

War of the Worlds: Geologic Consciousness in Reza Negarestani's *Cyclonopedia*

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Abstract: Iranian philosopher and writer Reza Negarestani crosses horror, science fiction, theology, and speculative realism in his complex 2008 work *Cyclonopedia: Complicity with Anonymous Materials*. Investigating supposedly ancient technologies rooted in oil and oil extraction through a series of increasingly arcane essays, Negarestani locates in the Middle East a geologic consciousness ingrained into human and natural histories that is manipulated and consequently also manipulates human and non-human actors through processes of extraction and consumption. Negarestani's geologic consciousness is a thinking Earth whose oil explicitly guides and "lubricates" events that lead to power and dominance for the surface-level humans and non-humans, while a subterranean-rooted large-scale war between the planet and the sun continues into perpetuity. Foucauldian biopolitics are visible here as life itself is used in gestures of sovereignty, making relevant recent revisions of biopolitics in the work of Achille Mbembe, Dominic Boyer, and Jeffrey Nealon. Negarestani reverses typical assumptions of terraforming—the idea of a human-led restructuring of the planet is instead inverted to reveal a planetary-led manipulation of the human and nonhuman actors staking claim to its surface. This reframing rescales relations and allows for a reorientation of the way that processes of oil extraction are understood. It suggests a terracentric model of reality as opposed to an anthropocentric one. Negarestani's geologic consciousness restructures Middle Eastern philosophical, environmental, and economic relations and puts pressure on assumptions about human-dominated control of the planet, pushing for a broader, less privileged understanding of human and nonhuman relations on a range of distinct scales.

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Talk Among the Stars

As a human-developed¹ medium of imaginative production, science fiction often incorporates anthropo-centered wells of scientific and cultural understandings, allowing for speculations that (re)imagine the sets of prior, existing, and future relations among humans, materials, and nonhuman forms of organic life (as well as imaginings of certain forms of inorganic life). The outcomes of these speculations are far from uniform, but often beg us to question naturalized assumptions popularized within Westernized thinking and practices. One such assumed notion is that of planet Earth's anthropocentricity—a perspective that centers around the effect of the world's processes on dominant human groups, as well as the manner in which these human groups have likewise affected those processes. One need only look at how the Anthropocene as a term has been argued as a descriptor for the current age—a time in which, according to paleontologist Kenneth Lacovara, "[humans are] changing things, in many cases in irreparable ways, and that will certainly be recorded in the geological rec-

ord. [...] There's no doubt if you could go 5, 10, 15 million years into the future and dig down to 2016, you would be able to find the geological evidence that humans occupied the planet" (Raz, 2016). The term itself does have benefits, insofar as it enables humanity to reorganize its understanding of its influence over the world. Evans (2018) suggests that "nomenclature such as 'Anthropocene' can be science fictional. Such names do not simply prompt critical thinking; they call up novel narratives predicated specifically on the embedding of an estranging novum into a storyworld that diverges significantly from the known world" (p. 485). What she terms a "science fictional" manner of (re)thinking pinpoints science fiction's efficacy as a mode of reframing human perspectives. She suggests that "[t]o identify the science fictionality of the Anthropocene is to recognize that the term introduces a novum that differentiates it from our prior sense of the world, integrates that novum into a future-oriented but historically grounded narrative, and uses that narrative to direct a reexamination

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of modernity” (p. 485). While such an analysis of the Anthropocene’s wider effects is helpful, it does not change the fact that—as evidenced by the centrality of “anthropo” in the term—humans remain dominantly self-absorbed in their thinking about the world and the sets of relations layered within lived reality. While it is true that humans are heavily entangled within the geological and ecological aspects of the Earth, it does not follow that predominantly human-centric models of reality must take supremacy. Any type of distance from such a model of thinking contributes to a wider understanding of those relations and more sustainability in existing with them. Some extant modes of thinking, like that of the indigenous groups described by Cruikshank (2005) already imagine such models. Nonetheless, dominant human groups and settler cultures have historically dismissed and mythologized these forms of knowledge during past cross-cultural encounters and have instead continued to rely on European notions of science as the primary mode of sense-making when it comes to the environment.

The difficulty of even attempting to view the world’s processes as separate from humanity’s within the domain of the scientific lies in the difficulty—perhaps impossibility—of separating knowledge and understanding from the subjectivity of human perspective. Ian Bogost pinpoints this as he describes Thomas Nagel’s attempt to answer the question, “what is it like to be a bat?”² The “alien phenomenology” that Bogost (2012) identifies is that, no matter the level to which we reduce an experience to physical components and “even if evidence from outside a thing (be it bat, hookah, or cantaloupe) offers clues to how it perceives, the experience of that perception remains withdrawn” (p. 63). As Bogost points out, even the best analysis cannot offer a complete understanding. The barriers that exist are too great. However, while the idea that other intelligences are withdrawn from human understanding is a core component in much of Object-Oriented Ontology (OOO)³ and remains an important source of insight into the available and unavailable avenues of breaking from human thinking, what I want to draw attention to is the way that this scenario exposes the particularly

anthropocentric allowances that human thinking necessitates. I further suggest that one function of science fiction’s reorienting sets of relations is to deform assumptions of human-centered models of reality and draw attention to the inherently biased characteristics in such models. This deformation produces platforms from which a more planetary democracy can be imagined, or at least vantages where the assumption of a human-dominated planetary hierarchy is problematized, even as they are routed through stubborn anthropocentric human thinking. This involves a reprogramming of the reader or viewer.

