"Do They See Me as a Virus?": Imagining Asian American Environmental Games

Edmond Y. Chang

Night Flyer. By Mike Ren Yi. 2020.

Even The Ocean. By Melos Han-Tani and Marina Kittaka. 2016.

Pandemic 2020. By Chanhee Choi. 2020.

Given the ongoing global COVID-19 pandemic, the national racial reckoning and spike in anti-Asian hate, and the ever-present consequences of climate change and environmental precarity, three recent independent games—Night Flyer (2020) by Mike Ren Yi, Even the Ocean (2016) by Melos Han-Tani and Marina Kittaka, and Pandemic 2020 (2020) by Chanhee Choi—engage the interactions and intersections of game studies, environmental studies, and Asian American studies. All three games demonstrate the power and potential of video games as environmental worldbuilding, environmentalist interventions, and ecocritical play; they imagine and engage players' relationship to and even problematic exploitation of their environments, both natural and built, embodied and virtual, utopian and dystopian. As Alenda Y. Chang argues in Playing Nature, these games are "environmental texts," referencing Lawrence Buell's criteria in The Environmental Imagination, and therefore an environmental game: "the ideal environmental text [and game] produces involvement. It brings the nonhuman world into equal prominence with the human, exposes humanity's moral responsibility to and participation in the natural world, and portrays the environment as fluid process, not static representation" (32). Moreover, beyond the ecocritical values and ideals

that frame and underpin each, these three games raise additional questions and provocations concerning other norms, identities, structures, even feelings that interact or intersect with their obvious and thematic environmental concerns. These designers and games provide an opportunity to contingently conceive of a growing body of Asian American games to 1) highlight Asian American contributions to environmental studies and game studies, 2) make legible Asian American games as part of environmental literature and media writ large, and 3) creatively articulate what I am calling an Asianfuturist imagining of the environment that points to critical utopian possibilities.

The close readings and close playings of the following games and responses from the game-makers themselves contribute to the growing body of Asian American game studies already underway such as the recent work by Tara Fickle, whose The Race Card: From Gaming Technologies to Model Minorities addresses the "ludo-Orientalist" infrastructures of literature, games, citizenship, and nation. Fickle defines "ludo-Orientalism" as the "design, marketing, and rhetoric of games" that "shapes how Asians as well as East-West relations are imagined and where notions of foreignness and racial hierarchies get reinforced" (3). An extension of techno-Orientalism,1 ludic Orientalism not only engages the digital, computational, or mechanical aspects of video games but also foregrounds the ways that "gaming, both digital and analog, is used in everyday life to provide alternative logics and modes of sense making, particularly as a means of justifying racial fictions and other arbitrary human typologies" (9). In other words, Fickle and the work of others like Christopher Patterson and Dean Chan deploy games as theory in order to examine the ways that games not only render race as mere pixels and representation, but they also enact and are embedded with racialized norms, logics, and mechanics. Night Flyer, Even the Ocean, and Pandemic 2020 and their respective designers theorize their own work, their relationship to their identities and positionalities, and the potential for Asian American games.

Moreover, the games and designers presented below bridge more traditional environmental studies, Asian American ecocriticism, and the recent environmental turn in video games studies. Robert T. Hayashi, in his essay "Beyond Walden Pond: Asian American Literature and the Limits of Ecocriticism," argues for understandings of nature that are not centered on or by whiteness, to expand the definitions of the environment that does not replicate the "historical assumption that nature is equivalent to environment," and most importantly, to consider "how ethnic/racial minorities have defined, experienced, apprehended, and represented" nature and the environment (61). Hayashi reimagines "how the study of Asian Americans relates to dominant notions of the natural world" (Hayashi "Environment" par. 7). He calls for a consideration of "a wider range of texts, disciplinary approaches, and epistemological assumptions" (Hayashi, 61) regarding the links between social and natural domains, particularly engaging literary canons, immigration, labor, law, technology, and so on. Serendipitously, Alenda Y. Chang's Playing Nature: Ecology in Video Games opens with and mediates on Henry David Thoreau's Walden as remediated into a digital game by Tracy Fullerton and the Game Innovation Lab

at the University of Southern California. Chang argues (at length) that we must "reframe games beyond the domestic interior... an ecological perspective on video games might cement games' place alongside more mature media like film and television, where maturity is defined not only by aesthetic development but also the capacity for sociopolitical relevance" (6-7).

