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Mycelial Trans-formations and Xenobiology in Jeff VanderMeer's *Annihilation*

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What if an infection was a message, a brightness a kind of symphony?
As a defense? An odd form of communication?
—Jeff VanderMeer, *Acceptance*

Introduction

Jeff VanderMeer's 2014 novel *Annihilation* presents the tale of an alien entity which insidiously transforms the landscape and the organisms that come into contact with it. These transformations take place in a tract of land dubbed Area X, named so by a governmental organization called the Southern Reach. The Southern Reach insists that there is an invisible border around Area X, which advances slowly, eating away into the surrounding landscape. In 2018, the novel was adapted to the screen as a film of the same name by Alex Garland. The film, however, reimagined Area X as 'the Shimmer.' Whether it be Area X or the Shimmer, the narrative is built on weirdness that invokes the uncanny. It is perhaps for this reason that VanderMeer was dubbed as the "Weird Thoreau" in *The New Yorker* (Rothman). The alien worlds in the Southern Reach Trilogy, of which *Annihilation* is the first part, belong to the literary movement called the New Weird. In 2008, Jeff VanderMeer edited an anthology of the New Weird with Ann VanderMeer. In the introduction to the volume, Jeff VanderMeer establishes the historical influences that have shaped the New Weird, while attempting to provide a definition of the genre. VanderMeer notes that a new wave of writers from the 1960s, including M. John Harrison and J.G. Ballard, laid the foundations for the New Weird, characterized by a mixing of high and low art, formal experimentation, and a blurring of genres (x). In addition to these three elements, the introduction also identifies horror and the grotesque often invoked by bodily transformations as other crucial aspects which constitute the New Weird. VanderMeer's Southern Reach Trilogy exemplifies some of these characteristics. The slow transformations brought about the alien entity that resides in Area X unleash a cosmic horror, producing strange bodies, transformed by the unintelligible impulses that drive Area X. These transformations border on the grotesque, as evidenced by the creatures that populate the world of *Annihilation.*

Apart from the cosmic horror and the grotesqueness associated with it, the novel exemplifies the New Weird by not being strictly bound by genre. Critics, while placing VanderMeer in the same

traditions as those of Thoreau and Kafka, note that he has transcended genre or the constraints of the weird (Rothman). This move to situate the novel in multiple traditions is also exemplified in the diversity of the critical work surrounding the text. The scholarly engagement with the novel includes but is not restricted to narratology and the question of human bias in narrative theories, colonial borders and anthropocentrism, and the vegetal nature of the world in *Annihilation.*[1] This essay builds on the connections that have been established between colonialism and *Annihilation,* with a focus on tactics of intelligibility and modalities of visibility. The essay explores this connection using the concept of landscape as a starting point and argues that Area X resists the modes of colonial visibility that sought to make terrains and bodies intelligible. The essay posits that two characteristics of Area X contribute to its unintelligibility. The first is what I refer to as xenobiology at work in Area X. With the prefix *xeno* meaning foreign, xenobiology signifies the alien biology that animates Area X. The essay further draws attention to xenobiology and its workings through the concept of 'mycelial' which stands for intricate branching networks that can be found in fungi, representing a decentralized mode of engagement with landscape. By employing these concepts, the paper attempts to respond to the question posed by the authors in the inaugural volume of *Environmental Humanities.* The authors ask:

> How are human identities and responsibilities to be articulated when we understand ourselves to be members of multispecies communities that emerge through the entanglements of agential beings? (Rose et al. 3).

Using the notion of landscape as a starting point, this paper demonstrates how Area X undoes the coherent, rational human who is separate from the environment and how alien xenobiology in Area X transforms human bodies that it encounters.

In his introduction to the anthology on The New Weird, VanderMeer defines the new weird as a genre that subverts romanticized ideas about place (xvi). While VanderMeer's 2014 novel *Annihilation* subverts the aforementioned romanticized aesthetics of place, it also marks an intervention in the textual strategies by which places are sometimes rendered intelligible. Detailing the experiences of an expedition team sent into Area X, *Annihilation* is set in a territory that is compared to a natural reserve. Inside Area X, the team encounters mysterious events while attempting to understand and document them. Drawing attention to the aesthetic evoked by adjectives such as "pristine" (VanderMeer 37) in textual representation of space, this paper analyzes the visual by utilizing the term landscape. In a similar vein as the eighteenth-century landscape aestheticians such as William Gilpin, who insisted that landscape vistas represent the idyllic by making themselves free of any signs of labor and industrial production (Lukacher 116), *Annihilation* offers the reader a taste of the idyllic, only to disrupt it as the novel proceeds. Initially perceiving the landscape in accordance with the visual aesthetic, the expedition team attempts to make the landscape intelligible by resorting to modes of

perception such as perspectival vision and practices of colonial mapping, which grant them a semblance of control over the landscape.

