan learns not only how to create life in vats but also "the secret of renewed youth, many spells of the ancients, and a strange abstract lore that Pandelume termed 'Mathematics'" (12). This is perhaps the most glaring instance of mathematics being equated with seemingly magical abilities, and it serves as a reminder that

many of the outlandish and fantastical abilities employed by the characters are grounded in a science that appears to require no resources. There is never any mention of electricity, coal, renewable energy, or any technology conceivable to us like these "vats." Rather, all of the environmental issues stemming from unsustainable technologies that plague us appear nonexistent in TDE. In a rare exposition dump, Pandelume attempts to explain how "magic" is performed, as he tells Turjan, in a reference to something unknown, that, "Within this instrument ... resides the universe. Passive in itself and not of sorcery, it elucidates every problem, each phase of existence, all the secrets of time and space. Your spells and runes are built upon its power and codified according to a great underlying mosaic of magic. The design of this mosaic we cannot surmise; our knowledge is didactic, empirical, arbitrary" (12). So, Pandelume seems to acknowledge that, even with his knowledge and magic, the universe evades understanding. The total certainty on which climate defeatism rests appears particularly fragile given this admission. Pandelume could do so much more with his powers, but his profound self-interest appears to have corrupted his perception of Earth as an unsalvageable wasteland. Furthermore, the intersection of technology and magic in TDE provides a new way of thinking through how sustainable technologies function in equilibrium with the cycles of the natural world.

As Pandelume continues, Turjan's status as somebody uninterested in abusing the power of the technocratic system becomes clear: "I have endeavoured through the ages to break the clouded glass, but so far my research has failed. He who discovers the pattern will know all of sorcery and be a man powerful beyond comprehension.' So Turjan applied himself to the study and learned many of the simpler routines" (12). Because Pandelume's technocracy is built on the assumption that he controls all vital knowledge, Turjan's sharing of this knowledge hints at his role as a potential disruptor of this system. The almost comedic fashion in which Turjan recuses

himself from Pandelume's lifelong struggle serves as a contrasting perspective from Mazirian's earlier obsession with acquiring all of the spells he possibly could, in addition to Pandelume's fervent desire to understand the "pattern of the universe."

Turjan's disruption of the technocratic regime also echoes the environmentalist perspective of "deep ecology," which is often considered to be a foundational aspect of green anarchism. Coined by environmental philosopher Arne Næss in the early 1970s, deep ecology, as summarized by David E. Cooper, advocates for a "radical reduction of the world's population, abandonment of the goal of economic growth in the developed world, conservation of biotic diversity, living in small, simple, and self-reliant communities, and—less specifically—a commitment 'to touch the Earth lightly'" (213). Vance posits a society that meets most of these policies; one in particular—the case of a reduced population—already exists and is cited by the technocratic magicians as a primary reason for Earth's demise. Vance revises this policy by suggesting that, were it somehow brought into effect, it would actually fuel defeatism to a potentially detrimental amount. In this way, Turjan's character represents a revolutionary figure who consistently brings about these policies, while doing so in a way that ensures a healthy amount of population growth, in opposition to the dominant technocratic elite.

While Pandelume shows no signs of amending his inaction toward the Earth in "Turjan of Miir," Turjan and those he influences attempt to make it more livable, starting with a respect for the sacredness of life and the environment. While Mazirian and Pandelume surround themselves with enormous collections of synthetic life, Turjan boasts no such collection. Instead, he takes time to carefully craft one lifeform at a time, which he nurtures until they die, and which is also all he needs to spread his message. The story also hints at a future where synthetic humans have become more than singularities. For example, his first attempt at synthetic life is a girl named

"Floriel," whom he imbues with conventionally druidic features: "pale green hair ... skin of creamy tan and wide emerald eyes" (13). More than that, she appears "dreamy and wistful ... caring for little but wandering among the flowers of the meadow, or sitting silently by the river" (13). Turjan finds her "amusing," but unfortunately her exceedingly passive bearing does not amuse T'sais, who eventually "came riding past on her horse, steely-eyed, slashing at flowers with her sword. The innocent Floriel wandered by and T'sais, exclaiming, 'Green-eyed woman—your aspect horrifies me, it is death for you!' cut her down as she had the flowers in her path" (13). T'sais, described here as the embodiment of steel and sharpness, poses a dark contrast to Floriel's gentle lightness, and Turjan's failed attempt at realizing a deep ecological perspective teaches him the importance of being wary of superficiality.