Given that "ecocriticism has historically excluded designed landscapes and methods of mediated interaction perceived as detracting from direct experience of the natural world" (10), Chang takes up Hayashi's call at face value for a wider range of texts and approaches to include that which may seem unlikely bedfellows. She argues for the need to "displace our existing understanding of games, players, and play contexts... while there are many reasons why game studies and environmental criticism have had little congress to date, none of those reasons are particularly unyielding... we move past the assumption that the natural and the digital are realms inherently inimical to each other" (Chang 10). Here the referent of ecocriticism's ur-text Walden by both Hayashi and Chang point to the need to diversify and reimagine what counts as nature or environment, what bodies and identities affect and are affected by said environment, and what texts, mediums, and perspectives are missing or ignored or discounted. All three games foreground Asian American design, experience, and representation (sometimes directly or indirectly), and offer points of view from bats to power plant workers to viruses that decenter white male bodies, gazes, and masculinist fantasies of control or domination over the natural world.

Finally, these games and designers gesture toward Asianfuturist possibilities, potential lines of inquiry, resistance, critique, and even hope that center Asian American identities, experience, engagements, and worldbuilding. In this case, Asianfuturism takes its inspiration from Mark Dery's "Black to the Future," which coins "Afrofuturism" as "speculative fiction that treats African-American themes and addresses African-American concerns in the context of twentieth-century technoculture—and, more generally, African American signification that appropriates images of technology and a prosthetically enhanced future... to tell about culture, technology, and things to come" (180-1). Asianfuturism is a response to and an alliance with Afrofuturism and other ethnic and marginalized futurisms. As Dawn Chan asks, specifically in relation to Asian American art, "Is it possible to be othered across time? For almost a century already, the myth of an Asian-inflected future has infiltrated imaginations worldwide" (161). Asianfuturism reclaims these too often Othering and Orientalist imaginations and recuperates, repurposes, or even overwrites them. Here Asianfuturism can be defined as any literature, art, and media—including the speculative medium of video games—that critically foregrounds Asian and Asian American cultures and concerns that reconfigure identities, embodiments, and technologies in order to imagine alternative, even radical narratives, desires, relationships, and play as "direct action" that challenges racism, sexism, ableism, phobia, and other technonormativities (Chang "Musings"). The games and designers below create speculative worlds that center characters of color, often drawing from transnational perspectives, and most

importantly, imagine ambivalent futures (and presents) that do not perpetuate white or Western fantasies about power, control, success, and salvation. What follows then articulates each designer's version of Asianfuturism, each hoping to challenge and "reorient" these legacies of disempowerment and to reclaim the future in their own image.

Night Flyer (2020)

Mike Ren Yi is a Chinese American game designer now living in Shanghai. He is known for a number of recent independent games including *Yellow Face*, *Hazy Days*, and *Novel Containment*. Over a five-day period culminating on Earth Day, Ren participated in IndiCade's Climate Jam 2020, which invited "game creators from across the world to join... to explore solutions that can address a rapidly changing world... to take action and raise solutions." Ren's submission was *Night Flyer: A Bat's Journey*, a short five-minute game that, according to the game's webpage, allows players to play "as a nimble bat" and challenges players to try "to survive as your world disappears."



The gameplay of *Night Flyer* is simple and straightforward. The player begins as a young bat hanging upside down on a tree branch. Using the left or right arrow keys (or mouse clicking on the left or right side of the game screen) causes the bat to flap its wings in the desired direction and gaining a little bit of altitude. Each flap propels the bat higher and higher, but when the player holds off on pressing a key (or clicking the screen), the bat gracefully arcs downward into a dive. Flapping and diving, the player navigates a monochromatic, gloomy green landscape of green ground, trees, sky, and clouds. The first goal of the game requires the player to fly and swoop to "Eat 5 Fruit" hanging from the trees, which is measured

by a hunger (or fullness) meter at the top center of the screen. Every time a fruit is consumed, the meter inches right and a small seed or pit falls to the forest floor. In fact, according to the game's "Learn More" pages, the player learns that bats are an important part of seed transportation, reforestation, and pollination. Eventually, the bat matures, and the next goal is to "Find a Bat Partner" by crossing paths with another bat, which results in a triumphant trill and spray of hearts. Then both bats must continue together and "Eat to Survive" before the hunger meter falls to zero. It is in this last stage of the game when the background changes, and the player sees some sort of large bulldozer machine spewing a plume of dark smoke slowly, methodically knocking down the forest, row after row, until there is nothing but devastation. As this happens, food sources become scarcer—fewer moths, fewer trees with fruit—until in the end both bats perish, hearts broken.

