

Ecocritical Engagement in a Pixelated World

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Abstract

How does one talk about materiality or embodiment when the “body” and the “environment” in question are forever separated by a screen? Through close readings of *Proteus* (Twisted Tree, 2013) and *Islands: Non-Places* (Ice Water Games, 2016), this essay argues that certain video games articulate empathetic relationships between player and world, because of—rather than despite—the video game’s position as a virtual realm. Because these two games limit player interaction and manipulate experiences of time, *Proteus* and *Islands: Non-Places* force the player to critically inhabit her position in the world and to question her expectations of dominance and control as typically experienced in video games. Applications of material ecocriticism drive the readings of these video games. Specifically, by considering theories of time—both Anna Tsing’s pace of walking and Rob Nixon’s slow time of environmental disaster—together with Jane Bennett’s concept of vibrant matter and Serenella Iovino and Serpil Oppermann’s definition of material ecocriticism, this essay argues that the worlds of *Proteus* and *Islands: Non-Places* demand an environmental attention from the player. These two games reject the human desire to touch, cultivate, and master the environment, offering, instead, a digital assemblage that includes the corporeal player and the virtual world. *Proteus* and *Islands: Non-Places*, human-made constructions designed for human consumption, drive an investment in the vibrancy of the world—both within the game and without.

Keywords: Video games, material ecocriticism, interactivity, attention.

Resumen

¿Cómo se puede hablar de la materialidad o la personificación cuando el “cuerpo” y el “ambiente” de los cuales hablamos están siempre separados por una pantalla? Mediante un análisis cuidadoso de *Proteus* (Twisted Tree, 2013) y *Islands: Non-Places* (Ice Water Games, 2016), este trabajo argumenta que algunos videojuegos fomentan la relación empática entre el jugador y el mundo a causa de—y no a pesar de—la existencia del videojuego como un mundo virtual. Como estos dos juegos limitan la interacción del jugador y manipulan la experiencia del tiempo, *Proteus* y *Islands: Non-Places* obligan al jugador a reflexionar sobre la posición que ocupa en el mundo y a cuestionar las expectativas de dominio y control que típicamente se hacen realidad en los videojuegos. El uso de la ecocrítica material impulsa el análisis de estos videojuegos. Concretamente, al considerar algunas teorías del tiempo—como la idea del “paso de la caminata” de Anna Tsing y la noción de la “violencia lenta” de Rob Nixon—junto al concepto de la materia vibrante de Jane Bennett y la definición de la ecocrítica material propuesta por Serenella Iovino y Serpil Oppermann, este trabajo sostiene que los mundos de *Proteus* y *Islands: Non-Places* exigen que el jugador considere el medio ambiente. Estos dos juegos rechazan el deseo humano de tocar, cultivar y dominar el ambiente; más bien ofrecen un montaje que incluye al jugador físico y el mundo virtual. *Proteus* y *Islands: Non-Places*, que son construcciones hechas por el ser humano para ser vividas por el ser humano, impulsan una apuesta por la vitalidad del mundo—tanto dentro como fuera del juego.

Keywords: Videojuegos, ecocrítica material, interactividad, atención.

Your eyes open and you find yourself in the middle of a pixelated ocean. An island drifts in front of you, barely visible through the haze; a jagged-edged sun blazes in the sky above. You glide across the water by pointing and clicking your mouse until you reach land. The island is beautiful, uninhabited, and serene. You explore. The sound of the place grips you first: each object has its own tone and the score of the island changes as you wander. The trees in pink bloom, the yellow wildflowers—everything sings and together the cacophony is exuberant and joyful. This is *Proteus*, a first-person video game by Ed Key, a world created by humans for humans, accessed via a computer screen. The world is beautiful and seductive, but does it act on its players in the same way that a physical island might? How does one talk about materiality and embodiment when the “body” and the “environment” are forever separated by a screen? Building off of Alenda Chang’s argument that “games are opportunities to create entirely new sets of relations outside of those based on dominance or manipulation,” (60) this essay asks what happens when we include digital landscapes into the assemblages of material ecocritical theory. As ecocriticism continues to push the boundaries of what can be considered to have agency, I argue that certain video games offer unique vantage points from which environmental theory can assess and critique the position of the human within nonhuman ecologies. Specifically, *Proteus* (Twisted Root, 2013) and *Islands: Non-Places* (Carl Burton, 2016) manipulate expectations of interactivity and experiences of time within their nonhuman worlds in order to disrupt Enlightenment-era hierarchies of domination and control. These games engage in ecocritical questions that engender specific attention and care toward the environment that, one hopes, continues off-screen. This attention—influenced by Anna Tsing’s “noticing”—ensnares player and game into an assemblage which disrupts the human-centric views of the earth as inert.

