Onkwehón:we play: Decolonizing videogame ecology and disrupting environmental racism

by

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Abstract

Environmental racism manifests in videogames and is an under-explored facet of videogame ecology, as are Indigenous worldviews such as relationality. Using primarily decolonial poststructuralist semiotic analysis and Indigenous Métissage, this thesis highlights the signs and simulacra of environmental racism (eg. resource extraction, water access, climate change, borders) in videogames that affect bodies of colour in real life such as the migrants from Central America, Black folks in North America, and Indigenous peoples of Turtle Island. The hope is that this critical exploration can work as a starting point for social justice education about environmental racism and relationality from Indigenous worldviews (specifically those of the Néhiyaw, the Iñupiat, and the Haudenosaunee). The games analyzed in this experiment are *SimCity BuildIt, Civilization VI, Fallout: New Vegas*, and *Kisima Inŋitchuŋa (Never Alone)*.

Dedication

For Ella Barnes (1923-2018) and for all the elders who teach and care for the next generation, moving us from survivance to thrivance.

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Contents

List of Tables

Introduction

i ran onto main and hastings[1]
cried out in anguish, this place called cold
called heartless
called monster & maw
was never the culprit & the blame was never to be
my mother's or her sisters'—
rather, machines of genocide
placed here by
the illegal government (simpson, j. 45)

This project in anti-colonial analysis of environmental racism in games for anti-racist education started with procrastination. I was avoiding course work - a thesis proposal - by playing a mindless app version of a childhood videogame[2]— *SimCity BuildIt*. Anything to avoid the assignment, relegated to the back burner. I ignore the simmer that builds, the increasing pressure of the upcoming deadline because I am bereft of intellectual energy and creativity.

I thought I knew what I wanted to study and explore in my program and with my thesis— a crowning glory of graduate scholarship. Instead, one course into the program, I felt an increasing frustration. I knew I could write. I knew my skills in research were honed through years of voracious reading of anything I could find. The issue wasn't imposter syndrome; it was displacement. Everywhere I looked in the program, I found capitalist-settler-colonialism[3] pushing against me. The readings, the projects, the

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[1] Part of the traditional territories of the Skwxwu7mesh, Tsleil-Waututh, and xʷməθkʷəy̓əm - this area is part of Vancouver's Downtown Eastside, an area with high rates of poverty, substance use, and sex work. In particular, a frontpage 2006 *Vancouver Sun* article described the area around the Main and Hastings intersection as "hell" (Steffenhagen A1).

[2] As Hawreliak writes on the "video game" vs "videogame" debate, "I use the single term simply because it emphasizes the inter-connectedness of representation and gameplay" (2019, 28), emphasizing the multimodal nature of this medium.

[3] Max Liboiron writes far more eloquently on the types of colonialism that exist: "settler colonialism, extractive
colonialism, internal colonialism, external colonialism, neoimperialism" and articulates that they have some things in common - namely it is a relationship between conquest and geoncide that privileges settler

assessment— all a funnel into Eurocentric capital output where we make our being *useful*. I didn't want to be useful. I wanted to be creative. I wanted to wander the intellectual forest without having an end goal, like I did in the bush outside my Grandma's house when I was young. We'd wander and I'd listen to her stories about the land. I couldn't do that anymore as she was in a long-term care facility with limited mobility, and I struggled with how to replicate that experience in my studies.

Instead of staring at a blank page, I took comfort in distraction within reach— my phone. I've always been a technology nerd, the one Grandma called when she couldn't find the letter "a" on her keyboard. "Look to the left-hand side," tried to tell her but was swiftly cut off with her insistence that she "already looked there". Technology was my lifeline to a world outside of childhood and colonial traumas, whether it was connecting with others who understood online or getting lost in a gameworld far away from my current reality.

Seeking comfort from my disappointment and frustration with my foray into graduate studies, I took it out on the Sims of the game. The simulacra of the cityscape inferred that the Sims all wanted the same things in their setting, and knew exactly how it should be done. Fail to acquiesce to their demands and they react immediately, forcing the player to adapt to the struggle of making an archetype of the middle-class White suburbanite happy. Still, the Sims of my app-based urbanscape were the perfect target of my anti-capitalist, settler-colonial-driven angst. They were easy to hate. Sims are

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access to land and resources as opposed to that of Indigenous peoples (9). Based on their definitions, I would say that it is an intersection of neoimperialism, settler, and extractive colonialism that my work criticizes, but with special attention to capitalism. As such, I try as often as possible to address the fact that the political and economic systems are difficult to separate and interrogate one at a time, and thus name them. It is also a recognition that capitalism is not the only economic system that views land as a resource as opposed to an entity, as Tibetans might rightly point out (13).

demanding, unreasonable, constantly-consuming monsters, like digital rogarous[4] who would never know contentment or peace. As the game is designed, there is really no way to make them happy. Making the Sims happy ends the game, ending the motivation to adapt, develop, and extend the game play for as long as possible. In my anger, I cursed out the Sims and the digital simulacra of White, middle-class privilege, “Are you kidding me? You’d never survive in the real world. This isn’t the Flint Water Crisis here!”

The proverbial lightbulb of the mind turned on— this was settler-colonial capitalism as a game, designed that way because that’s the accepted world of many game designers. To my own shock, I realized that storytelling, the Land, and the Indigenous knowledge that sustain my heart could have a place in my studies through videogames as a way to demonstrate environmental racism that bodies of colour know all too well. To do this would require me to force it in the small space that I was afforded as a student in the program, but I realized there was nothing else I would do as everything else felt inconsequential to me.

Writing and researching about bodies of colour and the traumas inflicted upon them during the murders of Black folks by police, the continued neocolonial denial of the harms of Indian Residential Schools and MMIWG2S at the hands of the Canadian government and society, the crisis faced by migrants the US-Mexico border was not an easy endeavour, and in many cases it was a retraumatization for myself. Still, I am incapable of separating the effects of colonialism in wider-North America from the academy as our institutions sit on stolen land. I would have carried this with me regardless as there is no editing out colonialism from the North American academic

[4] Werewolf with an insatiable appetite from Métis lore.

reality. As writer Felcia Rose Chavez explains “White colonialism takes up all the air, so much so that we’re forced to step outside to breathe” (21).

What happens when there is no outside?

Establishing a Lexicon

Recognizing that some of the terminology and ideas I use in this scholarship are rather unfamiliar to games studies, it is prudent to inaugurate with a consistent vocabulary across the following chapters.