But the game does not end with the death of the player's bats. A short coda follows showing a living bat falling to the ground and a mysterious worker caging the now displaced creature. The worker sneezes, spraying the area and ostensibly the bat with their germs. The bat is then loaded onto a truck and taken to a city in the distance. The implication and subtle commentary here, of course, is on the current COVID-19 global pandemic, which is believed to have originated in bats but thus far no conclusive evidence has been discovered or corroborated.2 Despite the uncertainty as to the etiology of the disease, its discovery in Wuhan, its possible link to "wet markets," open air markets that sell raw fish and meat, and its eventual spread to the West reignited longstanding anti-Asian, "yellow peril" responses particularly in the United States. In fact, according to a report in the American Journal of Criminal Justice, given the false belief that "people of Asian descent are solely responsible for causing and spreading COVID-19" (Grover et al. par. 4), the imagined origin, cause, and spread of the novel coronavirus has "enabled the spread of racism and created national insecurity, fear of foreigners, and general xenophobia, which may be associated with the increase in anti-Asian hate crime during the pandemic" (Gover et al. par. 6).

Night Flyer imagines the beginnings of the pandemic as beginning with or at least in a recursive relationship with humans, animals, deforestation, environmental degradation, industrial farming, precarious food systems, and global capitalism. In fact, according to researchers, "the loss of biodiversity in the ecosystems has created the general conditions that have favored and, in fact, made possible, the insurgence of the COVID-19 pandemic. A lot of factors have contributed to it: deforestation, changes in forest habitats, poorly regulated agricultural surfaces, mismanaged urban growth. They have altered the composition of wildlife communities, greatly increased the contacts of humans with wildlife, and altered niches that harbor pathogens, increasing their chances to come in contact with humans" (Platto et al.). It is this site of contact that Night Flyer plays with and narrates differently: the assumed trajectory of the virus leaping from bats to humans is flipped or complicated, reconfiguring the circuits of race, environment, and xenogenic and xenophobic fear. Ren explains that the game's inspiration "stemmed from the coronavirus outbreak around the world. When I was starting the project, I

remember seeing a lot of irrational fear aimed at bats, with media sources attributing COVID directly to bats. This misrepresentation pushed under-informed communities around the world to target and exterminate bat populations out of fear.... Bats, which play a crucial role in our natural ecosystem, struggle to survive against the forced destruction of their environment. They end up on a collision course with humans."

Even the Ocean (2016)

Melos Han-Tani describes himself as Taiwanese and Japanese American; he grew up mainly in the suburbs of Chicago and now lives in Tokyo. Marina Kittaka identifies as Japanese American and Yonsei, a great-grandchild of Japanese immigrants to the United States. Together Han-Tani and Kittaka form Analgesic Productions, "a studio specializing in single-player, narrative-heavy adventure games with experimental flair and twists on traditional gameplay." Melos Han-Tani is known for *All Our Asias*, "a surreal, lo-fi, 3D adventure, about Asian-America, identity, race, and nationality." But both collaborated to develop *Anodyne* in 2013 and have recently completed the sequel *Anodyne* 2. In 2016, the duo released *Even the Ocean*, "a narrative action platformer about balancing the Light and Dark energies that hold the world together."



The player moves through the game as Aliph, a power plant technician with brown skin and pink and green hair, which reflects two dominant forms of energy in the world: Dark or Purple energy and Light or Green energy. Her work earns the attention and favor of the mayor of Whiteforge City, the center and capital of the known world, which relies on a number of plants to keep the city running and literally floating over the ground, over those who are not rich, powerful, or fortunate enough to live in the city's brilliant and gleaming towers and spires. Aliph is then tasked to seek out other malfunctioning power plants, armed with only her skill, wits, and

armored shield. She eventually learns that the disruptions in power are symptoms of a larger, existential, environmental threat to the world. Marina Kittaka comments on the game's goals: "One key theme throughout the game is the resonance or relationship between the small scale and the large... we can connect the dots from Whiteforge's imbalanced use of energy, to its stratified society, to the small stresses and preoccupations of the individual characters. I see this as related to adrienne maree brown's *Emergent Strategy* and her discussion of fractals: 'what we practice at the small scale sets the patterns for the whole system.'"