Iranian philosopher and writer Reza Negarestani’s 2008 work, *Cyclonopedia: Complicity with Anonymous Materials*, uniquely deforms popular Western assumptions about hierarchies of animacy through his science fictional cross-stitching of Iranian culture, Islamic traditions, speculative realism, and continental philosophy. The novel builds its storyworld through a combination of pseudo-academic analysis and summary essays written by or about the fictional Hamid Parsani, a radical archaeologist whose investigations into arcane histories and the occult are hinted to have led to his recent disappearance under suspicious circumstances. The increasingly arcane essays continue to investigate antediluvian mysticisms and technologies rooted in oil and oil extraction as well as revealing a stellar conflict going back to before the evolution of human life. Negarestani locates his novel in the Middle East and consequently puts into conversation Iranian and Western views of the natural world. With its agriculturally rich history and unique ecosystems, Iran has a tradition of cultivating nature that is commonly seen through the integration of indoor and outdoor spaces, a persistent motif found in Iranian architecture. Fondness for nature and respect for the open air and spaces have grown from the pastoral roots of Iranian culture. However, nature is often curated for use by human intervention. Natural spaces in Iran have frequently been utilized as locations for farming or as preserves for game hunting. In the 1960s, environmental conservatism was linked to a push by elites to create sites for big game hunting. Iran established

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one of the largest national park and conservation programs in the Middle East at that time, though this has since eroded as a push for development and expansion have taken a prime role in the country's plans for progress (Schwartzstein, 2020). The field work conducted by Abe (2012) regarding Iranian relationships to planetary ecology finds that Iranian knowledge of nature has been influenced and modeled on Western understandings of science and nature greatly over the last hundred years. Abe describes that "[i]n Western history, nature gradually became an object of scientific inquiries, being increasingly viewed as 'objectifiable' and 'knowable'" (p. 262). This means that Western modes of perceiving nature rely on breaking nature into component parts and objectifying them for physical investigation. It is a technical and sometimes narrow way of seeing nature, and even within Western modes of thinking, that sterility in analysis has been challenged by some individuals. In 1916, for example, Scottish born American naturalist John Muir asked, "why may not even a mineral arrangement of matter be endowed with sensation of a kind that we in our blind exclusive perfection can have no manner of communication with?"⁴ Traditional Iranian views on nature often appear as a mixture of mysticism and utility, but not of taxonomic investigation. While Abe delineates ways that the Iranian views on nature coexist with and have developed alongside Western traditions of knowing nature through technical investigation, his analysis of Iranian knowledge about nature points out that, as a whole, Iranians are unlikely to simply transpose their views of nature atop Western ones. Iranian nationalism and identity do not completely match up with these Western notions of the environment, which is perhaps what makes Negarestani's particular geological and ecological model so simultaneously familiar and alien to many of his readers. There is an almost utilitarian focus on nature's materiality and also an elevation of that material consciousness steeped in mysticism.

In *Cyclonopedia*, Negarestani puts tension on concepts of anthropo-superiority and governance, and not just by replacing the book's nonhuman entities with anthropomorphized entities of godlike propor-

tion. The subtitle, "complicity with anonymous materials," establishes Negarestani's goal before the text begins: to imagine a way of thinking about the planet itself and the materials that constitute its being. Channeled through a conscious flow of oil, issues of control and power on and in the planet are central to the text as platforms for renegotiating the understanding of human and nonhuman relations. Through inverting anthropocentric models of social production and placing materials at the center of his framework of relations, Negarestani (re)imagines understandings of the processes cycling through local, national, planetary, and interplanetary systems.

In an interview with Fabio Gironi, Negarestani describes how he "wrote *Cyclonopedia* with only one priority, constructing a sense of syncretism and paranoia: both characteristics of the contemporary Middle East" (Gironi, 2018). He attributes this to his own background: growing up as an Iranian Muslim during the Iran-Iraq war and then getting his degree in systems engineering while fostering a private fascination with continental philosophy. This background has contributed to the stacking of numerology, demonology, cosmology, materialism, and geopolitics in the novel, and gives way to both the technical approach of his writing and the grounding of his text in Islamic occultism. His ability to blend genres like horror and science fiction as well as modes of thinking like Islamic mysticism and poststructuralism, make the novel stand out. The novel is often associated with the subgenre of science fiction described as "weird fiction," and *Cyclonopedia* has been called "an incestuous amalgam of Lovecraftian chthonic horrors, Islamic theology, Deleuzian hallucinations, numerology, and not-so-fictional middle-eastern geopolitics" (Gironi, 2018). This description of his work—a mixture composed of what are often seen as incongruent pieces—is helpful, as I argue that it is productive to envision Negarestani's planetary ecologies and systems not as differentiated wholes, but as a sort of concentration of assemblages in which the various agents consciously or unconsciously form and function as a larger unit (Deleuze and Guattari, 1980; Delanda, 2016; Hayles 2017). Still, despite the knowing and un-

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knowing “complicity” of the “anonymous materials,” in creating these assemblages, it is Negarestani’s notion of the planetary consciousness at work (and guiding the machinations of the human and nonhuman world in asymmetrical proportions) that guides this article. The worlds in Negarestani’s novel are cognizant and the Earth is literally at war with the Sun, and all of the organic and inorganic objects at work on these planets are being played as part of an interplanetary chess match—whether they realize it or not. The anthropocentric model of reality is rendered obsolete or foolhardy and, instead, the reader must perform a terra-centric mapping of relations to process the entirety of *Cyclonopedia*.