Proteus and *Islands: Non-Places* both allude to universes that are larger than the individual playing the game. *Proteus*, for example, provides a gorgeous world in which the player cannot touch or destroy her surroundings and thereby forces the player to engage with the environment only through walking and exploration. *Islands: Non-Places*, on the other hand, drops the player into ten surreal vignettes in which the player must click on specific objects in order to complete the whimsical scenes in which nature and human-constructed “non-places”—escalators, parking lots, bus stops, and so forth—come together. Both games are atmospheric and environmental rather than goal-oriented, and the games ask their players to witness rather than to win, to dwell within the world rather than to conquer it. Because these games create virtual spaces which are invested in the material of the natural world, I ask what happens when we consider them as material, too. Material ecocriticism, because of its investment in non-anthropocentric anthropomorphism and its insistence on querying the very same binaries that would separate video games and “nature,” offers a helpful venue for addressing the seeming contradiction of analyzing a virtual space through a theoretical lens invested in embodiment.

Material ecocriticism has pushed for the destruction of boundaries between nature and culture, in favor of Donna Haraway’s term, ‘natureculture’, the idea that our concepts of nature and culture are forever intertwined and inseparable. Haraway’s idea

is expanded to argue that human and nonhuman material forms produce webs of relationships and “configurations of meanings and discourses that we can interpret as stories” (Iovino and Oppermann 7). By considering the stories that spring up within the space of connection between the human and nonhuman, material ecocriticism makes the argument that the nonhuman and the human are intimately intertwined, not separate. Timothy Morton similarly cites the historical distinction between human and nature as a damaging one, arguing that “environmentalism worries that we are disconnected from the world. But what if one of the problems were *this idea itself?*” (108). For humans are part and parcel of the nonhuman world, and vice versa.

How, though, do we think about a world from which our bodies are literally, permanently separate? Taking the environments within video games on face value—that is, considering them as nonhuman worlds—how might material ecocriticism understand the relationship between a player’s body and a virtual environment? By mapping such an understanding of matter onto these games, this essay argues that elements of the video game medium, specifically those which emphasize exploration and disallow combat, offer ethical attunements to the nonhuman world.

This essay reads these games neither as symptomatic of capitalism nor as backdrops for narrative experience. Rather, it argues that *Proteus* and *Islands: Non-Places* are material environments which fully deserve ecocritical engagement in their own right. This post-critical approach is not to deny the fact that digital spaces, screens, and the Internet should be and have been scrutinized and critiqued¹—they are, after all, products that rely on the environmental and human tragedies of enormous corporations and globalization. However, by considering these video games as environments—with unique rules and ecologies that include but supersede the human—this essay expands the scope of material ecocriticism to include digital worlds not as signposts of capitalism but as human-made (but ultimately nonhuman) assemblages. Borrowing from Jane Bennett’s conceptions of vibrant matter, as well as jumping off from theorists who have made claims for digital media’s materiality, this essay argues that these games are more than matter; they are material sites of agency.²

Interaction

Instead of objectives, the player of *Proteus* encounters a world to explore. The game begins in the ocean: you bob on the water and hear oceanic gusts of wind and the lapping of waves. In the distance you see a hazy island and through experimenting with controls—no tutorial or instructions greet you—you click the mouse or hit “W” to move

¹ The “post-critical” comes from Rita Felski’s *Limits of Critique* in which she argues: “Rather than looking behind the text—for its hidden causes, determining conditions, and noxious motives—we might place ourselves in front of the text, reflecting on what it unfurls, calls forth, makes possible. This is not idealism, aestheticism, or magical thinking but a recognition—long overdue—of the text’s status as a coactor: as something that makes a difference, that helps makes things happen” (12).

² See Thomas Apperley and Darshana Jayamane (2012), and Richard Maxwell and Toby Miller (2012) for more on the materiality of digital media.

toward land. Once you hit the beach, you teach yourself to walk. And though all you can do is walk—there are no mechanisms for grabbing, jumping, or running—the world is engrossing and captivating enough that it doesn't matter. There are mountains to climb, animals to follow, weird rock formations to ponder. The only other action you can perform is to sit, here completed by pressing the space bar, a key used in many computer games to jump. As you explore, and through no action of your own, the gorgeous spring day wanes; the sky becomes a vibrant pink, then purple. The sun turns beet red and hangs low on the horizon as the moon rises, white and luminous. During the day you are left to explore as you will, but at night the world guides you to a specific area. This guidance takes the form of white lights which dance close to the ground and lead you to a circle of oval rocks. As you approach the stones, the dots of light swirl around the periphery of the circle; stand within the rocks' circumference and the lights accelerate. The lights constrict you and paralyze you and then the world explodes. The sun springs into the sky only to fall into the horizon again; the moon follows quickly after. Clouds pool like water in the sky and it gets dark and it rains and then the sun comes up for a second and the clouds are pink. The trees change rapidly from green to pink to orange to white; snow falls and melts immediately. The music is rapid and chaotic as you stand in the middle of a year's worth of seasons in a few seconds. Your screen whites out briefly and you wait, unable to move, in the stillness and silence. Then, it's summer. The trees are more colorful, there are more animals for you to follow, and the music is more animated. You begin your day again, and again the sun sets slowly as you explore. At night the lights come out to guide you to the rock circle where again you help the world transition. The game compresses the passage of the seasons into a few seconds, and a lifetime into less than an hour.