Land:

While there are a number of potential definitions from a variety of Nations, I’m partial to Mississauga Nishnaabeg writer Leanne Betasamosake Simpson’s very holistic definition:

“Aki includes all aspects of creation: landforms, elements, plants, animals, spirits, sounds, thoughts, feelings, and energies and all of the emergent systems, ecologies, and networks that connect these elements” (161).

Environmental racism:

“an alternative concept of racism, white privilege, in addition to more common understandings of discrimination, to explain disparate environmental patterns” (Pulido 2000, 18) and “Land is thoroughly saturated with racism. There are at least two primary land processes to consider:

appropriation and access. Appropriation refers to the diverse ways that land was taken from native people, as previously mentioned. Once land was severed from native peoples and commodified, the question of access arose, which is deeply racialized.

Numerous laws and practices reserved land ownership for whites" (Pulido 2017, 529). Antithetical to relationality.

Relationality:

Recognizing that the survival of humans relies on respectful relations with the natural world, be it the sun, air, water, land or other (Donald 2019, 104), and a recognition that we are of the land (eg. our bodies are majority water[5]). Also known as "sacred ecology". Antithetical to environmental racism.

Public Pedagogy:

Sandlin et al's definition comprises of five domains:

- citizenship within and beyond schools
- pedagogical theory on popular culture and everyday life
- informal institutions and public spaces as educative arenas
- dominant cultural discourses
- public intellectualism and social activism (338).

Social justice education:

"Enabling people to develop the critical analytical tools necessary to understand oppression and their own socialization within oppressive systems and to develop a sense of agency and capacity to interrupt and change oppressive patterns and behaviors in themselves and in the institutions and communities in which they participate" (Bell 2). Social studies education scholar Carla Peck recommended this definition to me.

[5] Hamer, Ashley. "How Much of Your Body Is Water? That All Depends". *Discovery.com,* 01 August 2019.

“So what? Who cares?”[6]

When writing about Indigenous[7] relationships to place[8] and decolonization, Alicia Elliott, a Kanien‘kehá:ka writer from the Six Nations of the Grand River, wrote

> There is a reason the land gets compared to a woman, mother nature. There is a reason the colonial treatment of land is often referred to as rape. Indigenous peoples are responsible for the care and maintenance of the land. We have always been conscious of concepts the West has only recently taken on, such conservation and environmentalism. Yet Indigenous peoples' consent has never been a prerequisite for any of Canada's actions in regards to the lands we have historically cared for, lands we consider part of us. There is a duty to "consult and accommodate" Indigenous peoples in decisions that affect us or our Treaty rights, but there is no legal obligation for our nations to consent. Are we allowed, then, to say no? Or are we trapped in situations in which our "no" will be ignored regardless, leaving us with the difficult task of finding a way to make our pain as bearable as possible? (n.pg).

Simply put, racism can be enacted environmentally. For Indigenous peoples in Canada, it’s colonization and its systemic discrimination through industrial development and degradation, the chronically-underfunded and underserved reserve system. For Black people, it’s communities and neighbourhoods in crisis that are ignored, like Flint, Michigan. For migrants, it’s the anti-immigration policies that restrict who can cross the colonial borders, even if it means life or death. In each of these cases, environmental racism impacts these bodies of colour. Indigenous peoples are at a higher risk of health

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[6] A repeated mantra from my journalism school supervisor, the incomparable Judy Charles, to force us to articulate why the story we wanted to report on mattered beyond ourselves.

[7] In an effort to avoid “pan-Indianism” (the idea that Indigenous cultures are interchangeable and consistent), I will cite the cultures that provide the ideas. I will also try to include these concepts in their original language where possible, and define them for an Anglophone audience as part of an ongoing effort to decolonize scholarship and research.

[8] Scholar Lucy Lippard defines landscape as “seen from the outside” or the outdoors (8), space as a “desentimenalized place” (9), and place as “space combined with memory” (9). These are the definitions I use, and will try to use consistently.

concerns like HIV, diabetes, or poor health service (Reiheld n.pg) and are unable to practice their time-honoured traditional ways. Black people in Flint live with a toxic water supply without meaningful intervention from the local, state, or federal governments. Mexican migrants must try to survive crossing the deadly Sonoran desert.

While Elliot was referring to a physical place, land colonized by Europeans in particular, her call-to-action for decolonization can also be applied to the virtual—games, the culture of gaming, and the gaming industry in particular. It's the privilege of the developers that cause misrepresentation of the realities of people of colour, or completely erase the people themselves. In this way, racialized space and racialized bodies, both in the physical and digital realms, are locations for oppression. As digital media theorist Jason Farman writes, "Embodiment is always a spatial practice. Trying to imagine a body without space is impossible," (19). This embodiment is space for a hierarchy of privilege and power to enact oppression against racialized people.

Videogames in particular create an interactive environment or place that is a reflective simulacra of the realities in which they were developed. Many games present a world that is reminiscent of the physical world. In *The Sims* franchise, players live the life of a person in a capitalist society trying to climb the social ladder while keeping up with the Joneses. Empire-building, colonialism, and conquest are central to success in *Civilization.* Still, there are gaps in these simulacra. There is poor representation of racialized space, bodies, and realities, and a lack of relationality between land and humanity. How can we represent the real stories of people and their connection to the land affected by structures and systems of power who weaponize the land in videogames? Simply put, how can we represent the water crisis of Flint, Michigan in *SimCity*?

I propose that these gaps exist as a result of the capitalist-colonial systems of power and privilege embedded in Western society in particular and that these systems' perspectives on landscape, place, and space create exclusionary terrains. Since game designers and many players naturally enact the simulacra they know, this shouldn't be a particularly revolutionary thought, however I plan to push this research further into the realm of public pedagogy and social justice education by proposing that there is still educative value in these flawed simulacra. Not only do these games give scholars a terrain to explore privilege and power, but I propose that they can be used to educate about these issues in a setting beyond the classroom when paired with critical analysis. I also hope to draw attention to a decolonial perspective— that humanity is of the land and that it is our relation. My goal is to discuss how players and designers can reimagine a decolonial and non-extractive relationship with land in games and, thus, a terrain that is not exclusionary to bodies of colour.