Bringing attention to the imperial histories of landscape, what has been referred to as "the dreamwork of imperialism" (Mitchell 10), this paper argues that while perspectival vision, landscape and colonial mapping have been associated with establishing control over space, *Annihilation* disrupts these discursive practices of control through its xenobiology, which drives the terraforming transformations in Area X. I contrast the terraforming exercise undertaken through monocultural colonial plantations structured under scopic regimes of control with the transformational diversity operating in Area X. The Southern Reach has been sending expeditions into the area for years, with some of the expedition members returning as eerie doppelgangers and few others transformed into other life forms that exist in Area X. Tracing how the expedition team follows in the wake of imperial histories, I establish parallels between the expedition's epistemological work and the imperial voyages undertaken to make new lands intelligible. I further highlight how the expedition relies on Linnaean systems of classification to categorize Area X, thereby proposing that techniques of mapping are not restricted to making the geological terrain intelligible. *Annihilation,* however, presents a space where the epistemological work of classification comes to a halt as a result of the proliferating xenobiology that characterizes Area X. The paper links classificatory exercises and colonial anxieties about undesirable mélanges, which in turn are carried over to the security state, represented in the novel through the Southern Reach.

Contrary to the conception of landscape as an object that remains distinct from the viewer, this paper, through a reading of Area X, suggests how landscape itself can become a point of contagion, a word that signifies contact, with its meaning "to touch together" (Wald, 12). The earliest uses of the word contagion, Priscilla Wald notes, signified "connoted danger or corruption" (ibid). My reading of *Annihilation* brings into the forefront the 'contact' between the body and the environment, as well as the disruption of the idiom of mastery implicit in landscape perception and imperial mapping. While I draw on theorists who have critiqued the boundedness of the human body,[2] through this paper, I attempt to place *Annihilation* in a framework which does not reduce the phenomenon of Area X into a binary of normal and pathological. To this end, the paper proposes mycelial networks as a possible decentered radical way of transforming matter. In addition to a framework to locate material transformations, the paper also brings into focus alternate modes of seeing which highlight transitional modes of being as opposed to fixed modes of being. For this reason, the paper discusses classical Chinese landscape painting and how it foregrounds the transitional.

Landscape, Mapping and (Hi)stories of Control

Employing landscape as an analytical category, this section of the paper focuses on how landscape, associated with a particular visual aesthetic, gets deployed as a mode of exercising control over space. The biologist, serving as the focalizer of the novel, makes the following remark about communication that exists between the various entities that have been transformed as a result of their exposure to Area X:

> Imagine that this communication sometimes lends a sense of the uncanny to the landscape because of the narcissism of our human gaze, but that is just part of the natural world here. (VanderMeer 126).

The biologist notes that the unintelligibility of Area X gets perceived as the uncanny since the human gaze cannot comprehend Area X. Laying out the expedition team's attempt to make the landscape intelligible and subject to control, the following paragraphs demonstrate how Area X resists these attempts at being known.

As a term that has emerged from art history and has been studied in cultural geography,[3] landscape remains bound to vision, a connection exploited in the novel which describes Area X using a collection of adjectives that signal an aesthetic mode of landscape appreciation predicated on vision. Area X is described using adjectives such as "untroubled" (3), "natural" (63), and "pristine" (37). With the Southern Reach sealing off Area X and its pristine natural habitats, the text mobilizes the binary of urban civilization and the natural wilderness. This is clearly expressed by the biologist, who claims that to make sense of the events that unfold, she tells herself that she was in "a protected wildlife refuge" and that the team members were "hikers who happened to be scientists" (9). Writing about how designating land as 'national parks' began in America and then spread out into the world, Denis Cosgrove draws attention to the visual element involved in the creation of these protected areas. He writes:

> Although concern for the continued existence of their flora and fauna has been a powerful motivating force in the selection and designation of these areas, it is their *visual appearance* as landscape that has conventionally sustained their public appeal ("Landscape" 254 emphasis added).