This cycle repeats three times total; you witness spring, summer, and autumn this way, by meandering through the day and following the white lights at night. Winter is different: it ends not with a light circle that transports you to the next season, but rather with a liftoff. At night, you begin to float. Something like the aurora borealis blooms in the sky; blue and white lights consume the horizon as your feet leave the ground. Through no control of your own, you glide way up above the island, as if carried there. The music swells; it's beautiful and moving, somehow uplifting and sad all at once. You hover in the sky and slowly close your eyes—the screen mimics the blinking of an eye—and the game is over. The island guides the player to an ending which forces the player up and out of the world; by exploring the game the player sets the stage for her own rejection. By the end of the game, the island and player enter into an uneasy symbiotic relationship: the island is open for the player's exploration, but it also exists beyond the player. By not walking toward the lights, by ignoring the path the island sets out for its visitor, however, the player forces the island and the human into a limbo. The player and the island need one another for anything to happen.

Proteus is unusual in its limited interactivity and lack of puzzles, but those familiar with computer games will recognize the style and setting of this game as reminiscent of another, much more popular game: *Minecraft*. Similarly to *Proteus*, *Minecraft* (Mojang, 2011) exposes the player to a pixelated, obviously digital world.

However, in *Minecraft*, the player can mine the matter of the world. Rocks, trees, and animals are all raw material that can be harnessed and then crafted; the player transforms the raw material into tools, structures, or nutrients. Unlike *Proteus*, the world of *Minecraft* exists for player cultivation, one that is not only allowed by the game but demanded: at night, zombies scramble from caves to hunt you down. In order to live through the night, you have to chop down trees and construct a house using the plants and minerals of the world. Despite some interpretations of *Minecraft* which hail it as depicting an “agential nature” because the objects of the world can be transformed into symbols and therefore demonstrate a capacity for language, the game still reinforces an Enlightenment-era model of the world.³ The world is an agent to work against and, because of its hostility, it deserves to be cultivated and mastered. *Minecraft* necessitates a controlling attitude toward its physical spaces and transforms the landscape into raw material.

Proteus, by contrast, allows for none of that violence or exploitation. Rather than existing for the cultivation of the human avatar, the world of *Proteus* exists beyond the influence of the player. The player’s avatar cannot grab, chop down, hunt, shoot, or in any other way damage or interact with the landscape. Because interaction is such an expected and joyful component of video games, its absence may evoke a number of emotions: frustration, confusion, or surprise. Regardless of the affective response of the player, the lack of interaction is, at the very least, noticeable. By disallowing the controlling mechanisms expected in a video game, the world of *Proteus* forces the player to reconsider the ways in which she interacts with space. It encourages its players to scrutinize their relationship to the world and interrogate their own desires to control, harm, or otherwise interact with an environment.

It is not new to suggest that video games affect their players. Ian Bogost, for example, argues that the “magic circle” of video games—the sanctioned, other-world experience of gaming—comes with a gap, through which “players carry subjectivity in and out of the game space” (135), suggesting that a video game lingers in the consciousness of a player long after the screen goes black. Similarly, scholars such as Miguel Sicart argue that video games provide real-world ethical experiences for their players. Sicart claims that “the experience of a computer game is the experience of a moral object by an ethical subject” (5), a claim that this article uses to argue that argument that video game ethics exist beyond what’s created on the computer screen. However, where Sicart considers a game an inert object, I insist on its position as an agent within an assemblage. Nick Dyer-Witheford and Greig de Peuter also argue that playing a game on a console means “plug[ging] oneself into a network of techno-human relations, which even as it offers cognitive skills and affective thrills also inserts subjects into a commodity web” (93). Consideration of the materiality of video games consistently (and intuitively) places video games, that is, within the metric of human systems—video games are analyzed for their relationships to real-world violence, or for their complicity in military cultures. As Dyer-Witheford and de Peuter suggest, “Game

³ For more on the “agential nature” of *Minecraft*, see Kyle Bohunicky’s “Ecomposition: Writing Ecologies in Digital Games.”

consoles ... are not just hardware but techno-social assemblages that configure *machinic subjectivities*" (xxxix). I argue that these machinic subjectivities must be read as nonhuman entities which are part of the "mesh" of naturecultures as Iovino and Oppermann would argue, not just the techno-social.

The worlds that these games create ensnare players in ecologies because of their digital nature, not in spite of it. *Proteus* and *Islands: Non-Places* are not examples of virtual reality nor are they mimics of what they represent; rather, they imagine artistic, mediated worlds and invite the player to experience them, in a fashion similar to the worlds created by literature or film.⁴ That said, the video game genre offers a level of interactivity that is not afforded in books or movies because the player controls the pace of the action and, depending on her choices, how much content she is exposed to. Games have been called "structured interactions" (Deen), and studies such as "Effectance and Control as Determinants of Video Game Enjoyment," for example, argue that interaction is pleasurable because it affords players the ability to control and influence a situation (Klimmt et al). To interact with the world and to be able to have a hand in how a story unfolds is at the heart of what makes video games a distinct medium.⁵ Katie Salen and Eric Zimmerman, for example, define a video game as explicitly interactive: "participation with designed choices and procedures" (60). The ability to have a part in the outcome is one of the major defining characteristics of a video game.