Theoretical Considerations

> *"If you gave people a bucket of dirt, could they teach a science lesson in biology, chemistry, physics, & earth sciences, as well as FNMI, religion, geopolitics, history, & civics about it?" (*Thomas*)*

In the digital humanities, a burgeoning, interdisciplinary field, the theoretical toolbox is mid-assembly. The discipline is not old enough to draw on its own well-ingrained intellectual traditions. As such, practitioners in the digital humanities, myself included, rely on borrowing established research and theories from other fields to situate their work within the academy— a historically white, male, cisgender, straight, upper-class context. Still, the digital humanities' interdisciplinary collegiality fosters creative approaches and flexibility in the use of the academic toolbox. Indigenous,

feminist, poststructuralist, anti-oppression— theory and methodology from these realms and others can be used to "unsettle[9]" the traditional academic context, and these tools can be used to critically-analyze the digital. Some of these tools were designed in opposition of the power structure of the academy; others can be used "errantly[10]". For example, Gilles Deleuze's poststructuralism, as detailed in *Différence et Répétition,* was not written as a specifically anti-oppressive perspective on identity and representation but I intended to use it as such. Nevertheless, it is important to approach this work with poet, civil rights activist, and librarian Audre Lorde's criticisms of the reliance of oppressive perspectives and approaches in academia in mind, "What does it mean when the tools of a racist patriarchy are used to examine the same fruits of that same patriarchy? It means that only the most narrow parameters of changes are possible and allowable" (111). Or, in the words of legendary artist and Kainaiwa activist Joane Cardinal-Schubert:

> Let us not be too eager to fit into Western European art paradigms, to continue to see our work acceptable only on those imposed terms. Our ancestors did not give up so much, sacrifice so much, for us to live in a continuing reactionary soap opera with scripts written for us by others. We owe it to ourselves to take back what is ours— our history, our past—our ancestors' knowledge that has been passed on (34).

While Cardinal-Schubert focused on the art world in her criticism, I see parallels in academia and game studies. As such, my work tends to eschew established games studies research in favour of Indigenous-centric thinking and other anti-oppression

[9]By bringing Indigenous perspectives and philosophy to this discourse in particular, and by naming them with their respective nation, I'm committed to decolonizing scholarship in this field.
[10] Based on the OED definition of "errant": straying from the accepted course or standards (OED).

scholarship. It is with deep gratitude that I am able to express my thoughts through this established scholarship.

Much of the Indigenous scholarship I use centers around three deeply-intertwined main themes: Indigenous worldviews on Land, relationality (or sacred ecology), and Indigenous survivance. While I draw upon thinkers from a variety of disciplines and nations, there is consistency in these patterns of thinking. Mississauga Nishnaabeg writer and artist Leanne Betasamosake Simpson writes that “the land, Aki, is both context and process” which means that the land is who we are now and who we become through life-long learning (151). It’s an insight completely antithetical to settler-colonial logics that conceptualize Land or the natural world as other to humanity, something that can be separated from our corporeal and philosophical being. Land exists for extraction and manipulation for human needs, from a colonial perspective.

Deeply connected to Land is the concept of relationality or sacred ecology. This ethic is corporeal and philosophical, and a value system that requires a certain amount of unlearning from settlers, especially with my stretch to apply this line of thinking to the digital. Nevertheless, by inviting non-Indigenous folks to expand their understanding is a request of allyship in the decolonization of scholarship and games studies. Haudenosaunee theorists Joe Sheridan and Roronhiakewen “He Clears the Sky” Dan Longboat explain that the Cartesian dualism wherein body and mind, as well as body and land, are separate entities is completely foreign to traditional understandings. They write that

> restoration of mind, spirit, and imagination is a sequence that requires us to know the antiquity we embody and from there to plan the ecological restoration blood memory demands. Without maturation of our primal condition, neither we nor

> Mother Earth can know reciprocity on its own terms: as mind in nature, as nature in mind (366).

More simply, the natural, the corporeal, and the spiritual are one in the same from a Haudenosaunee perspective, and that the act of environmental racism, which relies on colonial extraction logics applied, is a violation of body, mind, and Land. Instead, relationality is a networked relationship between Land, human, and non-human beings. It recognizes kinship beyond species, and highlights that harm to the Land is harm to (predominantly) bodies of colour and it is environmental racism. Further to Simpson's earlier point, she writes that

> while each individual must have the skills and knowledge to ensure their own safety, survival, and prosperity in both the physical and spiritual realm, their existence is ultimately dependent upon intimate relationships of reciprocity, humility, honesty, and respect with all elements of creation, including plants and animals (154).

Simpson connects this to the aforequoted idea from Schubert-Cardinal, that Indigenous survivance is connected to a return to our own knowledges and values, forgoing a reliance on Eurocentric academic thought that perpetuates the settler-colonial logics that feed environmental racism, and key among them is centering Land and relationality.

Survivance is a strange word, but it highlights the divergence in understanding between settler-colonial and Indigenous perspectives. French philosopher Jacques Derrida's well-established definition[11] is a spectral, ghostly existence— neither life or death. Conversely, in Indigenous scholarship, the established and accepted definition of

[11]Derrida uses this in his discussion on mourning in his work *Demeure: Fiction and Testimony*. Trans. Elizabeth Rottenberg. Stanford: Stanford UP, 2000.

survivance is that of Anishinaabe philosopher Gerald Vizenor who writes that it is, “an active sense of presence, the continuance of native stories” (vii). Anishinaabe-Métis games scholar and designer Elizabeth LaPensée applies this perspective to games as “asserts Indigenous presence in the contemporary world rather than representing Indigenous existence as a relic of the past,” (129). Further to this perspective, she highlights the ability for games to share self-determined Indigenous representation through art, media, stories, teachings, and code (129). LaPensée’s belief is that Indigenous survivance isn’t just a return to tradition, but building upon it and adapting on our own terms.

The last part of the theoretical framework that exists as my thesis’ raison d'être are the pedagogical considerations— anti-racist education using games. While there is the entire genre of serious games designed specifically for educative purposes, I’m more interested in the non-traditional pedagogical spaces that non-serious or “for fun” games can afford learners. Not unlike the bucket of dirt in the aforecited tweet from education and metacognition scholar Gregory Thomas, using pop culture creations in education is not an unheard of concept; the question is how you use it. Reasonably well-established in education scholarship, public pedagogy is the idea that learning happens outside of the formalized classroom structure, even passively. This concept is familiar to Indigenous perspectives on learning that, among other aspects, the lesson and learning should be learner-centric, exploratory, and discovery-based— something that I argue games afford as a medium.