Similar to national parks which are presented as empty spaces to commune with nature, Area X, in the reports by the first expedition, gets characterized as a pristine, empty wilderness (37). The novel opens with a description of Area X, with the biologist describing the black pine forests, marsh flats and swamps which constitute an untroubled landscape (3). Through the use of the adjectives cited earlier, *Annihilation* foregrounds a landscape aesthetic, thus reinforcing connections between landscape and vision.

The visual element of landscape is not only confined to the aesthetic appreciation of natural beauty in Area X but is also reflected in attempts at mapping in Area X. Employing the technique of linear

perspective, landscape, intricately bound with practices of surveying and map making, was a tool to achieve control over space. The role of linear perspective in achieving spatial control has been summarized as follows:

> In painting and garden design landscape achieved visually and ideologically what survey, map making and ordnance charting achieved practically: the control and domination over space as an absolute, objective entity, its transformation into the property of individual or state … landscape achieved these ends by use of … the technique … *linear perspective* (Cosgrove, "Prospect" 46 emphasis in original).

The Southern Reach attempts to maintain state control over Area X by choosing expedition members whose epistemic modes of perceiving the world are crucial to instrumentalizing its project of deciphering Area X. In addition to the psychologist, the anthropologist and the biologist, the novel also features a surveyor, who serves as an extension of the governmental ambitions of mapping. The surveyor, the text informs the reader, comes to the expedition with her military experience and is tasked by the Southern Reach to observe the expedition leader, the psychologist, to possibly relay back these observations to the state. The irony of the situation does not go unnoticed and the biologist remarks about the psychologist: "Perhaps the idea that a surveyor, an expert in the surface of things, might have been chosen, rather than a biologist or anthropologist, amused her" (VanderMeer 10). Landscape, by providing a tool to compose what is seen by a separate gazing subject, is also an exercise in organizing surfaces and perspectives. The expeditions sent by the Southern Reach are in themselves attempts at controlling perspective, which the governmental agency achieves by creating a narrative of its own, by suppressing the number of expeditions that have been sent to Area X and by maintaining the narrative that Area X is a site of an environmental catastrophe, a result of experimental military research (62).

Hiding information about Area X, the Southern Reach chooses to send people with specific skills to map Area X, an 'other' space. Just as how the people on colonial expeditions were "trained in techniques of observing, surveying and sketching landscapes" (Cosgrove, "Landscape" 265), the members of the expedition attempt to record and represent the space for a governmental agency. It is worth noting that the concept of landscape and its descriptions underwent developments as explorers went around the world in search of new regions and unknown places, the voyages of Captain Cook being an example (Dubbini 83). The expedition members, who serve as cogs in the Southern Reach's larger aim to decipher the workings of Area X and the principle that animates it, are not far off from the historical traveler on an expedition who is "intent on discovering new things, urging him on in his obsessive quest for a primal matrix that forms and organizes all things" (84). Empires have also been known to order reports from specific regions, producing archives that were comprised of live specimens, drawings and reports (Bleichmar 379). Natural history and the figure of the naturalist becomes important in this quest

for knowledge (Pratt 56; Bleichmar 380). Viewed from this perspective, the members of the expedition are descendants of "Linnean emissaries" in a travel narrative that "is organized by the cumulative, observational enterprise of documenting geography, flora and fauna" (Pratt 50). They are tasked with understanding the terrain as well as classifying and categorizing its flora and fauna. It is in the wake of these traces of colonial mapping and attempts at making 'new worlds' intelligible that the expedition team of *Annihilation* heads into Area X, but they are thwarted in their attempts to employ regimes of visibility to make the alien world intelligible.

Limitations of Southern Reach's attempts to establish spatial control by mapping become evident in the cartographical artifact of the map. As part of the preparatory training sessions prior to their departure, the expedition members are asked by an instructor to familiarize themselves with a map of Area X, with a particular emphasis on a lighthouse. Since they have been trained to map their movements around the lighthouse, the expedition members are understandably relieved when they find that the lighthouse on the map coincides with their current reality. The text describes the responses of two expedition members as:

> In fact, the surveyor and anthropologist had both experienced a kind of *relief* when they had seen the lighthouse. Its appearance on both the map and in reality reassured them, anchored them" (VanderMeer 15 emphasis in original).