Proteus and *Islands: Non-Places*, however, subvert the expectation of the video game genre by limiting their interactive elements and rejecting a clear-cut objective. These are games which thrive on exploration, not combat. There are neither contests to win nor puzzles to solve, no guns to shoot or princesses to save. By limiting the interactive options available to the player and subverting winning objectives, *Proteus* and *Islands: Non-Places* underline their environmental commitments. They highlight the fact that these worlds exist beyond the scope of the player and force her to critically inhabit a world in which human and nonhuman exist in an assemblage and not in Enlightenment-inspired power structures. The world doesn't bend to the whims of the player, because the player isn't given the means of control that she expects. Instead, the player and the world act on one another; each must acknowledge the agency of the other in order to move forward through the game.

Islands: Non-Places relies on the constant clicking of a stationary player. The player of *Islands: Non-Places* watches a scene unfold before her and she clicks on different objects in it—a lamp, for example, or the fronds of a palm tree—in order to

⁴ For more on mediation and digital media, see Finn Arne Jørgensen, who argues that "new media technologies enable particular relationships between people and the world, and this act of mediation is by no means neutral. ... In that sense, mediation is an important way we are in the world. Mediation is how we interface with the world, with all that it implies, including the fact that we have always been mediated" (110). An additional source is Jesse Oak Taylor who argues that "ecocriticism's greatest contribution has arguably been strengthening the *metonymic* connection between the world, the text, and the critic [...] rather than the *mimetic* one with which it is often associated" (2). Both of these sources illustrate the robust thinking that exists on the topic of mediation, ecocriticism, and media.

⁵ For more on interactivity as the defining characteristic of video games, see Espen J. Aarseth's *Cybertext: Perspectives on Ergodic Literature* in which Aarseth defines video games as "textual machines" which rely on the input of the player.

view more of the scene. Each vignette offers a vision of the world if animal and plant agencies, rather than human ones, were in charge. In the first scene, for example, a dimly-lit bus stop sits in the midst of dense, blue fog. The side of the stop glows blue and after a few still seconds begins to pulse. Clicking the light triggers the next event in the tableau: a bus pulls up full of swaying bird cages and with it a crescendo of bird songs swells. The doors open and about a dozen person-sized eggs float out and assemble at the bus stop. A hole opens in the ground and the bus descends onto a previously unseen underground road and drives away. The chirping stops. The eggs float in the silence of the bus stop, the side of which, after a few moments, begins to beep and pulse. The blue light turns red when clicked and the screen fades to black, transporting the player to a loading screen.

Unlike in *Proteus*, in this world the player doesn't inhabit a first-person perspective which can explore. In fact, the player can't move at all. In order to see more of the game, she can instead spin the entire scene by clicking in the tableau and moving the mouse. That the player has the control to twirl the world implies at first glance that the world itself is something consumable; that it is small and that the human has control over it. However, by forcing her into a static position and refusing to further the action without the player's active engagement through clicking on objects, *Islands: Non-Places* forces her to question what the world of a video game is supposed to offer. By inhabiting the role of a spectator in an interactive medium, the player of *Islands: Non-Places* must reconsider her expectations of what can happen in the world. The controls in both *Proteus* and *Islands: Non-Places* subvert the desire for a habitual, naturalized interactivity between the player and the environment by making strange the degree to which she may interact with that world.

Both *Proteus* and *Islands: Non-Places* prime their players to question their expectations through the interactive mechanics that challenge their exposure to the world. That they are able to inhabit or interact with the worlds in this way points to the unique position of video games in creating environmentally-oriented exposures to the world. In addition to the restrictions on the interactivity, however, both *Islands: Non-Places* and *Proteus* create worlds that include specifically environmental content. By placing the players on an island, surrounded by lush greenery, or in a mall waiting room that becomes a habitat for fish rather than for people, these games insist on the importance of the nonhuman world. More than show that world to their players, through the interactivity of the game and, as we will shortly see, through the timing of the games, they also invite their players to empathetically inhabit the nonhuman realm.

Ecological Time and Video Game Time

Without the capacity to capture or dominate the world, players of *Proteus* and *Islands: Non-Places* must explore. While the players of *Islands: Non-Places* explore through clicking and spinning each scene, those of *Proteus* walk. Walking is such an integral part of the experience of *Proteus* that it may come as no surprise that the game has been deemed—much to the chagrin of the game's designer Ed Key—a walking

simulator. The term itself is fraught.⁶ It began as a pejorative tag on purchasing and playing platforms as a way to designate nonviolent games in which “nothing happens.” From these beginnings, however, the term has seen moves to reclaim it as players and developers embrace nonviolent games. Walking simulators or, as Key would prefer, “wander games,” eschew puzzles or combat in favor of exploration and discovery (O’Connor).