Methodological Ethic and Praxis

In many ways, the methodological approach is the most ambitious and most strange part of this project, or at least it is the part I have both loved and struggled with the most. It's an attempt to decolonize my education and practices while recognizing that I still exist in an institution that demands a certain level of scholarly conformity. To reconcile this reality and hold it in tension requires a certain self-awareness of my own biases and limitations. It's not just what I think, it's *how* I think and *how* I research. It's a recognition that my writing style, the choices I make in terms of what sources I use, and how I include them require self-interrogation on my part. This struggle is far from unique to my experiences. Racialized scholars before me know this actuality all too well. Chavez explains that "writers of color are charged with convincing white readers that our stories are believable, relatable, universal. Since there's no such thing as neutrality, what we're really charged with is erasing our bodies from our texts one by one until white readers feel dominant again, safe again," (37). I argue that this line of thinking can be further extended to *how* we enact our scholarship. While the digital humanities and game studies might be young disciplines in the scholarly world, there is still a dearth of acceptance of non-Eurocentric praxis or theory in these fields.

To merge the seemingly divergent theoretical perspectives I chose to employ as well as honouring the struggles of racialized scholars before me, I use a methodological approach advocated by Dwayne Donald called Indigenous Métissage[12], which puts Indigenous knowledge, perspectives, practices, and experiences on equal footing with the Western intellectual tradition. Donald formalized this methodology as a way to hold

[12] A decolonial research approach inspired by Plains Nēhiyaw and Siksikaitsitapi (Blackfoot) philosophical insights that emphasize contextualized and place-based ecological interpretations of ethical forms of relationality.

in tension and deconstruct both Eurocentric and Indigenous knowledges together without assimilation or prioritizing one scholarly tradition over another. He writes that “we need more complex understandings of human relationality that traverse deeply learned divides of the past and present by demonstrating that perceived civilizational frontiers are actually permeable and that perspectives on history, memory, and experience are connected and interreferential,” (2012, 534).

Further to this point, the value of Indigenous Métissage in this research establishes the importance of positionality and place— two concepts of profound importance in environmental racism. Donald writes

> Interpreting differing perspectives on artifact and place requires the development of a critical sense of who has formed the perspective, where the perspective is situated, under what circumstances, and according to which values, prejudices, and assumptions it has gained currency… Doing Indigenous Métissage requires work with artifact, place, and context in the hope that a story will emerge that will need to be told (2012, 549).

In the case of this academic exploration of environmental racism and relationality in videogames, this praxis braids seemingly divergent theoretical perspectives, narrative, history, context, and artistic production together to create an affective[13] and inclusive thesis research based in place, and hopefully continued dialogue on our ways of being.

In particular, while I may draw on established game studies research or poststructuralist theory, I also integrate storytelling traditions my grandmother used and I see in many Indigenous communities. Primarily, the voices of storytellers I admire and

[13] The influence of my Deleuzian colleagues strikes again. In this context, the term refers to the experience of being affected or the experience of emotions.

respect will be layered with my own voice where I attempt to share the stories of racialized people experiencing environmental racism of a variety of forms. The stories we tell, how we tell them, why and when we tell them are integral to so many Indigenous cultures and practices. Cherokee scholar Daniel Heath Justice explains that this unifying practice stems from survival of past and ongoing colonialism. He writes that

> Our stories have been integral to that survival—more than that, they've been part of our cultural, political, and familial resurgence and our continuing efforts to maintain our rights and responsibilities in these contested lands. They are good medicine. They remind us about who we are and where we're going, on our own and in relation to those with whom we share this world. They remind us about the relationships that make a good life possible. In short, they *matter* (5-6).

With this at the forefront of mind, it would be beyond remiss to not contextualize the game analysis through the inclusion of the stories of those affected by environmental racism. Their lived knowledge is invaluable to grounding the theoretical rigour demanded by academic scholarship.

Another methodology that will be critical to apply to the close reading of videogames will be the practice of semiotic analysis. Semiotic analysis is critical for the study of signs and symbols in communication and meaning-making. To take the archaeology metaphor further, there needs to be a way to understand the artifacts uncovered in the excavation process, or the exercise is futile. In particular, I plan to utilize a poststructuralist approach to semiotic analysis to deconstruct the signs and symbols in videogames, as well as the ones *not* present. This latter point is especially critical when studying the erasure of people of colour, their perspectives, and their realities. In the words of Gilles Deleuze, "for it is not the elements of symmetry present

which matter for artistic or natural causality, but those which are missing" (20). In addition to Deleuzian poststructrual semiotics, I take great inspiration from games studies scholar Jason Hawreliak whose work on procedural rhetoric[14] (2018), multimodal semiotics in the procedural mode[15] (2019), and social justice in videogames (2020) is absolutely instrumental in my thinking and researching. In particular, Hawreliak's work into the analysis of meaning made, transmitted and received in the multimodal entities that are games and the act of play, and how to analyse these "complex artifacts[16]" (2019, 23) through semiotics scaffold my work through each chapter.

Like a writer penning words on paper, humanity articulates our existence and our stories on the land—be it digital or physical. We extract resources, build structures, and make our mark on the land through ways limited only by our imagination. Our stories in this place are embedded in a matrix[17] that we can excavate to understand the context of our finds. In the same way, digital humanists can approach the virtual landscape like archaeologists on a dig. Another term Donald uses for this understanding is "Pentimento", an approach he uses to re-read the history of Edmonton, Alberta, Canada. He uses this art history term to describe how the long history of Indigenous presence in the area now called Edmonton had been painted over and how he peeled back the

[14] While Hawreliak may not be the creator of this term, I stick with his definition: "Procedural rhetoric can be thought of as the means by which the game's rules and parameters guide action in the game world and can be expressed as a series of questions: Which actions do the game's rules require or allow? Which do they forbid? Which do they reward or punish?" (2018, 230)

[15] The rules of a game as enacted by the player; the mode - only one part of the analysis in multimodal analysis (2018, 229).

[16] Further to his point about videogames being a challenge in terms of multimodal analysis, Hawreliak rightly points out that videogames add the extra challenge in that they are an interactive medium (2019, 33) and that we can't always interrogate exactly how each player engages with the medium or artifact in question. He writes that there is no controlling the "reading path" of a game player, and "it is not even certain which signs the
user will encounter" (34). As a result, I try to focus as much of my analysis as possible on the wider-scope of the game as opposed to smaller, non-required-according-to-the-game interactions.