Even the Ocean's gameplay is a mixture of fantasy role-playing game and puzzle platformer. The player navigates various maps and locations, interacts with non-player characters in the world, and completes a number of tasks or quests at the request of the mayor and others. Woven through and among the narrative and geographical interactions are action areas or levels where the player must use Aliph's jumping, running, climbing, and protective shield to explore, traverse, unlock, and complete the level. In addition to the running, jumping, and climbing mechanics common to the platformer genre, the game adds the complication of Green and Purple energy. Green or Light energy is associated with vertical movement, with the Y-axis; Purple or Dark energy is associated with horizontal movement, with the X-axis. At the bottom of the game screen is a Green and Purple meter which measures how much of either energy Aliph has absorbed. Having more Green than Purple means Aliph can jump higher, and having more Purple than Green means she can jump and move faster horizontally. If at any time, Aliph takes on all one type of energy, she perishes, and the player is restored to their last save point. Success in the game both on a mechanical and narrative level is about using the Light and Dark energies in thoughtful and intentional ways, and about keeping them to a certain degree in a moving, ebbing and flowing equilibrium. This yoking of the ludic to the narrative, the mechanics to the worldbuilding reveals the strength of a medium-specific articulation of game and story; Aliph's relationship to the two energies analogizes her relationship to the social and political powers of the game world.

Even the Ocean's central conceit is that of a world out of balance, a society too dependent on a particular form of energy reflected in the stark divide between those with access and those without. The majesty and literal heights of Whiteforge City rely on Green energy, on Light energy, which allows it to maintain its exalted position. The coding along color lines extends to the characters in the game. Most of the non-player characters the player meets in Whiteforge City are white, affluent, and interested in perpetuating the status of the capitol. For example, the mayor named Richard Biggs (a not so subtle penis joke) and chief scientist Doctor Wodsnick are both white men in charge of the city and Aliph's work. Whereas, most of the characters on the ground and in other parts of the world are people of color, queer NPCs, and characters of a range of identities and embodiments. For Han-Tani, "Even the Ocean feels like a powerful game in the way it makes these little character friendships and interactions feel huge in the face of apocalyptic histories and massive ecological disasters. It also homes in on the fear that bad

leaders carry, but how they refuse to work through those fears in productive ways, choosing to hide and be selfish."

Interestingly, Han-Tani and Kittaka did not set out to create an environmental game, but they recognize that the dystopian currents of Even the Ocean imagine the conflicts and interactions between nature and civilization and the difference between saving the world and saving its people. The game explores race, class, technology, and the environment suggesting that "Whiteforge is inspired by the excesses of American culture... [and] that the Western version of history is not really where we should be going" (Han-Tani). Though the game ends on a dystopic note, it does present the possibility of hope and of a different future, particularly through the character of the Storyteller, who frames the game's narrative and who functions as witness to the game's events and the player's choices. The hope in Even the Ocean is the survival of the story of Aliph and in the consideration of different and more radical ways to imagine the future, an Asianfuturist one that, in the words of Kittaka, "point some people in the direction of learning more about power structures and how they can distort our perceptions of balance.... If players can be a little transported, reflected, encouraged, or challenged, then they might be able to find more than I could personally tell them" (as qtd. in Riendeau).

Pandemic 2020 (2020)

Chanhee Choi describes herself as "a first generation culturally-hybrid Korean/American." Originally from South Korea, she is an interdisciplinary, interactive media designer and artist and currently a doctoral student in the United States at the University of Washington in the Digital Arts and Experimental Media program. Choi began working on Pandemic 2020 at the start of the COVID-19 lockdown in Seattle, Washington after experiencing anti-Asian racism firsthand. She says, "In March, as I walked alone in the city, I was humiliated by the comments of a non-Asian stranger. He said, 'You f-ing Chinese, you brought the coronavirus.' I was very shocked. I started questioning whether it would have happened if I were any other race besides Asian" (as gtd. in Taguchi par. 8). As an aside, Choi says that she goes by "Chanee" as her artist's name because it is easier, simpler, more readable and speakable than "Chanhee," recognizing the multiple marginalizations of being an immigrant, a non-native speaker of English, and even as a woman. Choi's Pandemic 2020 is a response not only to the ecological and environmental consequences of a global pandemic, particularly in urban spaces, but also to the social, racial, institutional, and media environments in which racism, xenophobia, and nationalism circulate. Beating at the center of the game is an attempt to answer the existential question of what it means to be Asian in the U.S. and what it means to be seen and assumed to be a problem, an outsider, a vector, a virus. Choi wonders, "Would that have happened if I were white? I felt afraid to cough. I wondered if everyone else felt as anxious about being seen as a carrier, if I looked sick, or what would happen to me if I didn't wear a mask? I asked myself, 'Do they see me as a virus?""