Walking, Anna Tsing argues, is “the speed of bodily pleasure and contemplating; it is also just the speed to look for mushrooms” (141). While the players of *Proteus* and *Islands: Non-Places* are not on the hunt for mushrooms, the sentiment remains: to walk is to be observant and to explore is pleasurable. For Tsing, the two most important delights of mushroom-hunting are “first, the undeserved bounty of the gift; and second, the offer of a *place* that will guide my future walks. These mushrooms ... jump into my hands with all the pleasure of the unasked for and the unexpected. For a moment ... I am alight with the sweetness of life itself” (142). Excitement, delight, pleasure. The gift of discovery. In a walking simulator, the gift is the world. Tsing uses searching for mushrooms as a metaphor for environmental awareness and argues that the pace of walking engenders an attention to the world. For Tsing the “art of noticing” is a political act that makes visible small, over-looked ecologies which in turn shed light on global, political systems, or else are visible for their own sake (255).

The slowness of this exploratory pace makes *Proteus*, which takes only around 20 minutes to play from start to finish, feel longer than it is. The pleasure of discovery takes precedence over the pleasure of winning; the game asks us to slow down and to contemplate. In so doing, it subverts expectations—generated through digital culture and more mainstream video games—of speed and teaches players to notice or, as Tsing would say, to “listen politically”; a type of attention that opens one up to detecting “potential allies” (254). This listening is born through a deliberate slowness and attention which delights in the unexpected and remains open to surprise. *Proteus* has no save function. Once you begin, you either play until the end or you quit and start over. This is crucial to the environmentality of the game: the world allows the player to dwell within the game, but it doesn’t exist on your time frame. Finishing the game requires committing the time to do so; there’s no way to rush this game, to skip ahead, or to save and come back. Slowness, attention, and a commitment to dwelling in the world contribute to environmental engagement, Timothy Morton argues, allowing us to love a thing “as thing, not as a person in disguise” (196). By insisting that we notice and respect the agencies outside the sphere of human systems, material ecocritics reorient human relationships to the world.

However, the player of *Proteus* isn’t walking—not literally or corporeally. The game creates the feeling of a walk, and promotes attention that Tsing argues happens only at the walking pace, while still remaining separate from the embodied action of physical movement. These tensions remain important to the considerations of what environmentally conscious video games can do, and the ways in which ecocriticism can

⁶ See “Is it Time to Stop Using the Term ‘Walking Simulator’” (Kill Screen) and “Self-Interviewing Devs: Proteus and ‘Walking Simulators’” (Rock Paper Shotgun).

scrutinize them. It is precisely because the game is a simulator that the limited interaction is so effective: by minimizing the choices of the player within the constructed environment, *Proteus* creates an attention that isn't available outside of the confines of the video game. The limited, controlled, but beautiful world of *Proteus* heuristically demonstrates an environmental attunement to the player's surroundings.

Walking isn't the only speed of *Proteus*. At night, when the player progresses the game from one season to the next, the animation that follows is anything but meandering. Day and night flicker back and forth and the seasons change before you, suggesting that it's not months that pass, but years. You witness the life cycle of the island in a few seconds. This new speed is extremely fast, a quickness that animates a time scale not generally accessible to humans. The environmentality of *Proteus's* timing reflects the ongoing tension between the felt experience of slowness and capturing the passage of time on a larger-than-human scale.

Rob Nixon argues that our present time is categorized by an "attosecond pace" which "with its restless technologies of infinite promise and infinite disappointment, prompts us to keep flicking and clicking distractedly in an insatiable—and often insensate—quest for quicker sensation" (8). *Proteus*, on first glance, seems guilty of this attosecond speed: the flickering, seconds-long transitions between seasons distills months into the blink of an eye, and the game itself shortens a year into the length of a television show. However, the quickness of the year coupled with the slowness of the individual days redefines speeds in order to, as Nixon argues, "render slow violence visible" (13). Nixon argues that the goal of environmental representation is to "recast 'glacial' ... as a rousing, iconic image of unacceptably fast loss" (13) which in turn promotes urgency for action. By elongating the days and condensing the years, *Proteus* counterintuitively renders the glacial pace of seasons—a passing nearly imperceptible on a human scale—as instantaneous. The passage of time becomes a "fast loss," as the player can neither go back to a season once it's passed nor can she slow down the transitions between seasons. The game toes the line between two time scales—the human pace of walking and the nonhuman pace of seasonal change. The manipulation of time decenters the human player from the universe of the game and alludes to elements of the world that the human will never experience. In so doing, the game suggests to the player that if the world was designed, it wasn't designed to cater to her.

While *Islands: Non-Places* is not a walking simulator, the meandering pace of the game contributes to similar tensions between the time scale of the human and the pace of the nonhuman world. Each vignette flows between moments in which the player has no control and moments which are looped until the player decides to progress. This push and pull between the player and the world of the game, the reliance each has on the other, further emphasizes the relationship between human and nonhuman understandings of pacing.

Time in our contemporary moment is compressed. Our inability to experience time on the geological scale has been, according to Nixon, one of the major barriers to mobilizing mass responses to global warming. By deliberately manipulating the player's expectations of time, *Proteus* and *Islands: Non-Places* allow players not only to visualize

but to *feel* nonhuman time. These games implicate the player's body in the different experiences of time and in so doing ask players to witness rather than conquer. The experience is more jarring and potentially more environmentally meaningful for the subversion of instant gratification that one expects from video games. It is in these digital worlds, however, that representations of environmental time may be felt as well as seen.