However, if the appearance of the lighthouse both on the map and in reality serves as a reassurance, the map is complicated by a glaring omission: that of what the biologist refers to as the tower. The biologist entertains two possibilities: the omission being "a deliberate exclusion" or it being "something new that wasn't here when the last expedition arrived" (10). As she discovers the extent of deception by the Southern Reach, it becomes clear that the omission is indeed deliberate. Though maps have been placed in the category of scientific images, they were an "invention in the control of space and facilitated the geographical expansion of social systems," making them a medium of state power and surveillance (Harley, "Maps" 55). Similar to the biologist who follows in the imperial traces of naturalists, the surveyor follows in the historical trajectories of imperial surveyors. Alongside soldiers, surveyors were employed by colonial regimes to produce maps that legitimized conquest (57). The surveyor, who is also tasked with monitoring the psychologist, is shown to add details and nuances to the map provided to the expedition by its nameless superiors at the Southern Reach (VanderMeer 20), making her a part of the governmental effort to potentially control Area X.

Though defective, the map given to the expedition by the Southern Reach is a tool meant to push the team in specific directions in an attempt to make Area X intelligible for the state, implying that these lands awaited the expedition team as a tabula rasa to be represented and controlled. The biologist perceptively states how the "map had been the first form of misdirection, for what was a map but a way of emphasizing some things and making other things invisible?"

(44). The cartographic silences on the map are crucial since they omit the 'tower,' the transforming engine housed in Area X. What the biologist refers to as a tower is, in fact, a structure that burrows into the ground, which the team members initially see as being made of stone because of the hypnotic cues from the psychologist. As she descends down the stairs in the tower, the biologist notes that the walls have words made up of fungi. When the biologist inhales spores from these fungi on the walls, the hypnotic conditioning falls away and she sees that the tower walls are made of living tissue (27) and describes being inside the tower as being inside "the gullet of a beast" (19). The biologist eventually finds this beast at the base of the tower and names it the Crawler. It creates the fungal words that adorn the tower walls. Even before her descent into the tower, the subterranean communication at work in Area X is evident in how the catachrestic word choice of the 'tower,' for a structure that burrows into the ground, comes to the biologist (5), producing a lacuna in the cartographic language that the team attempts to deploy.

By omitting the tower from the map, the Southern Reach suggests that all of Area X was empty territory that awaited exploration and mapping, a strategy that can be seen in some printed maps of America while it was being colonized. With the exclusion of indigenous people from maps, the settlers are given an impression of unpeopled, pristine land awaiting to be conquered. It has been pointed out how such maps "offer a promise of free and apparently virgin land—an empty space for Europeans to partition and fill …" (Harley, "Silences" 105). Though excluded from the map, the tower in Area X is not powerless. Despite numerous attempts to map Area X, the expeditions fail; its members "had died or been killed, returned changed or returned unchanged, but Area X had continued on as it always had" (VanderMeer 105). Attempts at mapping fail to produce results in the face of an alien entity that transforms its landscape in myriad ways, frustrating the tactics of visibility and intelligibility employed by the state.

A juxtaposition of the gaze levelled by Area X to terraform the landscape and the imperial gaze that governed plantational monocultures reveals a further breakdown of the quest to control and render landscapes intelligible. The colonial plantation, structured by the gaze that managed the labor required to fuel exotic monocultures,[4] operated under an overseer, whose practice of surveillance has been called "oversight" (Mirzoeff 50), which in turn functioned by employing the techniques of mapping and natural history (57). The psychologist, the leader of the expedition, is described as a "distant overseer" (VanderMeer 81). Under her guidance in the form of hypnotic cues, with their respective skills, the members of the expedition attempt to map and transform space into a manageable entity. As opposed to oversight, which was instrumental in producing monocultures, Area X employs a non-panoptic gaze which is dispersed in the territory, specializing in transformations that bring forth its riotous exuberance. From the dolphin which the biologist suspects harbors human eyes (64) to the cell samples from the moss and fox

which are comprised of modified human cells (106), and the doppelgangers who come back (110), Area X transforms the matter it encounters in multiple ways. Furthermore, as opposed to the colonial oversight which was employed to propel labor in monocultural plantations, the entity housed in Area X uses its gaze to evaluate and transform that which it encounters in multiple, unregulated ways. The biologist stumbles upon one of the journals from the many previous expeditions in which someone had recorded what being in Area X felt like: "I felt as if I could do anything *as long as I did not mind being watched*" (62, emphasis in original). Similarly, the biologist feels that she is being watched by the otters she spots in Area X (21). She realizes that Area X is an entity that possesses an intelligence that is "far different from our own" and whose processes are "utterly alien" (126). In addition to evaluating people and transforming them, Area X, in turn, surveils the surveillance state, which is the reason why the expedition members are never given contemporary technology; the Southern Reach is aware that such technology "could be used in unknown and powerful ways" (60) by the entity that occupies Area X. The colonial overseer employed visual surveillance to manage the labourers who transformed the landscape. Faced with the epistemological practices of the expedition team, which are illuminated by their colonial antecedents, Area X returns the gaze, refuses to yield, invalidates the human attempts to know it, thus producing a dialectic of gaze in which one party remains deeply unintelligible.