Choi describes Pandemic 2020 as a first-person, 3D, environmental art game, but instead of playing as a human avatar, the player is transmogrified, put into the literal position of the coronavirus, disembodied looking for a body. She says, "I chose to work in the medium of the 'art game' and virtual experience because it attempts to understand how reality is necessarily distorted by our perception of it. As a medium, it is curious about the gap between how the world really is and how it appears to us." In Pandemic 2020, the player plays as a macroscopic coronavirus floating and moving through vivid, picturesque, surreal, and at times nightmarish landscapes and spaces. As the viral avatar, the tell-tale ball shape covered in a "crown" of club-shaped spines or projections, the player explores homes, stores, cafes, streets, and workplaces, all of which are overlaid and interrupted by eerie textures, apparitions and reflections, dreamy lights, and otherworldly figures. More importantly, all of these areas and levels are decorated, hung, interspersed with multimodal and multimedia evidence drawn from real world headlines, social media, news clips, and found objects that render and reify anti-Asian backlashes and xenophobic fearmongering over COVID-19. The player is inundated, graphically oppressed by images and video clips of the U.S. president, screenshots of "China flu" tweets, anti-lockdown protest signs, racist graffiti on walls, jokes and memes about eating bats, and whorls and walls of words that speak of uncertainty, panic, fear, disaster, and hate. Inspired by other experiential and affective games like Mike Ren Yi's Yellow Face (2019) or Jason Rohrer's Passage (2007), Choi argues, "The video game format as a delivery method is important for this project because individual players can experience different spaces, different scenes, and different events in the game.... Some places are meant as entertainment, some places might make you feel happy, and some will feel like a nightmare."

The central mechanic of *Pandemic* 2020 is exploring, looking, experiencing while floating as a virus through the various places of the game. Games with this mode of play have often been celebrated and denigrated as "walking simulators,"

which privilege observation, investigation, storytelling, and slower movement through the game world rather than the usual, even normative gamic expectations of competition, combat, conquest, accrual of points, winning, and losing. Given the nonhuman avatar of Pandemic 2020, the game might better be called, in the words of Bonnie Ruberg, a looking simulator, lingering simulator, or observing simulator (201). As Choi has described, her game is both about witnessing the individual and ideological side effects of the pandemic and finding ways to reckon with and reimagine a world forever changed by disease, phobia, institutional neglect, and powerlessness. The power and potential of an "exploring simulator" like Choi's game and others is that these "experimental games critique the ways in which certain game mechanics and dynamics have become 'normalized' within mainstream games... pushing against conceptions of video games as reliant on 'hyperrealistic' visual representations of bodies and space or as dominantly freeing, immersive, and filled with 'free' choice and player empowerment" (Pow 44). Moreover, as Alenda Chang suggests, games like Pandemic 2020 disrupt expectations of not only the player's agency and control but also the modes and means of how they interact with or are acted upon by the gamic environment; Chang says, "[T]heir slowness, their lack of action, the absence of people, their spatial storytelling—indirectly indicate a path forward (pun intended) for more environmentally sophisticated game design... [they are] a call to inhabit different game worlds and to inhabit game worlds differently" (Playing 43). Playing as a virus plays with notions of viral agency, of the permeability of inside and outside, public and private, exposure and safety, and ultimately, of the spreading of both a biological disease, COVID-19, and a social, cultural, political, and multimedia disease, racism.