[17] An archaeological term used to describe the material surrounding a find. An example is a specific geological layer which can help date the find.

layers to see what was beneath (2004, 23). I plan to use Donald's approach to excavate videogames that erase racialized bodies, stories, and realities in the gamescape and see what lies underneath the privilege of the game designers. Not only will this methodological approach be invaluable when reading the digital landscape in videogames, but it also grounds the semiotic analysis in anti-oppression and an Indigenous worldview.

Background of Research Objects

Videogames have cultural impact. From gaming consoles to adaptations to the silver screen to books and merchandising tie-ins, videogames have permeated into pop culture's essence. The Resident Evil franchise started as a Japanese first-person shooter game in 1996 and has since grown to over twenty games, six films that have grossed over $1.2 billion, an animated series, and associated merchandise (Capcom n.pg). Characters from Nintendo's Super Mario, one of the best-selling games of all-time (Dunn n.pg), can be found on children's clothing and as Halloween costumes. The pervasiveness of video game culture is as ubiquitous as any other major entertainment fandom or industry.

The video game industry is also an economic juggernaut, raking in over an estimated $100 billion in 2017 (Graham n.pg), which is about the same size as the GDP of Kuwait, an OPEC nation with the world's sixth largest oil reserve (WorldBank n.pg). Games like Grand Theft Auto V hold the distinction of being the fastest selling entertainment product, earning over $1 billion in the first three days of its release, outselling any book, album or film in the same timeframe (GameSpot n.pg). The game

industry is a powerful financial engine in the capitalist system, both running on privilege and profiting off oppression, exclusion, and displacement.

The prevalence of the video game industry's cultural and economic impacts validates an increasing field of study. In particular, I believe my research to be relevant in an era of increasing awareness of environmental racism, Indigenous ways of knowing, public pedagogy, and how study of these areas can be enacted through many avenues, including videogames. To bring a decolonial, anti-oppression lens to videogames demonstrates the validity of both the medium's influence as a cultural object and the values it reflects, as well as an area of study. Analyzing games through a social justice lens is far from an original exercise by myself, but as Hawreliak and Lemeiux write, "in spite of their history as conveyors of the status quo, videogames can in fact be an effective medium for countering and critiquing oppressive systems," (2019, 724) and I wish to add a distinctly more-decolonial and Indigenized analysis to the body of scholarship.

While the four games I have chosen are rather disparate and arbitrary, there is a method to the madness of my choices. I wanted three games to be from AAA with a heavy focus on resource-extraction and land-use, and one Indigenous-centric game. Out of the three AAA games I wanted one app-based mobile game, one single-player RPG, and one turn-based 4X ("eXplore, eXpand, eXploit, and eXterminate") game. I also wanted two of four of the games to be clearly uncritical of settler-colonial development narratives, but the other two games to be more critical of those philosophies, or present an entirely relationality-focused perspective.

Outline of Chapters

Chapter One: You can't recreate the Flint Water Crisis in SimCity

This section focuses on *SimCity BuildIt*, another spin-off of the wildly popular series. This chapter primarily focuses on the signs of environmental racism in urban and suburban settings, particularly that of the Flint Water Crisis. The realities of urbanized environmental racism are absent from the game, however I argue that this game provides a striated space to explore the structures and systems of power and privilege in this imperfect digital lab where the real-world privilege of game designers and players is up for scrutiny and critical analysis. It's a place for anti-racist education as long as the game is contextualized with the realities of a capitalist settler-colonial society. As this is the first chapter, it is the most introductory with regards to Indigenous methodology and perspectives.

Chapter Two: Manifest destiny of the empire

This chapter will focus on the successful game series: *Civilization*, a land-conquest and empire-building game series. In particular, I will analyze the signs of colonization where colonizing powers enact manifest destiny to assert their society's political dominance over other cultures and races to gain more access to resources, increasing their power. The game actively encourages players to displace Indigenous peoples from their land and enact industry on the land, consequences ignored. Seeing as this is a sizeable game series, I restricted the analysis to the most current edition of the game– *Civilization VI* and to Canadian and American-based settler-colonialism. In particular, I situate the analysis on my traditional homelands of the Haudenosaunee Confederacy - a confederacy of nations split by colonial borders.

Chapter Three: "There is no innocent gaming"[18]: Fallout: New Vegas and the Migrant Crisis

Bethesda Game Studio's wildly popular series about surviving nuclear annihilation and subsequent crisis is ripe with potential for analysis. While each edition of the game has different signs of privilege and power, the premise remains the same: some people are able to survive the apocalypse due to their access to resources or their increased mobility and that privilege tends to cut along racial lines. As well, how the land is represented in the *Fallout* series, particularly the massive amounts of environmental degradation, borders, the representation of water and water crisis and race all intersect in a way that sets the stage for potentially compelling analysis from an Indigenous worldview. As this is also an expansive series, the analysis is limited to *Fallout: New Vegas* in the context of the migrant crisis that has unfolded at the southern border of the United States. In this chapter, narrative from Mexicanx authors and details from news stories voice the racialized experiences of environmental racism in contrast with the game analysis.

Chapter Four Agniq Suaŋŋaktuq[19] and Kisima Inŋitchuŋa (Never Alone): 'Cause Gaia likes it cold'[20]

On the advice of Dr. Dwayne Donald, this chapter exists as a stark contrast to the others. Unlike the AAA games previously mentioned, *Never Alone* (*Kisima Ingitchuna*) is a side-scrolling adventure-puzzle game set in the Iñupiaq landscape amidst a blizzard. The design of the game, as well as how players interact with it, show a fundamentally

[18] Consalvo, 415.
[19] Translates from Iñupiaq to "the blizzard is getting stronger" (Webster 106 and 122).
[20] References a line in Tanya Tagaq's song *Cold*.

different understanding of the environment. An Indigenous worldview is on display in a game widely available through multiple platforms, and that alone makes it a game worth exploring further. I have also been given the opportunity to direct a discussion on this game with two classes of undergraduate students in MLCS 399: Videogames Across Cultures, and from those experiences I was able to further develop my thinking on this game. It is my desire that academic exploration of this game will demonstrate a more hopeful view of how sacred ecology and anti-racist education can be infused into non-serious videogames.