Foucault in the Cracks

Foucault’s concept of biopolitics and biopower offers a helpful perspective in the reading of Negarestani’s geologic consciousness. Describing a “biopolitics of the human race,” Foucault (1997/2003) suggested that biopolitics seeks to control “set[s] of processes such as the ratio of births to death, the rate of reproduction, the fertility of a population [...] together with a whole series of related economic and political problems” (p. 243). Negarestani’s notion of the planet controlling the life and death of all organic life on and within itself as a means of gathering power against the Sun can be productively read using Mbembe’s discussions of biopolitics. His questions—for example, “under what practical conditions is the power to kill, to let live, or to expose to death exercised? Who is the subject of this right?” (Mbembe, 2019, p. 66)—underscore the correlation between biopolitics and sovereignty—the power over life and death. He terms this biopolitical focus on and management of death “necropolitics,” and he explains that “sovereignty means the capacity to define who matters and who does not, who is disposable and who is not” (Mbembe, 2019, p. 80). To wield necropower, then, is to have the power to decide who can and will die, often simply by de-individualizing persons or taking these people as a form of power to be used, reused, and eventually disposed of as one would toss away an old tool that has served its purpose and outlived its utility. The geologic con-

sciousness of *Cyclonopedia*, in fact, at the center of all the continually circular patterns within the novel, is found in this materiality’s sovereignty over matters of death. In his book, *Plant Theory*, Nealon (2016) reads Foucault’s biopolitics in conversation with, first, the inclusion of nonhuman animal life and, second, the addition of vegetal life. He states that “animality is fully incorporated into biopower as the template for life itself” (p.7). Nealon goes on to make a case for how, just as animal life can be applied to Foucault’s notions of biopower, so too can vegetal life.⁵ These considerations further complicate the concept of biopower as they bring, not just human life, but also animal and vegetable life under its purview. If, as is suggested in *Cyclonopedia*, the planet draws organic life toward death in order to convert the living material into literal energy in the form of fossil fuels, then Negarestani’s novel literalizes and extends notions of biopower.

Boyer (2019) has conducted a recent anthropological study in which he coins another idea based on biopolitics—one that he calls energopolitics. His study of wind energy production on Mexico’s Isthmus of Tehuantepec specifically notes the relationship between energy production and political institutions. Boyer describes “a more basic but also invisible codependence between our contemporary infrastructures of political power and our infrastructures of energy” (Boyer, 2019, p. 16). Derived from biopolitical methods of power tracing, Boyer complicates the notion of power production by showing that “the material and infrastructural dimensions of energy both enable and disable certain configurations of political power. The line of analysis questions whether political power in the conventional (human-centered) sense can really be taken to be an autonomous and efficacious domain” (Boyer, 2019, p. 1). Boyer’s study—much like the fertile ground excavated by Mbembe and Nealon within their studies of biopolitics—productively configures the means by which Negarestani’s geologic consciousness manages sovereignty for humans and nonhumans, whether it is unaware of the existence of such networks or cognizant of them. By granting energy itself status as a material object, the material consciousness that

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frames *Cyclonopedia* can be understood as wielding and embodying notions of biopolitics, or finding entanglements between politics and energy production that cannot be clearly articulated as granted from one source or the other. In the end, the “oily entity” controls or at least manipulates human and nonhuman life, as well as organic and inorganic nonliving material, through internal programming, from the surface to the substratum where the material flows maintain dominance. The dispute between the Earth and its solar adversary intertwines these notions of energy and politics in such a way that the power dynamics of the terracentric model are rescaled spatially and temporally.

Knowing Nature

The remapping of relations from anthropocentricity to terracentricity directly correlates to ecological readings of the planet and underlines the processes that different groups of humans use to “know” nature. In his introduction to *Green Planets*, Canavan (2014) suggests that “ecological critique [...] can productively be thought of as a kind of science fiction, as it uses the same tools of cognition and extrapolation to project the conditions of a possible future— whether good or bad, ecotopian or apocalyptic—in hopes of transforming politics in the present” (p. 17). Through investigating the science fiction concepts at work alongside the ecological in *Cyclonopedia*, a relevant model of interpreting reality influenced by human and geologic histories pushes beyond those anthropocentered boundaries of understanding in order to provide portals for making sense of planetary processes.

Negarestani, begins relating to nature through materiality. Materials are the result of so-called natural processes and are often extracted or converted by human interventions and invasions into ongoing cycles that are part of the physical world. In his book, *How Forests Think*, Kohn (2013) describes life “beyond the human,” and argues that there is a “hopeful politics we seek to cultivate, we privilege heterarchy over hierarchy, the rhizomatic over the arborescent, and we celebrate the fact that such horizontal processes—lateral gene

transfer, symbiosis, commensalism, and the like—can be found in the nonhuman living world” (p. 19). Kohn’s work is directed at what he calls the nonhuman living world, meaning bio-matter, but we can take this a step farther and include those mineral and geological materials as well, particularly if we read them, as Negarestani does, as having a consciousness. Kohn believes that there is “a relational landscape composed in part of nested and unidirectional associations of a logical and ontological, but not a moral, nature [that] is a form of anthropocentric narcissism that renders us blind to some of the properties of that world beyond the human” (p. 19). It is his conclusion that the human relationship to the nonhuman world is one which, despite a growing awareness of the nonhuman world, still features an anthropocentered reading of reality. He argues that this “anthropocentric narcissism” limits the human understanding of the planetary processes always in motion. Kohn’s observations are rooted in fieldwork that he conducted with indigenous peoples in Ecuador, but his understanding of these ecological assemblages reveals the same stubbornness and inescapably anthropocentric thinking that Negarestani’s nonhuman material consciousness inverts and reappropriates in *Cyclonopedia*. In the book, it is the thinking and yet “nonanthropocentric imagining of oil, the extractive landscapes of the Middle East, and the oil wars pursued by the United States” (Doherty, 2014, p. 367) that shape the so-called natural landscape and relay the ways in which Negarestani wants the reader to experience this ecology. The desert and the oil welled up beneath it are the natural geologies found in *Cyclonopedia*. Nature and the environment are understood through the physical relations, entanglements, and knowability of materials. As Abe (2012) illustrates, “objects play a critical role in how Iranian environmentalists conjure up and develop a conception of Iranian nature” (p. 260). The application of Abe’s research on Iranian environmentalism is easy to see in practice within *Cyclonopedia*. The materiality makes up a crucial part of Negarestani’s novel, and object awareness and analysis are intrinsic qualities of the ecologies that he builds in the text. What Negarestani calls petropolitics originates in the ancient bio-matter

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that physically make up this fossil fuel, meaning that the energy and power entanglements are directly related to the ecological entanglements found throughout the novel. The move to a terracentric model here suggests that the planet itself, through its layering of ecological entanglements, is engaging in biopolitical, necropolitical, and energopolitical manipulation of all organic and inorganic biomatter. The ancient geological consciousness has a deified element to it that comes out through the text, but one that is littered with technical, natural processes.