Much as defeatism is often thinly disguised as offering a "real" environmentalist perspective, deep ecology "counter[s] what many grassroots environmentalists deemed to be an ultimately shallow reformist environmental movement" in the mid-1970s. As Eric C. Otto summarizes from Bill Devall, "by the mid-1970s this environmentalism became an institution, with many of its already existing and new membership organizations (e.g., the Sierra Club, the Natural Resources Defense Council) bureaucratically advocating for policy changes but not leading a charge for fundamental transformations in 'our society's basic culture" (46). This illustrates the dangers of "shallow" environmentalism—purporting to care about the environment but being unwilling to take action to defend it. These "superficial environmentalists" are like the beautiful but passive and fragile Floriel, wandering dewy-eyed through the world romantically gazing at its beauty but remaining unable or unwilling to appreciate that ugliness also resides in nature. In other words, their passiveness is defeatism in all but name, as it allows plutocrats to do

as they wish, and also signifies a false understanding of the reality of the natural environment, doing little to prepare them for the difficult actions environmentalists must take to protect nature.

Symbolically, the encounter between T'sais and Floriel illustrates the conflict that occurs when defeatist and nihilistic worldviews turn people away from environmentalist movements. In other words, be mindful not to touch the Earth too lightly. To remedy this, Turjan "would create one like [T'sais], of the same intensity, yet sound of mind and spirit" (13). The result is T'sain, who is capable of leading a transformation of society's basic culture, beginning with her sister, and culminating with "Mazirian the Magician." In her creation, Turjan influences her ideological outlook only after she has emerged from the vat; he also notes her "intensity," or the strength with which both sisters display their convictions. In a sense, Turjan has engineered an "antibody" for hopelessness, someone who can venture out into the world and properly match the intensity with which defeatists express their views with an equal share of intensity for proactive change. Of all the choices at his disposal, Turjan creates somebody who loves the Earth and is also perfectly suited to convincing a world of Earth-haters to love the Earth too. In this way, he disrupts the technocratic regime by looking outward at what effect his magical technology can have aside from the superficial accumulation of power.

The story reflects the concept of deep ecology in three ways. Firstly, in Turjan's teaching of T'sain, he advocates for a recognition of the interconnectedness of all living things. For example, he tells T'sain, newly from the vat, "Presently we return to Earth ... to my home beside a great river in the green land of Ascolais" (14). This language adopts none of the indicators of natural and moral decay that always accompany other people's descriptions of the Earth. Instead, Turjan paints a picture of a rejuvenated Earth defined by cyclical patterns and filled with space to co-exist with the environment: "Is the sky of Earth filled with colors?" inquires T'sain, "No, the

sky of Earth is a fathomless dark blue, and an ancient red sun rides across the sky. When night falls the stars appear in patterns that I will teach you. Embelyon is beautiful, but Earth is wide, and the horizons extend far off into mystery" (14). Thus, his personal philosophy is revealed to align with a deep ecological perspective that emphasizes "the fundamental interdependence of all phenomena and the fact that, as individuals and societies, we are all embedded in (and ultimately dependent on) the cyclical processes of nature" (Capra 6), rather than a superficial attachment to the Earth's beauty. Secondly, according to Pandelume's explanation, magic in TDE is also fundamentally deep ecological in nature, acting within and drawing from patterns and symmetry inherent in the natural world. This symmetry renders it radically sustainable and renewable, as it takes nothing away that it does not return. This representation of technology as magic, and thus functioning without fuel, offers a differing perspective from sf and ecocritical scholar Graeme Macdonald's, which problematizes the tendency to "skip over" the struggle for fueling advanced technologies sustainably. Lastly, Turjan's instruction of T'sain mirrors his own by Pandelume but omits the emphasis on power and personal gain that characterizes the great magician's. Rather, Turjan imparts to T'sain the importance of appreciating the beauty of the universe for its own sake and not to exploit the symmetry of the universe for personal gain. "Mazirian the Magician" illuminates this concept by having T'sain help free Turjan unmotivated by potential reward and unaided by any except nature itself and the denizens of the forest. All of these elements place Turjan as an environmental revolutionary with both the tools and know-how required not only to envision but also to bring into effect a more sustainable future, and this project is clearly in line with the "deep ecology" perspectives of green anarchism, with the sole caveat that a radically reduced population might not result in a people conducive towards environmentalist perspectives.