You can't make the Flint Water Crisis in *SimCity*

"PUT YOUR IMAGINATION ON THE MAP. Build your own beautiful bustling city where your citizens thrive. Play now," is the encouraging tagline on the Electronic Arts website promoting *SimCity BuildIt*, an app version of the popular, "open-ended" city design and construction video game series originally released in 1989. The premise is simple: make your citizens happy by building a wealthy, orderly city and collect the taxes to expand this idealized, simulated urbanscape. The game engine and the actors engaging with the game operate on certain values and principles embedded in an affluent Western civilization, namely consumerism and the acquisition of wealth. In his essay *Philosophical Game Design*, multimedia scholar Lars Konzack describes *SimCity* series game designer Will Wright as "presenting a cybernetic philosophy of urban construction in an aesthetic way, making these feedback relations and game theoretical mechanisms into an experience," (35).

By this same token, the digital landscape design and a player's interaction with it reflects the beliefs, biases–unconscious or otherwise–, and values about how people live in a physical space. Simply put, choices reflect perspective, knowledge, and an understanding of reality. Thus, games are a striated space to explore society's structure and systems of power and privilege, giving players a chance to critically analyze these aspects in an, albeit imperfect, "digital lab". Here in this lab, the real-world privilege of both the game designers and players is up for investigation and scrutiny.

Theoretical & Methodological Framework

Drawing on an assemblage of anti-oppression perspectives, poststructuralist thought, established digital humanist works and others in the expanding field of game

studies, and leading education theories, this chapter will address the issues and simulacra of privilege inherent in the choices of game design and game play. While a game engine like *SimCity BuildIt* is not a symmetrical reality to our own, it is a reflective simulacrum of the entitlement and freedoms outside of this interactive medium— a philosophy of capitalism and consumerism. It is the absence of certain signs within the game that demonstrate the privilege of the game designers and directs players to re-enact this real-world privilege within the digital landscape to achieve success. As Gilles Deleuze explains, “for it is not the elements of symmetry present which matter for artistic or natural causality, but those which are missing,” (20).

I argue that the absence of these signs stem from the game designers who are products of a Western settler-colonial capitalist society that encourages a Cartesian approach to landscape where humans can control the environment for their own use, as opposed to a sacred ecology perspective where relationality between people and the land acknowledges that we humans are kin with the land, part of the land, and harming the land harms people— particularly racialized people. The dangers of this ideology is best explained by educational scholar jan jagodzinski who connects the dots between genocide with environmental degradation:

> The *Anthropocene* directly equates the agent of incumbent responsibility for this global crisis to the ‘white Man’ of European Enlightenment, and to the emergence of scientism and the largely instrumentalist legacy of progressive modernity that is as much entangled with hierarchy and enslavement, which pervaded the colonialist mentality of conquest in the name of Man, bringing with it the spread of infectious diseases of one sort or another, and the death of approximately 50 million people. Such colonization eventually led to the entitlement of appropriating

> the material world in the name of progressive global Capitalism; Earth became simply matter, our 'standing reserve' (2).

More succinctly— how humanity treats the land reflects how we treat those who live in relation with the land, and this reality is reflected in the simulacra of games.

In particular, this chapter uses *SimCity BuildIt* to explore environmental racism in digital spaces. Simply put, it explores how "you can't create the Flint Water Crisis in *SimCity*". This facet of oppression contrasts the living conditions of marginalized, racial minority communities with that of the privileged classes. Municipal landfills are not constructed in neighbourhoods with white picket fences. Slums are hidden out of sight from the suburbs. The Hamptons always have clean water. As such, those engaging with *SimCity BuildIt* cannot achieve success in the game by constructing real-life narratives of poverty in racialized communities; there is simply no space for this embodiment. As games scholar Mary Flanagan explains, "despite the probable social benefits that could result, game designers have yet to grapple with the full range of inequities ingrained in the player categories and game models exhibited in most of today's games,"(225).

In *SimCity BuildIt*, the designed neighbourhoods in the digital urbanscape must reflect wealthy suburbia for game play success. In this way, players can see Joe Sheridan and Roronhiakewen Dan Longboat's assertion that "environmental apartheid, like all manner of apartheid, uses marginalization and isolation to ensure the harmony of its illusions,"(316, 2014) reflected in these flawed simulacra. To emphasize this point, I will rely on a research methodology that Papaschase Cree scholar Dwayne Donald calls Indigenous Métissage which pays attention to how people relate in ethical ways and it uses narrative and artistic practice as a way to connect people and explore a research

question through an Indigenous worldview. Further to this point, legendary political activist and philosopher Angela Davis explains that “Progressive art can assist people to learn not only about the objective forces at work in the society in which they live, but also about the intensely social character of their interior lives. Ultimately, it can propel people toward social emancipation,” (n.pg). By telling the story of the people of Flint, Michigan with this methodology, it is my intent to demonstrate how a non-relational disassociation with land can negatively affect other people.

Further, this chapter argues that critical analysis of game play and design can be part of social justice education and digital literacy[21] through a public pedagogy lens. A problematic game can still provide a learning experience that is accessible and engaging; it does not need to be thrown out with the bathwater. As education scholar Peter Pericles Trifonas suggests, viewing games as public pedagogy “foregrounds the intentionality and embodiment of the subject and the role technological mediation plays in social relations produced therein,” (182). Simply, conscious thinking about the medium, its message, and its potential impact can be a learning opportunity.

Contextual Métissage

> *the law mandates that a hate crime only be classified as such if there is ample evidence to show that one’s actions were motivated by prejudice towards an individual’s nationality, ethnicity, sexuality, gender, etc.*
> *oh, I got one!*
> *some more than others know that all objects can be put to violent use. if our bodies could rust, we would be falling apart.* (Belcourt 52)

[21]Anyangwe, Eliza. “20 Ways of Thinking about Digital Literacy in Higher Education - Josie Fraser.” The Guardian, 15 May 2012, www.theguardian.com/higher-education-network/blog/2012/may/15/digital-literacy-in-universities.

In *SimCity BuildIt,* players are encouraged to expand the boundaries of their city into the “untouched” landscape and develop industries that have the potential to create pollution, something that is categorized as undesirable for Sim citizens, however no impacts on the surrounding natural environment are shown. As well, the Sims have access to perfect information with no delay and unlimited mobility. If there is a structural issue with city services, such as water or waste management, the Sims will know immediately and react; they will become upset, the taxation rate drops, and the Sims will move away, further lowering the tax base. An added layer to the game play is the optional in-app purchase component; if players so choose, they can use real-world currency to buy “Simoleons” for increased capital in the game, releasing them from dependency on the citizen tax base[22]. This society design is essentially an idealized version of colonial, capitalist consumerism. In contrast with Nēhiyaw poet Billy-Ray Belcourt’s aforecited poem, there is no acknowledgement of how this ideology of this simulacra can be used as a weapon against bodies of colour.