Negarestani's view of nature contains a duality that bridges between the scientific and the occult. Alternatively, perhaps it is better to see his view of nature as simply a larger net that is cast out, nested around, and living in the flow of oil within the desert that is central to the book. "Or, once again, take Oil as a lubricant, something that eases narration and the whole dynamism toward the desert. The cartography of oil as an omnipresent entity narrates the dynamics of planetary events. Oil is the undercurrent of all narrations, not only the political but also that of the ethics of life on earth. Oil lubes the whole desert expedition toward Tellurian Omega" (Negarestani, 2008, p. 19). The narrative voices understand this unique ecological landscape on one level through metaphysical relations and, on a second level, through the object relationality that comes from scientific scrutiny. It is this foray into the scientific that establishes this work as significant to Arab science fiction.

In a discussion with two contributors to an Arabic science fiction anthology called *Iraq +100*, author Anoud (2017) states that "The debate in Arab media about the lack of Sci-Fi in Arab literature attributes it to the Arab world hitting a slump when it comes to scientific advances and inventions in the 20th century, in comparison to other parts of the world." Even though mainstream science fiction writers like Frank Herbert and Kim Stanley Robinson⁶ plug echoes of Middle Eastern culture into their science fictional world building—with Herbert's fictional world, Arrakis, being a thinly veiled analog to Iraq (Senior, 2007), and Robinson presenting a group of Arabic settlers as one of the earliest sets

of colonizers to inhabit Mars in his *Mars* trilogy—the idea that the rather gradual progress of Westernized science in the Middle East has slowed the genre's development is echoed in Hassan Blasim's (2017) introduction to *Iraq +100*. This is doubly important when put into context with Abe's illustration of science as one of the key venues for actively engaging with and adequately reading the environment. Negarestani reveals the early influence of Western science on his writing, as well as his fascination with genre-splicing and the occult, when he explains that in his youth, "[d]uring the frequent air raids and blackouts, my sister used to read me French fairy tales like the Countess of Segur, Persian folklore, Russian science-fiction, or cloak and dagger stories by the likes of Zevaco and Dumas" (Gironi, 2018). While the Russian science-fiction most likely had the greatest degree of influence in constructing a Western scientifically based understanding of the environment for Negarestani, it is the international web of influence as well as the variety of genres from these early forays into storytelling and world building that makes segregating these influences from one another in his own writing so nonexistent. Negarestani, whose novel can lapse into jargon-filled technical descriptions of real and imagined science at a whim—while concurrently engaging with a numerological deciphering of ancient artifacts—dually builds a world that has a "uniquely Iranian concept of nature" and one that engages both directly with "the growing environmental discourses and practices [...] deliberately modeled and organized based on scientific notions of nature, indicating that this scientific notion of nature is becoming the mainstream discourse" (Abe, 2013, p. 202). Evans (2018) highlights the importance of the ecological in the study of science fiction as she explains how the "tendency toward sf is embedded in the fabric of environmental discourse, shaping environmental narratives as well as technological ones" (p. 487). Meanwhile, Canavan suggests the same sentiment in his introduction to the collection *Green Planets: Ecology and Science Fiction*, when he argues "that two hundred years of SF can help us collectively 'think' this leap into futurity in the context of the epochal mass-extinction event called the Anthropocene" (Canavan and Robinson 2014, p.

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16). Negarestani's novel contains a particular presentation of and focus on existing mainstream readings of ecologies that are largely anthropocentered. His novel systematically deconstructs these mainstream readings and rebuilds a dissimilar approach as there are important "relationships between conceptions of the environment and Islam" incorporated into his text where "nature signifies the totality of the universe of which humans are a part (Nasr 1996). Humans and nature are inseparable" (Abe, 2013, p. 202). This relationship between the environment and Islam is perhaps what Herbert tried to capture in the environmentally focused mysticism in his Arrakis-born human group of Fremens, or what Robinson's character, Frank Chalmers, begins to embrace as he spends time with the Arabic Zeyk's caravan traveling across the deserts of Mars during *Red Mars*.

In *Cyclonopedia*, Negarestani's cultural understanding and background enhance such imaginings of the Middle Eastern relationship between geology and religion through the application and excavation of his lived experience. Negarestani's constructions of the ecological—an ecology cradled in the deserts of the Middle East, highlighted by the geological formation and internal materials being formed beneath the planet's surface—rely on the entanglement of humans and nature that Abe addresses, but Negarestani puts pressure on the direction of the engagement. This heeds back to Kohn's fear of a unidirectional reading of relations, one in which all lines lead back to the human, and Negarestani is able to rotate such roads of engagement in his text. The geological and ecological material entities that become emblematic of nature in Negarestani's novel act as "hyperobjects," to borrow the phrase from Morton (2013), "things that are massively distributed in time and space relative to humans" (p. 1). In order to know these things, to know and read nature in a meaningful way that can instruct and reframe a model of ethical relations among the planet and its inhabitants other than those understood through globalism in what has been called by Spivak (2015) "planetarity," Negarestani's novel builds a knowable, or at least investigable, consciousness in

the planet itself and the materials that course or nest inside of it.