Attempts at resisting intelligibility are not only confined to practices of mapping, but also include classificatory practices which attempt to place Area X in a taxonomical system. In the beginning of the novel, the expedition team is characterized by its confidence in these procedures as it is made evident when the team hears a nightly cry of a beast: "We were confident that eventually we would photograph it, document its behaviour, tag it, and assign it a place in the taxonomy of living things" (21). As the novel proceeds, the opacity of Area X is highlighted in the text through biologist and the surveyor, particularly the biologist, who displays an enduring preoccupation with scientific objectivity, which she invokes in several instances while being worried that Area X is taking her objectivity away. In the beginning of her account, the biologist addresses the reader and writes that in reading her account, she hopes the reader finds her "a credible, objective witness" (37). The notion of objectivity includes several components and has come to include everything from "empirical reliability to procedural correctness to emotional detachment" (Daston and Galison 82). After she inhales the spores from the fungal words in the tower, the biologist is concerned that she is not 'seeing' properly, even when she is using a microscope. For instance, when she analyzes the cell samples from the Crawler and discovers that they are composed of human brain tissue, in her disbelief at what is seen, she asks the surveyor to confirm. The biologist further remarks: "I kept squinting through the microscope lens, and raising my head, and squinting again, *as if I couldn't see* the

sample correctly" (VanderMeer 49, emphasis added). Observation, even with the aid of a machine, fails to yield results. The role of machines in observing nature gave rise to a specific mode of objectivity, called "mechanical objectivity" which promised to "replace the meddling weary observer," thus eliminating any dangerous traces of subjectivity from the phenomena being studied (Daston and Galison 83). The biologist, by worrying about the effect of the spores on her observations and by struggling to hold herself apart, is indeed trying to eliminate the subjective observer from data that she needs to map Area X. Despite her attempts to do so, Area X refuses to yield to her probing; in the end, she comes to the realization that instruments are useless in Area X (VanderMeer 127). Much earlier in the novel, the surveyor who seeks to understand Area X with the help of photographs comes to the same conclusion about how they are useless (49). The instruments enlisted to enhance the eye's seeing powers fail here. Though *Annihilation* follows in the steps of colonial expedition narratives which focused on making terrains intelligible, the novel repeatedly demonstrates how any attempt at conquering Area X is thwarted, by rendering any potential tools to enhance visibility useless.

Despite the biologist's attempt to hold herself apart from the landscape, Area X creeps in, while remaining invisible. These developments are described in the text in terms of breaches and militarization, with numerous instances of feared potential contamination and infiltration. In the beginning of the novel, the biologist explains that the one rule for the expedition was to not attempt any outside contact, "for fear of some irrevocable contamination" (5). The biologist uses the word 'infiltrate' (17) to describe how the words were worming their way into her mind and, then to describe the brightness breaching her skin after her exposure to the spores (99). The subsequent effects of the spores are described as an 'infection' (39). Those who return from Area X are quarantined and questioned (23). These instances reveal a fear of an invisible enemy, one that creeps under the skin, "forming a layer that perfectly mimicked the one that could be seen" (101). The perceived risks of vulnerability and contamination are mobilized by the Southern Reach to send civilians, not soldiers, on these expeditions. The resultant subject is someone who constantly polices borders of inside/outside, us/them, uncontaminated/contaminated. The biologist, with her concerns about her mind being infiltrated, the spores contaminating her, and the samples being contaminated serves as a manifestation of anxieties about undesirable mélanges and breached borders. These changes are a source of concern also because of the way they defy the classificatory logic that the biologist has been clinging to.