Digital Assemblages

By playing with interactivity and with timing, *Proteus* and *Islands: Non-Places* bring their players into a messy web, akin to the ecologies within which material ecocritics insist we find our corporeal bodies enmeshed. In *Proteus*, for example, while the game limits the player's ability to touch or grab, the world still reacts to the presence of the player's avatar. Animals scurry away from you, bees swarm you, and the island guides you to specific areas in order to advance to the next season. The landscape manipulates the player, invites you into the world and then coerces you into bringing about your own expulsion from the island. The world and player act on one another, creating, as Jane Bennett would argue, an assemblage or "ad hoc groupings of diverse elements, of vibrant materials of all sorts" (24). *Proteus* needs a human player to bring about the island's progression through time, but ultimately the island, by sending the human away after the end of the full year, asserts its own agency.

Bennett's assemblages, composed of vibrant matter, are ways in which the human subject is deposed from the position of power over the world. She sees our bodies as part of a vibrant, messy ecology, embroiled in the assemblage of the materiality of the world. This messiness elevates all matter, she argues, rather than relegating our bodies to the realm of "mere objects," because it positions our bodies and the rest of the world into a category of "shared materiality" (13). Considering our bodies as meshed with the rest of the world's vibrant matter reorients our attentions to consider nonhumans as potent agents and to remember that humans are composed of nonhuman material. "The hope," Bennett continues, "is that the story will enhance receptivity to the impersonal life that surrounds and infuses us, will generate a more subtle awareness of the complicated web of dissonant connections between bodies, and will enable wiser interventions into that ecology" (4). *Proteus* provides a roadmap for the first two of these hopes, and gestures toward the third by creating a story through the world of the game.

Proteus brings the player into a "dimension crisscrossed by vibrant forces that hybridize human and nonhuman matters" (Iovino and Oppermann 5), a material ecocritical dimension promoted by making the human player both central to and forever rejected by the unfolding of the game. It seduces the player into changing the seasons on its behalf. It guides the player through her own life cycle, and every season that passes brings the player's avatar closer to expulsion. By forcing players to dwell in the world without being able to control or change it, *Proteus* ensnares its player in an ecology "in which many species sometimes live together without either harmony or conquest"

(Tsing 5). And in *Proteus*, there is neither harmony nor conquest. There is nothing to win, no objectives to complete, no conquest to be had. By the same token, the player is ejected from the island once she has done what the island required of her to do, reasserting the agency of the world over the desires of the player. By combining interactive mechanisms with the experiential nature of nonhuman time and the different paces of the game, *Proteus* gestures toward ways of being in the world that expand its environmental concerns to those both within the game and outside it. As Bennett argues, including a “touch of anthropomorphism” can be necessary when trying to open up ecological understandings, as it reveals the ways in which the nonhuman world is composed of agencies that demand respect and attention on their own terms (99). Iovino and Oppermann, too, find value in narrative, arguing that it reveals the connections between humans and nonhumans. “Anthropomorphism,” they claim, “can even act against dualistic ontologies and be a ‘dis-anthropocentric’ stratagem meant to reveal the similarities and symmetries existing between humans and nonhumans” (8). Through the anthropomorphic move of analyzing a digital island as an agential force that can act on a human, this argument hopes to contribute to the material ecocritical investment in making nonhuman agencies viscerally understandable to humans.

While *Islands: Non-Places* deviates from *Proteus* in a number of ways, its overall effect is the same: making the player aware of her position within the larger, nonhuman web of connections. Most important to this relationship, however, is *Islands: Non-Places*’s use of place. The scenes in the game occur in titular “non-places,” which conform to Marc Augé’s definition as “spaces formed in relation to certain ends (transport, transit, commerce, leisure)” (94)—the game includes a fountain in a mall, a baggage claim, an office waiting room. However, *Islands: Non-Places* subverts one of Augé’s main claims concerning spaces as reliant on the nature of their inhabitants. Augé argues that a non-place includes the “contractual relations” between an individual and the space—through signage, for example, or other expected behavior. *Islands: Non-Places*, however, populates its spaces with nonhuman entities. A fountain in a mall, for example, isn’t filled with people who experience the room as a moment of non-identity, but rather is revealed to have long roots that snake several stories into the ground. An escalator is filled not with queueing people but with floating, potted palm trees which are watered between floors. Furthermore, while *Islands: Non-Places* is populated by places, it doesn’t have video game *space*, as Michael Nitsche defines it. That is, *Islands: Non-Places* is not “navigable” and the ability for a player to explore and interact with the world is limited (Nitsche 3). In nearly every scene, some action of the vignette occurs outside of the player’s view. A waiting room, for example, is flooded with water. The player’s task is to click on the chairs and lamps to raise them above the water levels and in so doing to end up moving the scene out of their field of vision. These moments in which the action moves just out of view references an entire world that is untethered to the player’s perspective. By referencing this unseen, inaccessible world, *Islands: Non-Places* cultivates the same type of attention born in *Proteus*. Because the experience of the game consists solely of non-human interactions—clicking a lightbulb to make a fountain move rather than an action that would mimic a hand turning it on, for

example—and the scenes are so devoid of people, the world becomes an exploration of what’s possible when the humans are gone.