Planets at Play

Negarestani locates, a geologic consciousness in the Middle Eastern and, in particular, the Iranian materialism that is engrained into human and natural histories. The consciousness is manipulated and consequently also manipulates human and non-human actors through processes of extraction and consumption. Negarestani's portrayal of the planet in his novel underscores a kind of, as Moraru (2015) describes it, systematic "geomethodology," a way of understanding and reading planetarity. *Cyclonopedia*'s structure attempts to access and organize the human, organic, material, and geologic relationships as they intersect and knowingly or unknowingly form assemblages. The novel finds ways to merge ostensibly divergent pieces into holistic unities while concomitantly showing the separate components of this planetarity. One can trace unanticipated correlations among the entanglements revealed in the text that coincide with the manner in which the novel reframes the reader's actual thinking. In one example from *Cyclonopedia*, Negarestani first engages with geopolitical human conflicts through a Capitalism/Islam binary, describing how "for Capitalism, the other side is Islam, for Islam Capitalism constitutes the other side" (p. 23), but he then describes the planet's infiltration of this conflict, saying that "earth is the other side for both Islam and Capitalism—not in the sense of exteriority, but an outsider which has crept in, an Insider" (p. 23). Here the planet's sublevel of influence is revealed as a key component in shaping human geopolitical relations, both against and integrated in as part of the binary, which Negarestani describes in total as "a decimal disease system knitted on occult tellurian and social dynamics" (p. 23). These enmeshed layers of engagement reveal a large assemblage of which humans and other organic life are part, but unknowingly so. This allows the reader to reorganize a model of understanding so-called global processes and tensions in ways that unveil outside (or inside, as Negarestani playfully puts it) influences in the workings of global human interactions. Part of

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the purpose of this text is to deform anthropocentric thought processes, requiring the reader to utilize a different codex, or more alien process, in decoding the book to align with the jolt that comes from the shift in thinking planetarily. This de- and recoding means a continual removal from the kinds of comfortable and expected modes of relating to and understanding of the world typically found in storyworlds, including the expectations the reader has of narrative voices and of traditional story arcs. Temporally, this deformation is situated throughout the novel as part of past, present, and future arcs of time and narration.

Negarestani not only produces this deformation in the text with the kinds of jolts out of naturalized understandings of human relations found in such examples as the Capitalism/Islam binary dynamic, but he draws the reader's attention to the distorting and readjusting effect that the text produces on and in the reader through the narratology. For example, he embeds this reprogramming into the text when he writes, "[i]t is no accident that hidden writings are associated with collective authors, as in the case of *apocrypha scripta*. One of the initial symptoms of inauthenticity that Hidden Writing produces is positive disintegration, or more accurately, collectivization of one author (voice) or an authorial elite, and its transformation to an untraceable shady collective of writers, a crowd" (Negarestani, 2008, p. 62). The text not only puts pressure on itself and its own reliability as a representative voice that ought to be considered authentic, but also brings into question notions of collectivity and the impossibility of separating certain types of narrative voice into demarcated perspectives. While this distorting, alienating, and disjointing writing seems to lead away from narratological clarity, Negarestani (or the narrator he is using at this particular instant) seems to have that be his purpose as he states, "Inauthenticity operates as complicity with anonymous materials" (p. 62). Citing the deterioration of authenticity, these anonymous materials, or objects, or literal matter become more entangled with the reader as what is hailed as voice becomes disembodied even more. In other words, the voices of the text are no longer understood distinctly as human

voices. The agential component of the text itself solidifies more firmly as the narrator explains how "archaeologists as fanatic readers of Hidden Writing who concretely contribute to the text" eventually "dominate the politics of future and will be the military science of the twenty-first century" (Negarestani, 2008, p. 63). The narrative of the text, by not strictly being derived from a human narrator as would be expected in typical storytelling, materializes in a relationship in which humans are being informed and guided by conscious objects, most directly the planet Earth itself. This kind of re-evaluation of planetary relations aligns with what Szerszynski (2017) suggested triggers a move into "a 'Second Axial Age,' a radical shift in thinking and praxis involving a deeper awareness of being as conditioned by the dynamic material becoming of the universe on multiple spatial and temporal scales" (p. 36). The new model of understanding being formed through the text rescales the typical way humans relate to and understand the greater relations of which all living and nonliving things are part. While Szerszynski's examination of what he calls "theory-fictions" in the process of constructing geo-spiritualism futures does not exactly follow the same kind of endgame that Negarestani seeks, in worlding a horror-science fiction text, *Cyclo-nopedia* does develop and encourage a "radical shift in thinking and praxis" for the reader. By reframing sets of relations and renegotiating assumed hierarchies, material and consequently spiritual understandings are redefined within the text and the reader takes a step closer to a terracentric model of reality in which a material consciousness directs the myriad activities of humans and nonhumans on local and planetary scales.