The state, represented by the Southern Reach, attempts to manage these anxieties by locating them beyond an alien border that is slowly advancing. Not only is the border advancing, but it is also sending out its emissaries in the form of doppelgangers across the border. The question posed in the novel, "What strange matter mixes and mingles?" (127), is also a concern for the security state which

consolidates its power by employing the invisible transborder threat. The alien threat, the fears of its impact on the body and governmental anxieties have been linked as follows: "The body's transitional form—its plasticity that may be accelerated by disease and other forms of interspecies contact—is a significant cause of concern for securitizing states" (Ahuja 9). Hence, the psychologist, the expedition leader, who is also the director of the Southern Reach, in an attempt to safeguard the seemingly inviolable body, expresses concern about toxins and reiterates the need to wear breathing masks once the rest of the team comes back after discovering the fungal words on the tower walls (VanderMeer 19). Mel Chen links cultural productions of toxicity to immunity nationalism (192), arguing that "toxicity's coextant figure is immunity: to be more precise, *threatened immunity*" (194, emphasis in original). The militarized language of infiltration employed in the novel to speak about the alien threat is also a feature that characterizes discourses of disease, detailing how pathogens invade the self-contained body (Ahuja 9; Nash 12-13). It is also worth noting that threats to immunity often originate from a premodern landscape that is presented as the antithesis of modernity. The biologist draws attention to this dichotomy when she points out how the air in Area X is "so clean, so fresh, while the world back beyond the border was what it had always been during the modern era: dirty, tired, imperfect …" (VanderMeer 20). Ascribing the threat of disease to a primordial landscape is a characteristic of the outbreak narrative, wherein microbial threats to immunity are characterized as results of "a careless human intrusion on a discrete, prehistoric ecosystem" (Wald 46). It has been suggested that in this schema, "the microbial vengeance expresses a return of the colonial repressed" (46). With an expanding assimilative border, Area X and the entity housed in it create aggregations or colonies that function as emissaries by slowly terraforming all that they come into contact with (VanderMeer 105, 127). While the Southern Reach manipulates the threat of breached borders to continually send people into Area X, its efforts at comprehending and potentially neutralizing the threat, as it has been demonstrated, end in failure. The irony is that while it performs the role of the securitized state, it is rendered powerless against the advancing border, leading to a strategy that is summed up by the biologist as "*Feed Area X but do not antagonize it, and perhaps someone will, through luck or mere repetition, hit upon some explanation, some solution, before the world* becomes *Area X"* (VanderMeer 105, emphasis in original). Despite relying on tactics to render Area X intelligible through modalities of visibility, the strategy employed by the Southern Reach to feed Area X with bodies does not yield results. The landscape remains unintelligible to the anthropocentric gaze that seeks to contain and classify.

While the colonial antecedents charted so far function through techniques of classification and containment, Area X destabilizes fictions of self-containment and intact boundaries. Though the Southern Reach's narrative of Area X being a result of experimental military research is conducive to being read along the lines of the

outbreak narrative which locates the toxic threat in a distant elsewhere, *Annihilation* reimagines the narrative by highlighting proximity between the human body and the surrounding landscape. Etymologically, both contact and contagion are linked via the Latin *tangere,* meaning to touch ("contact;" "contagion"). The touching-together in Area X is best exemplified by the formations that the biologist sees in the abandoned village, described as "peculiar eruptions of moss or lichen … the vegetative matter forming an approximation of limbs, heads and torsos" (VanderMeer 63). As she understands the extent of deception by the Southern Reach, the biologist realizes that combating Area X called for guerilla warfare tactics, such as melting into the landscape (76), similar to the body-moss approximations she discovers. On the one hand, the novel actively showcases material transformations, but on the other hand, it also does not confine those transformations to the reductive pathology of normal and diseased. Rather, what characterizes Area X is an unchecked proliferation, which is captured in the novel through the word 'colonize.' The text presents the following images: "a purple flowering vine had colonized the lighthouse wall" (66), the dying psychologist's arm "colonized by a fibrous green-gold fuzziness" (89), and the lighthouse keeper "colonizing" the biologist's thoughts (125). Without resorting to the binary of normal and diseased, there is a need for a theoretical vocabulary that can articulate the proliferating impulses that reside in Area X. Characterizing the infiltrating and proliferating impulses, the word 'colonize' in its biological sense, primarily represented in the text through a fungal network, provides an opportunity to theorize the decentered communication taking place in Area X.