As a final note on Turjan's influence as a revolutionary, his teaching of T'sain directly leads to T'sais' reformation. Wandering through Embelyon, T'sain distractedly stumbles across her twin's cabin. Soon, T'sais herself appears and is momentarily shocked to see her reflection in T'sain. As T'sais prepares to strike her down, claiming that "You do wrong by existing, and you offend me by coming to mock my own hideous mold,' T'sain laughs and replies, 'Hideous? No. I am beautiful, for Turjan says so. Therefore, you are beautiful, too" (15). T'sais' face then "relax[es] into thought," and after further deliberation she decides to travel to Earth "to find beauty and love" (15-6). The power of natural symmetry and patterns thus once again proves transformative, as T'sais is given a chance to observe her own perspective from outside the echo chamber, and her previously fully radicalized and unrepentant outlook on other living things immediately shifts. In other words, her "flaw" is confirmed to be asymmetrical in the balance of the universe, and exposure to other perspectives gives her hope for the future where before there was only a cold desire for suffering. On Earth, the horizon extends into mystery, and there is perhaps no more fitting metaphor for showing how seeing beauty and hope in the environment can spur a desire for action against defeatism.

While the magicians also seem to appreciate the beauty of nature, they always imagine that the Earth was more beautiful in the past; compared to this, the dying Earth's beauty is sparse and fragile. The magicians' perspective thus exhibits a noticeable tilt toward defeatist thinking and the dangers of ecological nostalgia, and their appreciation is driven by a feeling of necessity: beauty can be taken away, so we must acknowledge it now. T'sais' perspective critiques this conception of beauty. As a person discovering beauty for the first time, she is personally unmarred by the idea that the Earth was "more beautiful" in the past, as demonstrated by her desire to continue despite Pandelume's unflattering description it. For her, the past, present, and

future are all potentially beautiful, so beauty is not defined by its status as a finite resource but rather infinitely renews itself amid the universe's larger cyclical process.

Furthermore, through T'sais' indoctrination and subsequent counter-indoctrination with the help of T'sain and Turjan, Vance demonstrates the need for ideological shifts to combat the climate crisis. While technological solutions like renewable energy and EVs tend to dominate the discourse on climate change, "Turjan of Miir" illustrates how much technology is ultimately subject to certain ideological positions held by the elite who control it. Under this framework, technocrats like Pandelume can intentionally "hold back" certain developments that could be helpful to society, like his refusal to use his "chamber" for more than self-isolation, his insistence that Turjan do something for him before he can do likewise, or the "defect" he mistakenly creates in T'sais. Turjan "shifts" the process of synthetic human creation from Pandelume's activity of idle fancy to a way of ensuring that people who are conscious of nature's beauty occupy the Earth. In so doing, he, through T'sain, also "shifts" T'sais' ideology away from her prior indoctrination.

Pandelume admits that "Living creatures, if nothing else, have the right to life," and that maxim, and how people can either fail or live up to it, is demonstrated in "Turjan of Miir." Through the magical conceits of an "isolated" reality, the story crafts a narrative in which technology leads to the proliferation of dangerous worldviews by creating an "echo chamber" effect that causes people to perceive "outside" beliefs, opinions, and people as existential threats to the world, which supposedly justifies extreme acts of violence. In the context of climate defeatism, widespread apathy directed toward the apparent inefficacy of current political and social institutions inflames a "doomer" perspective that only engages negatively with developments in environmental issues. Under this doctrine, each instance of bad news fuels