Although the narrative experimentation in the text is full of paranoid conspiracies and cultish hints within the mock analysis of texts and pseudo-historical documentation, keeping the reader at least an arm's length from witnessing an actual dialogue between celestial spheres, Negarestani (2008) clearly draws the geologic—and material—consciousness as an active "figure" through the musings and translations reported from the fictional sources, like "former professor of Tehran University, the archaeologist and researcher of Mes-

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opotamian occultural meltdowns, Middle East and ancient mathematics, Dr. Hamid Parsani” (p. 9) and “former infantry Colonel Jackson West” who “had unexpectedly deserted Delta Force” (p. 79). The attention to ethos-building for these characters, from the pseudo-authoritative blogger Z to the primary narration of “Sorceress,” runs counter to the infrequent reminders of the novel’s overall narrative unreliability. Despite the fact that the text is governed by rumors and unverified summaries or remnants of notes, the technicality and depth of the reports allow for some growing trust as the text develops. This is why the writings of Parsani, often given academic titles such as “The Rise and Fall of the Solar Empire”—which, we are told, offers a “rigorous investigation of the anomalous pact between the Earth and the Sun” (Negarestani, 2008, p. 145)—invite a reframing of these sets of relations and reorient a human-centered model of lived reality. It is through Parsani’s notes, articles, entries, and then the peripheral notes, articles, and entries written on those primary sources that the reader comes to see the material consciousness that provides the literal subtext of the novel. McLean (2017) describes the material sentience found in *Cyclonopedia* as something horrific: the Middle East is portrayed not only as a material entity (the region from which the mythological story of Tiamat and Marduk originates, and one theater of contemporary global conflict) but as an animate, sentient one. Such life and sentience, however, are far from being anthropomorphic projections or metaphorical displacements from human society to physical geography. This is a vitality and intelligence of an inhuman, alien kind, that Negarestani likens to H. P. Lovecraft’s Cthulhu and the Great Old Ones, i.e. “monstrous, gelid, tentacled, bloblike beings of extra-terrestrial origin” (McLean, 2017, pp. 218-219).

The material entity is animate and motivated as it directs human and other surface life toward its own ends. However, even in McLean’s description, anthropocentric biases are clear as the entity’s “vitality and intelligence” are described negatively as “inhuman and alien.” While reading Negarestani’s text surely does invoke a sense of horror at times, it is perhaps more productive to simply conceive of the entity be-

ing “withdrawn,” unable to be understood completely through a human-centered reading of reality, and therefore simply unlike that of human conception. By avoiding the comparative trap, the geologic consciousness appears less malicious in regard to humankind. Just what this consciousness is concretely comprised of—beyond mention of oil, dust, the desert, the molten core of the planet, and the planet as a whole—lacks clear definition and eludes the reader throughout the text in ways that undermine the impulse to anthropomorphize the material and planetary consciousness. It remains nebulous and variegated because of its scale, while peripheral glimpses can be seen as specific and clearly outlined. This step is essential to the book’s purpose of disorienting the reader in coding the text in a typical anthropocentric model of understanding. Negarestani’s world building alludes to a geologic consciousness excavated from the details of the book that underscores the Earth itself as it “actualizes the planet by looking at it, more exactly, by gazing into the planet’s face and treating it as a legible object—one that lends itself to reading” (Moraru, 2015, p. 20). This is what cognitive materiality does in the book, becoming a legible object although the “face” remains hidden in the “high dimensional phase space that results in [hyperobjects] being invisible to humans for stretches of time” (Morton, 2013, p.1). The book then mirrors the planet materially and translates it into textual and narrative constructions. The functions and processes of, on, and within the sphere reveal motive and plot, but this motive is working in what appears to be a counter-intuitive direction to the anthropos while moving in a direction that can be imagined to be intuitive for a geologic consciousness. It provides, perhaps, “a geophilosophy that doesn’t think simply in terms of human events and human significance” (Morton, 2013, p. 7). The motivation for Morton, though, is to urge human action that can act immediately in affecting change by becoming aware of such massive objects in motion and play across all geologic and temporal scales. Negarestani’s geologic consciousness does not necessitate such a sudden physical reaction, but rather a growing awareness of potential material motivation behind natural process-

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es in order to reorient models of understanding reality.

Negarestani creates a cloud of details to define the wide range of entanglements that go into planetary construction and, consequently, delineates multiple scales to be used for reading the planet. As it unfolds, the text follows what Moraru (2015) has called “an ethoscopia, a contemplation of the planet as planet, a multiple, creative-interpretive consideration of the planet’s planetary ‘aspect’ or *adspectum*,” and it reveals “a material and cultural configuration at once planetarily pertinent” (p. 20). Following the narratological arc and overall reframing of readerly processes, one need only look at some of the scattered environmental descriptions in *Cyclonopedia* to see an example of the level of detail that is used to bridge between human and geologic thinking. The narrator in this section of the text is in the midst of what is described as a “preoccupation of dust as the collective element of the Middle East” and he explains how “middle-eastern bedtime stories are built upon meteorological taxonomies; for meteorology suggests the weather-harnessing power of these alien building processes. Weather, the set of atmospheric states in a given time and space such as temperature, rain, wind, et cetera, represents the building processes of elements in the form of differential compositions between their properties” (Negarestani, 2008, p. 98). From this more technical and concrete musing, the narrator moves on to describe how “[m]onsters and fiends are categorized by weather and meteorological phenomena—for every weather or atmospheric phenomenon, there is a ghoul and a deav (demon)” (p. 99-100). The meteorology and mysticism that underscore the subterranean structures are enmeshed in the novel. The attention to detail and intentional shift in perceived field here reveal the circles of entanglements within a planetarity and go into the reframing of readerly processes forced through the style and genre amalgamation.

It is the geologic consciousness that manipulates the “petropolitics” of the novel, a capitalistic drive that is at the heart of what Negarestani (2011) calls an “organic necrocracy” (a biological drive of all living things and humans in particular toward death) likening it to

Sigmund Freud’s “thanatropic regression” (a *desire* to return to death) (p 192). In other words, according to Negarestani (2008), capitalism at large is symptomatic of a gradual, but widespread death drive preset into humanity and all carbon-based life on the planet, beginning with what his characters describe as a “Socio-political programming of planetary systems based on the depletion of petroleum. Everything oily has been manufactured with and to-ward death” (p. 27). In this planetary plot line then, humans act as agents for advancing the proliferation of fossil fuels as these sources of energy “feed” directly from the death of organic lifeforms. Petropolitics is the the only way for the planet to combat the overpowering monopoly of power that the sun holds over the rest of the solar system. The planetary consciousness programs a death urge into the organic lifeforms that works to create power reserves on subterranean levels. The “war machine” fueled by the “oily lubricant” of capitalism is evidence of a hidden drive of human entanglements with the geologic and ecologic spaces of the Middle East (Negarestani 2008, p. 27).