Mycelial Networks and Xenobiology

The word "colony", according to the Oxford English Dictionary, has associations with cultivation and farming. As it has been shown, colonial modes of cultivation such as the introduction of exotic monocultures hinged on strictly regulated modes of growth, structured by the gaze of an overseer. The Linnaean system is yet another epistemic mode of regulating species, contingent on placing organisms within ascribed boundaries. Area X defies the epistemic mode of classification by destabilizing boundaries and by giving rise to strange mixtures, as it can be seen from the moss-body figurations cited earlier. One of the major triggers for this work of destabilization is the presence of fungi, which first appear in the form of fluorescent words on the tower walls. Language, traditionally placed in the realm of the abstract and the representational, is made flesh into organic matter, which finds its way into the biologist through spores. Tricked into reading the words on the wall, the biologist incorporates the fruiting bodies which compose the words (VanderMeer 17). Thus, bridging the organic and inorganic, fungi transform the biologist's body into a site of uncharted fruition and unregulated growth. The importance of fungi

can be seen from the fact that before the expedition, the Southern Reach gives the biologist a refresher course on fungi and lichen without explaining why (45). Similar to Area X which frustrates the work of mapping and delineating boundaries, fungi have been known for how they do not adhere to species boundaries. Early studies of fungi placed them in the realm of primitive plants because of their immobility; however, fungi lack characteristic features of plants such as leaves, roots and flowers (Money 1). Combining non-animal and non-plant characteristics, fungi straddle boundaries, a feature that perplexed Linnaeus himself, leading him to place fungi alongside worms in the 1767 edition of his *Systema Naturae* (2). Some fungal spores such as the spores of Glomeromycotan fungi can contain genetically distinct nuclei, which can come from other microorganisms. In this way, fungi can form a new merged, genetic intelligence. As a result of this defiance of species boundaries, such fungi have been referred to as "shapeshifters" (McCoy 12). Area X functions by transforming bodies, by changing their form, remaking them a cellular level, mixing genetic material in accordance with the xenobiology. Hence it is not surprising to discover that the Crawler, despite being an embodiment of xenobiology, also contains human brain tissue.

The growth pattern of fungal systems also makes it an ideal metaphor for speaking about xenobiology. As stated earlier, the proliferating growth in Area X has been captured in the text through the word "colonize" (VanderMeer 66, 89). Fungal growth is driven by hyphae, filaments that extend at their tips, which branch repeatedly to produce a network called as a mycelium (Deacon 4-5). One of the defining characteristics of a mycelial network is its potential to grow endlessly, as long as it is provided the right kind of environment (McCoy 23). The strategy adopted by the Southern Reach has been feeding Area X over the years in the form of human bodies, allowing it to continue its machinations. The psychologist is claimed by a radiant fuzziness; later, it appears that not even her boot is left behind, it is as though she had "melted into the sand" (VanderMeer 128). The fungi, which later impart 'brightness' to the biologist, have completely transformed the body of the psychologist into a substrate for their own nourishment. Functioning as a force responsible for decomposing organic matter, mycelial networks respond to compounds released during decomposition. The compounds serve as signals for the hyphae to shift the direction of the growth, though the nature of sensing these signals as well as the growth responses elicited remain unknown (McCoy 16). The biologist speculates that the fungal words on the wall could be a form of communication between the Crawler and the tower (VanderMeer 60). In addition to the fungal words, alien entities could also communicate through chemicals and scent. Scent is a prominent mode of communication among nonhuman species:

> Scent – the least attended to of the senses for the contemporary human organism – for many animals and kingdoms like *plantae* serves as a metonym for the invisible molecular trafficking network primary to their species-specific mode of signification (Hendlin 151).

When the biologist descends into the tower for the first time, she notices "a loamy smell … with an underlying hint of rotting honey" (VanderMeer 17). Organized as decentralized networks which communicate with the environment via signaling, moving from one nutritional source to the other, the mycelial network builds complex structures that are invisible to the anthropocentric gaze. Furthermore, fungi make their presence felt in transitional spaces, they occupy the realms between life and death (McCoy 76), disrupt monocultural practices and promote diversity, help to "push humans into the wild" (49). The mycelial network thus captures the proliferating qualities of Area X that defies classification, counters visual modes of intelligibility, while pushing modes of being into previously unimagined directions.

To further address the transitional qualities of Area X, I return to the concept of landscape with which this paper began. Scopic regimes discussed in the beginning of the paper reinforce the subject/object binary, while making the object of the gaze static. Area X, on the contrary, troubles the stringent division between subject and object. As opposed to static being, Area X is characterized by its richness of the transitional. Western landscape, with its reliance on perspective, driven by the desire to represent three-dimensional space accurately on a two-dimensional page, captures only one point of view, freezing the landscape that is looked at. This approach is predicated upon maintaining a subject-object binary, making landscape an object that is produced from the gaze of a subject.