Given that Choi has adopted a hybrid status of Korean and American, her response to the formation of a body of Asian American games is focused on how they might "express the experience of being a minority in the United States." She says, "To play a game, people have to engage. This engagement puts them into a more receptive mental state and allows games to resonate with an audience in a way other mediums can't. I'd like to give people the experience of being a minority in America." While Choi does see her game at the intersection of art games and environmentalism, her focus is on a different reading of the environment, in this case the digital environment of social media, mass media, and the ecology of the news cycle: "Pandemic 2020 is a perception of news, media, and social networks. It's more about how our environment can affect and manipulate us to bring out bias or bigotry that makes us willing to incite violence toward a certain group of people." She turned to her work, her art, her studies in response. She wanted to find not only a way to articulate the social, political, and environmental contexts of her questions and feelings but also to create an affective, mediated response to share her experiences. Choi says, "This is why I decided to make a video game. I needed to describe the surrealistic struggle of this particular moment and engage with the people going through it with me.... The chaos of this moment, the coming election, and the widening cultural divide all make us wonder what we can expect from the future. Where are we? What are we doing?"

The Future of Asian American Environmental Games

Night Flyer, Even the Ocean, and Pandemic 2020 all imagine a grim future in their own ways, a future where it is impossible to deny the difficulties and ravages of capitalism, racism, and climate and ecological disaster. But they also imagine survival, transformation, and possibility, not necessarily easy and palatable solutions. They are Asianfuturist expressions of the dystopian and utopian potential of games, which can "offer powerful critical perspectives through which to interrogate the status quo" and they present "seriously flawed worlds that invite critical reflection" (Schulzke 331). Or as Raffaella Baccolini argues, in this case about speculative fiction, "Utopia is maintained in dystopia, traditionally a bleak, depressing genre with no space for hope in the story, only outside the story" but recent works, particularly by feminist writers and creators of color, resist closure and "allow readers and protagonists to hope: the ambiguous, open endings maintain the utopian impulse within the work" (520). The games of Mike Ren Yi, Melos Han-Tani, Marina Kittaka, and Chanhee Choi render this Asianfuturist impulse into playable form. By allowing (even requiring) players to play as a habitat-starved bat, a working-class woman of color, or even a floating, disembodied macrovirus, these games play against the grain of mainstream video games and the technonormative impulse to find easy answers and heroic resolutions. All three games linger in the ambivalence and interrelationships between animal, human, plant, earth, sky, building, technology, and the natural world.

The work of these designers are promising realizations and playful conceptions of Asian Americanist critique and worldbuilding through Asian American games. They demonstrate the need for and possibilities of games of color critique of race, ethnicity, belonging, space, and difference. They demonstrate that "video games present a rich limit-case for the claims of environmental scholarship—ontologically and epistemologically speaking, they are a place where the natural and the digital collide and prompt careful reexamination of our assumptions about nature, realism, and the virtual" (Chang Playing 15) and evince the common sense understanding that "games, like the natural world, can provoke curiosity, interaction, and reflections" (Chang Playing 2). They demonstrate the ways that race, ethnicity, and globalized identity come into play to "provide a means both to encompass the slippery term 'Asian American' and ground it in the material and cultural conditions of individual and collective experience, so that like those hidden faces, those whom it defines will readily emerge when we deploy the term 'environment" (Hayashi "Environment" par. 8). And finally, these games and their creators demonstrate alternative ways to design, play, and change the present and envision the future.

Going back to Chanhee Choi's questions about being seen as a virus, *Pandemic 2020* dramatizes the tensions between the individual and the collective, between the human and the environment, a reconfigured and remediated multiple awareness of what it means to be Asian and American, an invisible disease and a visible outsider. Choi's viral avatar makes macroscopic the "moments of doubled and occluded racial perception, in which Asianness becomes at once the most visible and the most attenuated sign of the convergence of racial and ludic fictions"

(Fickle 3). All three games, in fact, address what it means to embrace and excavate the terms of Asian American, environmental studies, and Asianfuturist games. And all three games attempt to answer or antidote their dystopian realities. The uncertainty and ambivalence of the current cultural, political, and environmental moment continue to be played out along raced, classed, gendered, embodied, and technologized lines, but the impulse for creativity, for change, for reimagining the imbrications and tensions of those lines are what these independent games of color attempt to capture. Or in the words of Choi, "We really can't predict what will happen next, but we should try to find hope."