Bould (2012) draws attention to the colonial mindset found in much of science fiction and discusses more recent turns toward a post-colonial reading of recent writing. He shows the way in which more contemporary science fiction often incorporates world building that is counter to such notions of space as *terra nullius* (i.e., “nobody’s land”). The incorporation of colonial themes is something that D Kilgore (2003) also draws attention to in what he calls “astrofuturism.” For Kilgore, astrofuturism is a subset of science fiction that targets space exploration and that often ends in interstellar conquest or the terraforming of planets. However, he does not extend his reading beyond a human or human-like species being central to the fictional worlds being created or to the process of world building. Negarestani inverts the process, suggesting that the seemingly human-driven urge towards colonization is being directed by the nonhuman geologic consciousness of the planet itself. The function of such world-building and (re)modeling of thinking is to deform common assumptions of global processes and

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raise potential vantages that disorient the reader's presumed understandings. The U.S. War on Terror, then, becomes a very different affair—one that is no longer rooted in the predominant media reports and is instead rooted in a much more ancient drive—as evidenced by Colonel Jackson West's narration in *Cyclonopedia* in which he says that the "War on Terror is riddled with dusty ancient crypts saturated with occult geometries [...] Their war machines do not belong to the time we know, the time in which our civilizations were built. We find ourselves constrained to fight in their time according to geometries which are utterly alien to us" (Negarestani, 2008, p. 81). The question becomes one of power and control, and whether the planet controls the life and death of all carbon-based life on the planet—including manipulating the human population—in order to achieve its own ends. Its goals are what Negarestani's narrators describe as a "Tellurian Insurgency" against the sun, in which "the strategy of stratification is to engineer a perverse immanence with the sun" (p.147). The petropolitical obsession with oil and fossil fuels, as well as the deathly wars that have long surrounded them, are all part of the planet's long attempt to create its own power to rival the sun. In its attempt to under-mine the solar monopoly and create a means of defiance, the Earth manipulates organic life to create its own energy in the form of fossil fuels.

The Inversion of Anthrocontrol and Reverse Terraforming: a Matter of Scale

A major component of (re)forming human imaginations in a way that deforms the anthropocentered model of relations into a terracentric one is to conceive of sets of relations along a more fluid scale. This rotating balance of scale works much like Morton's hyperobjects: they function productively as tools for perception when scales of space and time are adjusted, providing meaningful understandings of those things that would otherwise remain invisible. Scale is at the core of Negarestani's reorientations. In his essay, "Islamic Exotercism," which preceded the publication of *Cyclonopedia* by a year, he writes about the War on Terror and says that "[i]t is a desert lurking in the disruption

of chronologics, the corrosion of history and the collapse of the spatio-temporal continuity to the outside, because it is effectuated by refractory impossibility, not the other way around". (It) "is not a question of a clash between civilizations but a radical Time-war, between chronologics and chronopolitics" (Negarestani, 2007, p. 311). Similar to a thinking model in geologic time, temporality when outside of the common day-to-day human perception resizes and reworks how reality is read. The planetary thinking, then, configures these clashes between civilizations as of minor importance. Indeed, it is the way that notions of scale and perceptions of rescaling shape *Cyclonopedia* and jolt the reader into reconsiderations and reconfigurations with different sets of relations. For example, when Negarestani (2008) describes the interplanetary dispute between Earth and sun, he expands notions of spatial scale by detailing "[t]he disruption of the electromagnetic shield [that] exposes the Earth to planet-devouring solar radiations, which threaten to tear apart the atmosphere and immolate all life on the planet" (Negarestani, 2008, p. 161). In doing so, he re-frames chronology when he describes a "drastic divergence from conventional Apocalyptic and End-Time scenarios which presuppose an eventual chronological unity between Islam and Capitalism. Parsani warns that such a chronological unity never exists. For Islam and Capitalism, the end of time is mapped through chronological disunity on the helical-machinery of the corkscrewing motion" (Negarestani, 2008, p. 177). Here, the focus on human-formed models of history as being cyclic is shown to move in ways that are oblivious to the effect on human life. Negarestani knows the effect that such rescaling has, as he often describes spatio- and chronopolitics in tandem with the tension of surface and subterranean conflicts within the novel. These jolts effectively shake the human-centered model of reality and centralize the planet in the entanglement of relations, contributing to a planetary lens of relations. As Elias and Moraru (2015) explain in *The Planetary Turn*, "if today's planetary life consists in an incessantly thickening, historically unprecedented web of relations among people, cultures, and locales, to comprehend the planetary must entail grasping the

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relationality embedded in it” (p. xii).

Negarestani’s increasingly complex investigation of the Middle East reveals multiple and diverse layers of relational webs that I suggest are best understood as assemblages. In these assemblages, objects often gather as cognizant and aware and humans gather as objects. In one quote from *Cyclonopedia*, Negarstani describes historical conflicts in the Middle East in particular by saying that, “If people as numbers and numeric contagions constitute the foundation of democracy, ordinary people as dormant war machines form the floods of revolution” (p. 127). Describing these groups of humans “as numeric contagion” or as “dormant war machines” objectifies them as tools being utilized by the planetary consciousness, making them a nonconscious part of a larger assemblage. The conflation of organic and nonorganic confuses understood hierarchies of animacy and rescales relations. To see these “complicities” and diverse correlations in forming assemblages, yields a view of reality in which assemblages are everywhere, multiplying in every direction, some more viscous and changing at slower speeds, some more fluid and impermanent, coming into being almost as fast as they disappear. And at the limit, at the critical threshold when the diagrams of assemblages reach escape velocity, we find the grand cosmic assemblage, the plane of immanence, consistency, or exteriority” (Delanda, 2016, p.7).