Because *Islands: Non-Places* and *Proteus* leave the human behind by moving either the scene or the player out of view, they create mini universes which demand human cooperation—you must click to continue the scene, or step into the circle of white lights to progress to the next season—but which don’t entitle the human to mastery of the nonhuman world. The worlds of these games subvert Enlightenment hierarchies of power and ask instead that the human player acknowledge a cooperative and symbiotic position—important but not all-important—in the nonhuman ecology of the digital and natural world. There is no objective for the player but to witness, and no other role for her to inhabit. In this way the player and game become both simultaneously the subject and the object in their relationship with one another: the game acts on the player by keeping her still and forcing her to click on specific things to progress the game, while the player can spin the scene and inhabit the role of the witness. Both player and game act and are acted on at the same time.

The manipulations of time and the thwarted expectations of interaction attune the players of *Proteus* and *Islands: Non-Places* to assemblages within the digital world. But the question still remains: how can a human body be enmeshed in a digital ecology? How does embodiment function when the player is forever disembodied within the environment of the game? The avatar within *Proteus* offers some answers to these questions. While there is no referent for the body in *Proteus*, the lack of interactivity and the game’s invisible avatar have the counterintuitive effect of increasing the potential for action rather than limiting it. Because the player isn’t presented with a list of potential actions, the illusion of a human body and its capabilities is preserved. Because the possible actions aren’t itemized, which would limit what can happen through exclusion, the player can imagine a whole slew of options which are never presented nor actively ignored. In this light, the lack of interactivity amplifies the illusion that the player inhabits a human body which *chooses* not to interact rather than one which is allowed to do so only in a limited capacity. In addition, because no visible avatar exists, the player is invited to fill the space with her own form. Moments in which animals in the game respond to the player’s movements—such as when flocks of chickens shriek and scurry away—point to the physicality of the avatar’s body in space. They remind you of your human form that not only absorbs and observes, but interacts with the surroundings. Even if you don’t intend to intervene, your proximity affects creatures in the game, reinforcing the physicality of your avatar even though it remains unseen. The reaction of the world to the human’s nonhuman body underlines Bennett’s understanding of the human body as composed of vibrant materiality. In *Proteus*, Bennett’s claim takes on an additional component because the body of the avatar is literally the stuff of the video game. It is digital; it exists only within the realm of the computer screen. However, because the avatar is invisible, the avatar becomes a blend of the nonhuman video game and the imaginative powers of the human player. The human’s avatar is, therefore, part video game, part human imagination, an invisible cyborg or the “condensed image of both imagination and material reality” (Haraway, *Simians, Cyborgs, and Women* 150). By

becoming part of the game, by seeing one's body in the avatar of *Proteus*, the player develops more attention to the materiality of the world of the video game and in so doing is able potentially to extend that awareness to the nondigital world as well. By remembering that our bodies are made up of the same stuff as the world around us opens us up to the "ethical task at hand," as Bennett calls it: to be able to witness, accept, and be "perceptually open" to the agencies and vitalities of the nonhuman (14).

Conclusion

Why do we feel the need to touch? The limited interactivity of *Proteus* and limited mobility within *Islands: Non-Places* challenges our impulses to interact with or conquer the world. Even as *Proteus* invites its players into a digital ecology, the question remains: What happens when we include digital landscapes into the assemblages and ecologies of environmental theory? Because of the mediated embodied experience of the digital world, which looks inviting but doesn't allow for interaction, *Proteus* positions the player within an assemblage that includes but ultimately supersedes her. *Islands: Non-Places* similarly creates human/nonhuman ecologies within the short vignettes which explore the overlap between the built environment and nonhuman entities. Human-made objects and plants exist within one another in these worlds. Rather than undermining the nonhuman agency of these plants, *Islands: Non-Places* instead advocates for a world in which human agency isn't at the center. *Proteus* and *Islands: Non-Places* dance between human and nonhuman agencies; they flirt with anthropomorphizing nature in order to assert a nonhuman agency. As Bennett argues, "we need to cultivate a bit of anthropomorphism—the idea that human agency has some echoes in nonhuman nature—to counter the narcissism of humans in charge of the world" (xvi). *Proteus* and *Islands: Non-Places* situate plants in the human world while simultaneously revealing human characteristics that dwell in plant life, demonstrating that the nonhuman can be as funny and unpredictable and gorgeous as we can be.

The anthropomorphized elements of the game, together with their limited interactivity and the felt experience of nonhuman time, position the human within nonhuman ecologies. The island of *Proteus* is inviting, open for exploration, and yet once it has gotten what it needs from its player, it sends the player away, into the sky. *Islands: Non-Places* similarly allows visitors to see only snapshots of its world and in so doing gestures toward a world that the human cannot access. But in both cases, the human is still a necessary component of the game: not more important or more powerful, but not insignificant either. From this inclusion, the human player can learn to witness the world with a new, environmentally-attuned eye. The attention created in *Proteus* and *Islands: Non-Places* is specific to video games because they ask players to actively participate in the exploration of a world that can't be controlled and doesn't exist for human consumption.