Notes

- 1. See David S. Roh, Betsy Huang, and Greta A. Niu, eds., Techno-Orientalism: Imagining Asia in Speculative Fiction, History, and Media, Rutgers University Press, 2015.
- 2. See Smitri Mallapaty, "Where Did COVID Come From? WHO Investigation Begins But Faces Challenges," Nature (11 Nov. 2020), https://www.nature.com/articles/d41586-020-03165-9.

Works Cited

- Baccoini, Raffaella. "The Persistence of Hope in Dystopian Science Fiction." *PMLA*, Vol. 119, No. 3 (2004), pp. 518-521.
- Chan, Dawn. "Tomorrow Never Dies: Dawn Chan on Asia-futurism." Slant. (Summer 2016): 161-162.
- Chang, Alenda Y. "Games as Environmental Texts." *Qui Parle*. Vol. 19, No. 2 (Spring/Summer 2011), pp. 56-84.
- ---. *Playing Nature: Ecology in Video Games*. University of Minnesota Press, 2019. Chang, Edmond Y. "Musings on Asianfuturism?" *Ed(mond)Chang(Ed)agogy*. 27 Apr. 2020. http://www.edmondchang.com/2020/04/27/musings-on-asian-futurism/. Web.
- Choi, Chanhee, Personal Interview, 27 Dec. 2020.
- Dery, Mark. "Black to the Future: Interviews with Samuel R. Delany, Greg Tate, and Tricia Rose." *Flame Wars: The Discourse of Cyberculture*. Ed. Mark Dery. Duke University Press, 1994, pp. 179-222.
- Fickle, Tara. *The Race Card: From Gaming Technologies to Model Minorities*. New York University Press, 2019.
- Gover, Angela R., Shannon B. Harper, and Lynn Langton. "Anti-Asian Hate Crime During the COVID-19 Pandemic: Exploring the Reproduction of Inequality." American Journal of Criminal Justice. 7 Jul. 2020. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7364747/. Web.
- Han-Tani, Melos, Personal interview, 21 Dec. 2020.
- Han-Tani, Melos and Marina Kittaka. *Even the Ocean.* 11 May 2016. https://han-tani.itch.io/even-the-ocean. Web.
- Hayashi, Robert T. "Beyond Walden Pond: Asian American Literature and the Limits of Ecocriticism." Coming into Contact: Explorations in Ecocritical Theory and

- *Practice*. Eds. Annie Merrill Ingram, Ian Marshall, Daniel J. Philippon, and Adam W. Sweeting. University of Georgia Press, 2007, pp. 58-75.
- ---. "Environment." *Keywords for Asian American Studies*. 2015. http://keywords.nyupress.org/asian-american-studies/essay/environment/. Web.
- IndiCade. "Climate Jam 2020." April 2020. https://www.indiecade.com/climate-jam/. Web.
- Kittaka, Marina. Personal interview. 21 Dec. 2020.
- Platto, Sara, Jinfeng Zhou, Yanqing Wang, Huo Wang, and Ernesto Carafoli. "Biodiversity Loss and COVID-19 Pandemic: The Role of Bats in the Origin and the Spreading of the Disease." *Biochemical and Biophysical Research Communications*. 16 Oct. 2020. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7566801/. Web.
- Pow, Whitney. "Reaching Toward Home: Software Interface as Queer Orientation in the Video Game *Curtain*." *The Velvet Light Trap*, No. 81 (Spring 2018), pp. 43-56.
- Ren, Mike. Night Flyer: A Bat's Journey. 23 Apr. 2020. https://mikeyren.itch.io/nightflyer. Web.
- ---. Personal interview. 9 Jan. 2021.
- Riendeau, Danielle. "Even The Ocean is a Thoughtful, Politically Aware Platformer." *Vice*. 12 Nov. 2016. https://www.vice.com/en/article/wdj49m/even-the-ocean-is-a-thoughtful-politically-aware-platformer. Web.
- Ruberg, Bonnie. Video Games Have Always Been Queer. New York University Press, 2019.
- Schulzke, Marcus. "The Critical Power of Virtual Dystopias." *Games and Culture*, Vol. 9, No. 3 (2014), pp. 315-334.
- Taguchi, Kiyomi. "Video: 'Art Game' Looks at the Pandemic through an Artist's Eye." *UW News.* 24 Sep. 2020. https://www.washington.edu/news/2020/09/24/video-art-game-looks-at-the-pandemic-through-an-artists-eye/. Web.