negative opinion, and each instance of good news is either interpreted to be false or characterized as "not enough." While this is a distinctly contemporary perspective on environmental issues, to borrow Otto's words on the intersection of a different set of non-realist texts with deep ecology, TDE offers an avenue that has thus far not been acknowledged in the scholarship of non-realist fiction for a "dialogical interplay" with deep ecology, which "synthesiz[es] an ecological, activist perspective" that TDE and "deep ecology alone...cannot provide" (Otto 47). To this effect, "Turjan of Miir" demonstrates the importance of exposing oneself to different perspectives in order to break the cognitive barriers that result in a defeatist outlook. Vance's elided contribution to environmental studies in genre fiction is his employment of magic as a metaphor for "the fundamental interdependence of all phenomena," a perspective that highlights the need for "revolutionary" action in which the tools and status of a technocratic elite are supplanted for the establishment of a society aligned with deep ecological practices. Far from a simple gimmick that allows Vance to convey conventional heroic narratives, the "Dying Earth" setting allows him to show how a fear of civilizational collapse and perceived moral degeneration eventually causes their permeation in human viewpoints. The titular "Dying Earth," therefore, signifies the death of humanity's ability to hope for things, in addition to the Earth's "literal" process of dying. Ultimately, the story argues that if everything is connected and all living things are dependent on the cyclical processes of nature, then inaction against the climate crisis is the surest way to encourage the progression of that crisis.

Chapter Four

Conclusion

While gardening is often held as an activity suited to those who love nature, Mazirian uses his love of horticulture as a means of asserting his own measure of control over nature. Such an activity is shown to be profoundly anthropocentric at its core: Mazirian expresses distaste, after all, for natural spaces outside his garden and his many "enemies" contained therein, to the point where only his own interpretation of ideal natural beauty can be allowed in his presence. Throughout the "Dying Earth" series, but particularly in the final book, *Rhialto the Marvellous*, Vance increasingly portrays magicians as rendered completely inept by their narcissism: "the magicians of the day were a various lot; gathered in colloquy, they seemed an assembly of rare and wonderful birds, each most mindful of his own plumage" (*Rhialto*, 609). Vance contrasts their indolence with a long history of magicians whose very names "evoke wonder and awe," including the aforementioned "Phandaal the Great," who invented "mathematical magic" (584). By comparison, today's magicians are "a disparate and uncertain group, lacking both grandeur and consistency" (584). One of these elder magicians from a bygone age, who has retained life through magical means, characterizes them as "fifteen seals dozing on a rock ... pedants ... mystics ... buffoons" (595). While there is room in nature for indolence, Vance demonstrates that for humans, indolence is often not without cost. Magicians like Pandelume and Mazirian, by taking the route of inaction despite easy means to action, satisfy their short-term gratification for power and notoriety at the expense of quality of life. Importantly, Vance offers a green anarchist way of living in accordance with a "deep ecological" perspective as a necessary ideological shift required to ensure that technological shifts happen in socially and environmentally ethical ways.

Ultimately, the framing of contemporary environmental issues as contrasting with the idyllic natural sanctity of the past—a frequent talking point of "doomer" environmental discourse—puts more power into the hands of plutocrats like Pandelume and Mazirian, who maintain their power by pressing a narrative that hope is only lost for those not under their direct sphere of technological influence.

In "Mazirian the Magician" and "Turjan of Miir," Vance presents two revolutionary moments, spearheaded by Turjan and T'sain, that show how similar tactics to those above can be used to reverse the magicians' authoritarian applications of technology by similarly creating a sphere that "expands" rather than "constricts" ideological influence. Historically dismissed by scholars as "a state that provides a certain amount of background tension, and that is all" (Andre-Driussi 218), TDE and its titular setting deserve renewed consideration in our contemporary moment of widespread environmental discourse. "Background tension" can be widely cited as a major reason why people care about the climate crisis in the first place, and unfortunately, this tension can result in a state of extreme anxiety that makes defeatism and inaction seem more appealing than facing the realities of the issues at hand. TDE perfectly encapsulates this feeling of impending doom but asks the reader to take a step back and consider how plutocratic interests occupy the heart of this "monolithic" hopelessness. The text's title, after all, pushes a misleading defeatist narrative. Ideological shifts aligned with "deep ecological" perspectives have the potential to counteract this defeatism by maintaining that nature is governed by the same cyclical processes that govern us. As such, though Mazirian establishes himself as having risen from the natural world to live among his own artificial substitution for it, he eventually returns to the soil all the same. TDE sees hope in such "patterns" of the universe, from which the instruments of

change can be created in opposition to established power structures, many of which function by relying on disorganization and disorder.

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