Unlike the urban environment of *SimCity BuildIt*, the primarily black citizens of Flint, Michigan were not immediately aware of the issues with the water quality. In April 2014, the city of Flint changed the source of the water and the delivery system, leading to increased levels of lead in the water. Citizens complained about water quality publicly as soon as January 2015 and in December 2015, the mayor declared a state of emergency. In September 2017, experts were still encouraging citizens of Flint to take precaution and filter their water (Associated Press 2017), and in May 2018, protesters swarmed the Governor’s office, demanding action (Lawler) after it was announced that the state would end bottled water supply. In August 2018, a district court judge found

[22] This is a larger topic at hand that will have to be addressed in another paper.

probable cause for the Michigan's health director Nick Lyon to stand trial for involuntary manslaughter in two deaths linked to Legionnaires' disease in the Flint area (Associated Press 2018), but there is no mention of the actions (or inaction) as racially-motivated, and therefore no examination of the systemic biases against people of colour.

Moreover, with a large proportion of the citizen base living in poverty and without education beyond high school (US Department of Commerce), the people of Flint, Michigan do not have the means necessary to fluidly and easily change their situation. Instead, many still continue to live in Flint, as the population of the municipality has only decreased by five per cent since 2010 (US Department of Commerce). The agency of the residents is restricted by the structure and systems of power in North American society, unlike the Sims of *SimCity BuildIt*.

Analyzing Urban Planning Simulation

> *O, let my land be a land where Liberty*
> *Is crowned with no false patriotic wreath,*
> *But opportunity is real, and life is free,*
> *Equality is in the air we breathe.*
> *(There's never been equality for me,*
> *Nor freedom in this "homeland of the free.")* (Hughes, n.pg)

It is apparent that the game engine of *SimCity BuildIt*, and other variations in the *Sims* series, is not constructed to be an authentic, physical world reality and society. The name "sim" itself suggests simulation or simulacrum, meaning a repetition or a copy of an original symbol. Still, questions remain: what is the original and where is it? In the search for the inspiration, a look at the creator is prudent. While Will Wright, the original designer of *SimCity* and its sequels, has since left Maxis and its parent company

Electronic Arts, cultural theorist Mike Wayne explains that the middle class and intelligentsia is where media and cultural workers, such as game designers, exist (16). He asserts that they inhabit a higher spot of privilege because of the cultural knowledge they attain and hold (23). Furthermore, Wayne argues that "squeezed between capital and labour, they are constituted by them economically and influenced by them at the level of ideas" (23). As such, the privilege of these cultural workers in society's structure and systems of power shapes their perspectives, beliefs, and scope. This privilege influences their representation of the world, and it is the original for the simulacrum that is the game engine.

Yet, some may say "it's just a game." However, to separate the symbol from the simulacrum is not a realistic approach to video game criticism. In *Difference and Repetition*, Deleuze stresses that "the simulacrum is the sign in so far as the sign interiorises the conditions of its own repetition," (67). Simply put, if they look and act the same, they are the same. With this in mind, the onus is on game designers to avoid that internalization of their own privilege into the simulacrum. In his seminal work *Gaming: Essays on Algorithmic Culture*, Alexander Galloway argues that if "one is a realist game designer, the challenge is not only to capture the social realities of the disenfranchised but also to inject the game back into the correct social milieu of available players where it rings true," (84). If game designers neglect to check their privilege, Ian Bogost's claim in *Unit Operations* that "what simulation games create are biased, nonobjective modes of expression that cannot escape the grasp of subjectivity and ideology," (99) rings true. As the aforecited Langston Hughes poem explains, the reality of life for Black folks conflicts with the White, neoliberal understanding of equality. Regardless, *SimCity BuildIt,* remains a significantly erroneous simulacra of reality to the point of fantasy.

While game designers are responsible for their creations, game players have the opportunity for in-depth inquiry into this medium and their actions within it. Indeed, the primary function of a game is to compel players to take action. This performative engagement highlights the other side of privilege— that of the game players. Konzack explains the significance of this approach, and applies it to the Sims series of games: "The player has to think about what the game represents and simulates. The player is asked to think about the complex logistics or urban development, cultural development, personal life development or biological evolutionary development," (35). He pushes the idea of participation further, stating that players actively take part in a philosophical experiment (one he earlier refers to as an exploration in consumerism) investigating success and failure as defined by the game (35-6).

This philosophical experiment can be viewed as an exercise in imagination on the part of the players, asking them to imagine what choices they would make in a colonial capitalist society in order to achieve success as defined by the game's design, even if this means ignoring the connections between the land and people, as well as the potentially negative impact of development, such as pollution. In their essay, "The Haudenosaunee Imagination and the Ecology of the Sacred", Sheridan and Longboat describe this experiment as the "aberrant imagination" (373). They assert that it "conducts itself as self-induced ecological amnesia" (373), which is to say that players and game designers intentionally ignore the knowledge of nature and that humans are of nature, a perspective typically described as an "Indigenous worldview".

More concisely, action within a game requires players to engage with a specific ideology. Therefore, if that ideology is rife with privilege and embedded with a hierarchy of power, players are participating in that system of oppression. From this perspective,

players are as complicit in their privilege as game designers. In the case of *SimCity BuildIt*, by constructing a perfect, suburban-scape without poverty, environmental degradation, pollution, police brutality, and other issues marking the landscapes of racialized minorities, and consequently being rewarded by the game's method, the game's creators and participants are perpetuating a philosophy of conservative rhetoric where it is possible for anyone to achieve anything, with enough effort. There are no limits on what a person can do once they put their mind to it. In truth, this view neglects the reality that one's agency is constricted by their position in society's structure, just like Flint, Michigan's residents who remain in Flint and continue drinking from bottled water.