Reading *Proteus* and *Islands: Non-Places* as environments and spaces opens up new ways of seeing our contemporary, Internet-infused world as one that exists beyond a "real world"/screen dichotomy. Instead, these games demonstrate that to inhabit a

video game is to inhabit a world and to knowingly step into its ecologies. As screens become increasingly the means by which we engage with the world, perhaps the narratives of *Proteus* and *Islands: Non-Places* might remind us to consider not that we are escaping from the world when we jump into digital media, but that we are entering into yet another web of connections. These connections don't have to blind us to the perils of the contemporary environmental scene but, rather, can open us up to them. Perhaps the attention engendered in *Proteus*—the act of noticing that occurs only when we aren't allowed to touch—can ripple outward and create attention elsewhere: eyes attuned to the hidden beauties of the world and a curiosity about what's possible when we keep our hands to ourselves.

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Works Cited

- Aarseth, Espen J. *Cybertext: Perspectives on Ergodic Literature*. The John Hopkins University Press, 1997.
- Apperley, Thomas H., and Darshana Jayemane. "Game Studies Material Turn." *Westminster Papers*, vol. 9. No. 1, 2012, pp. 4–25.
- Augé, Marc. *Non-Places: An Introduction to an Anthropology of Supermodernity*. Translated by John Howe. Verso, 1995.
- Bennett, Jane. *Vibrant Matter: A Political Ecology of Things*. Duke University Press, 2009.
- Bogost, Ian. *Unit Operations: An Approach to Videogame Criticism*. MIT Press, 2006.
- Bohunicky, Kyle Matthew. "Ecocomposition: Writing Ecologies in Digital Games." *Green Letters*, vol. 18, no. 3, 2014, pp. 221–35.
- Chang, Alenda Y. "Games as Environmental Texts." *Qui Parle*, vol. 19, no. 2, 2011, pp. 56–84.
- Deen, Phillip D. "Interactivity, Inhabitation and Pragmatist Aesthetics." *Game Studies: The International Journal of Computer Game Research*, vol. 11. No. 2, 2011.
- Dyer-Witheford, Nick and Greig de Peuter. *Games of Empire: Global Capitalism and Video Games*. University of Minnesota Press, 2009.
- Felski, Rita. *The Limits of Critique*. The University of Chicago Press, 2015.
- Garite, Matt. "The Ideology of Interactivity (or, Video Games and Taylorization of Leisure)." *Proceedings of the 2003 DiGRA International Conference: Level UP*, Digital Games Research Association, 2003.
- Haraway, Donna. *Simians, Cyborgs, and Women: The Reinvention of Nature*. Routledge, 1991.
- . *The Companion Species Manifesto: Dogs, People, and Significant Otherness*. Indiana University Press, 2003.
- Iovino, Serenella and Serpil Oppermann, editors. *Material Ecocriticism*. Bloomington and Indiana University Press, 2014.
- Islands: Non-Places*. Carl Burton. 2016.

- Jørgensen, Finn Arne. "The Armchair Traveler's Guide to Digital Environmental Humanities." *Environmental Humanities*, vol. 4, 2014, pp. 95-112.
- Kill Screen Staff. "Is it Time to Stop Using the Term 'Walking Simulator'?" *Kill Screen*. 30 Sept. 2016, killscreen.com/articles/time-stop-using-term-walking-simulator.
- Klimmt, Christoph, et al. "Effectance and Control as Determinants of Video Game Enjoyment." *CyberPsychology & Behavior*, vol. 10, no. 6, 2007, pp. 845-848.
- Maxwell, Richard and Toby Miller. *Greening the Media*. Oxford University Press, 2012.
- Minecraft*. Mojang. 2011.
- Morton, Timothy. *Ecology without Nature: Rethinking Environmental Aesthetics*. Harvard University Press, 2007.
- Nitsche, Michael. *Video Game Spaces: Image, Play, and Structure in 3D Game Worlds*. The MIT Press, 2008.
- Nixon, Rob. *Slow Violence and the Environmentalism of the Poor*. Harvard University Press, 2011.
- O'Connor, Alice. "Self-Interviewing Devs: Proteus and "Walking Simulators." *Rock Paper Shotgun*. 28 June 2014, rockpapershotgun.com/2014/06/28/walking-simulator-proteus-ed-key-ricky-haggett.
- Proteus*. Ed Key, Twisted Tree. 2013.
- Salen, Katie and Eric Zimmerman, eds. *The Game Design Reader: A Rules of Play Anthology*. MIT Press, 2004.
- Sicart, Miguel. *The Ethics of Computer Games*. The MIT Press, 2009.
- Taylor, Jesse Oak. "The Novel as Climate Model: Realism and the Greenhouse Effect in *Bleak House*." *Novel: A Forum on Fiction*, vol. 46, no. 1, 2013, pp. 1-25.
- Tsing, Anna. "Unruly Edges: Mushrooms as Companion Species" *Environmental Humanities*, vol. 1, 2012, pp. 141-54.