A contrasting approach to landscape can be found in Chinese painting in which the painter does not paint the object as something that is bound to perspective. The painter, "rather than paint things as objects … captures them in keeping with the logic of immanence that makes them appearing-disappearing" (Jullien 20). Thus, the emphasis is not on cohering the object as a thing but on the transitional qualities of the scene that is being painted. As a result, the Chinese landscape painter paints not a particular view, but "an entire landscape simultaneously emerging-submerging, appearing-disappearing," which in turn is an attempt to "shake the beholder free from the cramped enclosure of an ego-subject constituting an autonomous fate for itself vis-à-vis the consistency of objects" (Jullien 28). It is a radical attempt to reimagine subject-object relations, and when human figures make an appearance in this kind of a landscape, they "become con-fused with—the landscape" (28). Becoming con-fused with the landscape is a strategy that the biologist advocates in the fight against Area X. She writes about how one has to "fade into the landscape" to fight the colonizing impulse at work there (VanderMeer 76). Jullien points out how Chinese landscape painting exemplifies an attempt to represent the hazy, the indistinct. Consequently, he writes that the artist, "rather than envisioning the landscape from the angle of a *species,* as power of sight, aspect … chose to think of the landscape—like any reality—as an interaction between poles …" (122, emphasis in original). These exchanges and tensions are captured in the Chinese words for

landscape, "mountain(s)-water(s) (*shan-shui)* or "mountain(s) and stream(s) (*shan-chuan*)" (121-122). As opposed to the European notion of landscape which is "constituted as an object of perception," mountain-waters "expresses immersion" (122).

Through its xenobiology and interspecies mingling, Area X destabilizes the subject-object binary, with expedition members being transformed and immersed in the landscape, becoming part of Area X. By avoiding the reification of subject/object duality and by providing methods to conceive the transitory, the Chinese methodology of thinking about landscape offers a new way of imagining space, which works well alongside a reading of Area X, which thwarts dualities such as subject/object, organic/inorganic, background/foreground. Area X, which animates the constant tension between these pairs and the movement between the pairs, benefits from imagining landscape as a series of interactions between different poles, as is evinced by the Chinese notion of landscape.

Conclusion

I have attempted to show how Area X resists attempts to make it legible for the state. Area X, through its mycelial networks and xenobiology, offer counter strategies to state-directed regimes of surveillance that rely on being made visible and legible. Spaces such as Area X become important because of how they transform the human body and the vegetation. The Southern Reach has been trying to understand, even potentially utilize, the biological plasticity engendered by Area X, through an approach that relies on the dispensability of bodies chosen for its expeditions. Exercising its governmentality in deciding which bodies are chosen to undergo transformations and return with cancerous growth, which eventually kills them (VanderMeer 38), certain bodies are placed into biocapitalist networks and are valorized precisely for the transformations that kill them, serving as sites of materiality to be mined, extracted and studied. However, Area X is characterized by its resistance to enter biocapitalist networks, wherein materials derived from human and nonhuman bodies become valorized and circulate in networks of capital (Lettow). Area X transforms that which it encounters and carries on its work, unintelligible to the humans. The resistance further acquires importance when thought of in terms of terraforming. It has been argued that plant classification and imperial botanical voyages brought about landscape transformations,[5] or in other words, terraformed certain parts of the world. In the wake of these historical traces, Area X raises the question of how to understand xenobiology that is slowly terraforming the landscape. Disrupting the monoculture mania of current times, xenobiology brings forth biological plasticity characterized by prolific diversity. It remains to be seen as to how to place xenobiology in the biocapitalist framework and the implications of such a placement. Furthermore, the connections between historical

terraforming exercises and those undertaken by xenobiology remain to be explored.

Notes

[1] For a reading on unnatural narratology in the novel, see Jon Hegglund. On borders and the links to the text, see Pearson Bolt. For the connections between the vegetal and the novel, see Alison Sperling.

[2] The concept of transcorporeality is particularly useful in thinking about the body and its connections to the wider environment; see Stacy Alaimo. Nash proposes a distinction between the modern body, which is the medicalized body as opposed to what she refers to as the ecological body, a body which is attuned to the fluxes and flows of the environment; see Linda Nash. Houser writes about ecosickness, in contemporary American fiction, precipitated by the interaction between human bodies and the larger nonhuman world, which brings about a dissolution of boundaries between the body and the environment; see Heather Houser. While these studies shed light on the intermeshing between bodies and environments, they focus on the healthy body and the bodies that are rendered diseased as a result of their intermixing with their respective environments.

[3] For an overview, see Marc Antrop.

[4] See, Anna Tsing for more on monocultures, plantations and forced labor.

[5] See Beth Fowkes Tobin. Also see Alfred Crosby; and Richard Grove.

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