Mapping these relations between humans and nonhumans and tracing these asymmetrical flows as polydirectional involves a desegregation of privilege and suggests the more diverse components in so-called human scientific advancements that lead to terraforming and geofarming. McLean (2020) states that “[e]nvironments—all environments, so the argument goes—should be understood as the reciprocal cocreation of a variety of human and nonhuman actors” (p. 295). This complicates both the motivation for and supposition that terraforming and geofarming can simply be human directed endeavors for achieving human advancement. Although terraforming and geofarming are central to influential authors’ Herbert’s

and Robinson’s science fictional worlds and narratives, they are almost always present in anthropocentered ways. Both do work to deform naturalized notions of human dominance, whether through the slow metamorphosis of Leto Atrides into a sand worm in *God Emperor of Dune* (1981), or in the pressures being exerted on the terraforming agenda by the purist conservatists known as the Reds in Robinson’s *Mars* trilogy (1993-1996). However, neither go as far as Negarestani in reimagining the intentionally nonhuman world-forming processes found in *Cyclonopedia*. This is not to say, of course, that some newer media have not also probed into this kind of reverse terraforming. The HBO series *Raised by Wolves* (2020), like the book and television series *Wayward Pines* (2012-2014; 2015), looks at evolutionary changes in humans being made on large temporal scales, while the Netflix show *The A-List* (2018) and Sue Burke’s *Semiosis Duology* (2018-2019) deal with changes being made to humans through the influence of vegetal life. China Miéville’s *Kraken* (2010), Andrea Hairston’s *Mindscape* (2006), and N.K. Jemisin’s *Broken Earth* trilogy (2015-2017) similarly deal with conscious planets influencing human inhabitants. What makes Negarestani’s geological consciousness stand out from these, though, is its distinct break from anthropomorphizing the planetary thinking and, instead, relying on the materiality of the planet as a distinctly foreign mode of conscious processing.

Enumerating major moments in terraforming and geofarming texts, Pak (2018) writes that “[b]oth science fiction and speculative science about terraforming represent an important archive of debate about the values and practices that underpin the shaping of an environmental future and a responsive contemporary engagement with anthropogenic climate change. Narratives of terraforming and geoengineering are, at their core, narratives about the Anthropocene” (p. 500). Perhaps just as fruitful to the mission of putting pressure on the ethics of terraforming is what Negarestani accomplishes in his text: the notion of reverse terraforming. Instead of being materially transformed by human interpositions, the planet materially

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shapes and transforms living and dead humans for its own ends. These processes can be horrific in a human-centered model of reality but make perfect sense in a terracentric one. These “[u]nexpected connections are essential [...] because environmental damage cannot be undone by turning back (meaning to stop doing harm) but rather only by going forward, making new connections rather than revitalizing old ones” (Willems, 2017, p. 35). I do not suggest that groups of humans accept mass extinctions as a helpful type of future fossil fuel production, nor that releasing more carbon dioxide into the atmosphere is simply helping future forms of bacteria and life that will thrive in that state; what I am suggesting is that a reorientation of human perspective from an anthropocentric model of reality toward an awareness of a potentially terracentric model like that constructed by Negarestani can decrease the levels of privileging and “anthropocentric narcissism” (Kohn, 2013, p. 19) which drive human action by offering an alternate imagining. Here the important work can be found in fiction, or especially “theory-fiction,” “a contemporary term without a stable, accepted definition,” but one where “literature can be the object of theoretical application” (Szerszynski, 2017, p. 39). The work of speculative literature is especially productive in this kind of endeavor as it pushes for the reader to imagine worlds, relations, and webs of knowledge that are defamiliarized within the world building process and restructured into and familiarized as the world building takes place in the reader’s thinking processes. The novel can function to actually reprogram thinking models themselves as the reader’s processing and decoding of a text rewrites and instructs thought itself. In *Cyclonopedia*, Negarestani’s terracentric model of reality provides just such an opportunity for the reader to be reprogrammed by the text in a way that mitigates the myopic privileges and biases inherent to anthropocentric modes of reading reality. Such reframing offers new ways of interacting with the planet itself and in understanding the place of humans in a relational web and as part of assemblages of all sizes and in all directions.

Notes

- ¹ I use the term “human” here and throughout this article to primarily describe dominant human groups who take part in the traditions of Westernized thought.
- ² A question originally asked by Thomas Sprigge though, as Bogost points out, made famous by Nagel.
- ³ Ian Bogost is a key figure within the growing theory of Object-Oriented Ontology (OOO) and Reza Negarestani has often been associated with this movement even though Negarestani has moved into a different train of philosophy.
- ⁴ While found in his larger text *A Thousand Mile Walk to the Gulf*, this excerpt from John Muir is often anthologized in an essay titled, “Man’s Place in the Universe.” This section of his work specifically tackles the limits in what he sees as the popular model of understanding the universe.
- ⁵ Nealon’s book looks at key continental philosophers like Foucault, Derrida, Deleuze, and Guattari and delineates the ways that vegetative life can be connected to their most influential and widespread concepts.
- ⁶ Frank Herbert’s *Dune* series with its desert world of Arrakis and Kim Stanley Robinson’s depiction of a dusty red Mars in his *Mars* trilogy both offer settings similar to the Middle East in their desert landscapes as well as certain cultural components.

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