The counter-narrative to the perspective illustrated in *SimCity BuildIt* is simple: not everyone has the same resources, abilities, power, or agency at their disposal. Yet, this critical point is absent in the simulated landscape of the game, demonstrating a divide between its digital reality and the physical world. This divide has an othering effect; if you do not fit into the idealized reality of the game, you do not fit in at all. While the argument can be made that *SimCity BuildIt* is not a realist game, but a fantastical game, media geographer Leigh Schwartz argues that the distinction does not matter. In her article *Fantasy, Realism, and the Other in Recent Video Games* she writes, "When experiencing these virtual spaces and the ideas embedded in the representation, game designers and players alike bring othering to the experience. Is there no 'us' if there is no 'them'?" (321). This is to say, the other is there, even if by absence of embodiment. Sheridan and Longboat take this perspective further by suggesting that imagination is in fact a place— a form of embodiment. They write: "Imagination has a place because imagination *is* a place, and because everything is connected to everything else, the

encounter with imagination is a living communication within a sentient landscape," (369). In other words, if we can imagine it, it exists and is tangible.

Simulation, Simulacra, Stereotypes, and Social Justice

> *a caged bird stands on the grave of dreams*
> *his shadow shouts on a nightmare scream*
> *his wings are clipped and his feet are tied*
> *so he opens his throat to sing.* (Angelou, n.pg)

From the lack of racial minority Sims to the game engine's feedback loop that encourages players to create a stereotypically white, wealthy urbanscape with perfect environmental conditions and a heavy police presence[23] (and none of the police-associated aggressions that occur between racial minorities and them), the game others visibly-diverse populations, which can lead to the cultivation of certain stereotypes or incorrect understandings about racial minorities and their real-world lives. As games studies scholar Miguel Sicart explains, "No misfits are allowed in [the game], only the stereotyped winners of late capitalist societies" (9). Unfortunately, in the case of Flint, Michigan, the citizens don't win so much as avoid lead poisoning from their tap water, a concern since 2014. Instead, they are effectively "out-of-sight, out-of-mind", as is their real-world life where their water is effectively a weapon that could kill them, and their lack of privilege and resources prevent them from radically changing their situation by leaving Flint. Unfortunately, this nuance is often lacking in conservative rhetoric that encourages folks to "pull themselves up by their bootstraps", and those who don't are lazy or are not trying hard enough. The situation in Flint is effectively the caging and wing-clipping of the bird in Maya Angelou's aforequoted poem, a restriction of agency.

[23] Once again, a topic for another essay.

In *SimCity BuildIt*, if the Sims are subjected to pollution, a utility crisis or a lack of policing, they leave. It's a remarkable dissonance with reality, one that jagodzinski tackles in his book *Interrogating the Anthropocene*, pointing to the political child of colonialism and nation-building (where manifest destiny created power hierarchies between races of people) that is liberal democracy. He argues that the perspective of equality and justice already being achieved and that citizens in this socio-economic system exist as "essential humans" creates this inaccurate political narrative, saying

> "the essential human maintains itself through a constant battle of 'inclusion' by the 'excluded' to be counted as fully human—to overcome the signifiers of being less-than- human or not human, based on the mythic utopian ideal that there indeed is the possibility of an equal and just society where all are counted," (37).

In other words, the magic circle[24] asks players to suspend their disbelief about humanity itself, not just the game engine's world.

In the case of media, be it entertainment or news, characterization of the lives of the racialized, Métis writer and lawyer Chelsea Vowel describes the harm in the misrepresentation of Indigenous peoples, and compares that to racist assumptions about Black communities:

> When Canadians consider the injustices faced by Indigenous peoples, those injustices are always located in the past… Canada is hardly unique in this ahistorical approach. In the United States, slavery is also located in the distant past, and the belief that full equality was achieved at some nebulous but definite point and is widely accepted as true. Thus, anti-Black sentiment is not based on

[24] A term coined by Eric Zimmerman and Frank Lantz in 1999 to describe the fantastical space where real world rules and reality are suspended for the world of the game. More analysis on the "magic circle" concept will be addressed in Chapter 3.

> race but on ‘true generalizations’ of all the ‘bad choices Black people have made’ since they became ‘equal’, (120).

More succinctly, it is a white, mainstream belief that remaining in Flint is a conscious choice, and that the predominantly black citizens are unwilling to change their living situation, because they don’t lack the ability to make the change. In her landmark essay *White Fragility*, DiAngelo calls out societal norms that suggest the experience of white people as representational of reality, saying “The belief in objectivity, coupled with positioning white people as outside of culture (and thus the norm for humanity), allows whites to view themselves as universal humans who can represent all of human experience,” (59). She pushes the idea further, suggesting that white fragility arises when it is made apparent that the idea of individualism is upset and displaced for an anti-oppression narrative that acknowledges privilege.This ideology that DiAngelo criticizes is reflected in the simulacra of *SimCity BuildIt.*

From an anti-oppression perspective that acknowledges that not everyone has the same level of privilege and resources, this is troubling. If we cannot escape real-world othering and oppression in the digital realm, be it realistic or fantastical, how can a socially-conscious person continue engaging with games?

One approach to combating this issue is to educate for digital literacy. When applied to videogames, digital literacy analyzes how games can be understood within a societal context, not at how skilled one is at playing the game. Although this approach has typically applied to serious or literary games, signs and meaning-making are still present in mainstream games. While commercial games are not designed to intentionally create cognitive dissonance in the players, bringing a critical analysis toolkit like literacy has the potential to disrupt what Hayles describes as deep attention, which

is “characterized by concentrating on a single object for long periods of time,” (187). This disruption becomes both an opportunity and space for analysis of the meanings made in the game by the designers and players. In *Literary Gaming*, Ensslin describes this cognitive clash as “players [entering] the magic circle without fully suspending disbelief,” (39), and thus has the potential to turn a commercial game into a serious game space.

Former GameLab chief game designer Eric Zimmerman explains this as, “design as the creation of meaning invokes the magic circle: designers create contexts that in turn create signification,” (28). In this way, game analysis focuses on the narrative put forth by the game. This approach takes the tack that games have themes, motifs, settings, and points of view, and they can be studied and interpreted. Ironically, this process is not unlike the cycle of deterritorialization and reterritorialization in capitalism that Deleuze and Guattari describe in *The Anti-Oedipus* (247), wherein analysis of the game’s meaning-making acts as a breaking down of the striated space, but smooth space is never achieved because society’s systems and structures of power and privilege continue outside of the game space. Flanagan describes this process as “incidental learning” (232) and calls for a type of digital literacy she calls “critical play” in which game designers and creators “create or occupy play environments and activities that represent one or more questions about aspects of human life,” (6).

Digital literacy also empowers players to take lessons from the game and bring them to the real world, a public pedagogy perspective. Zimmerman explains this perspective quite simply as, “rather than focusing on what happens inside the artificial world of a game, gaming literacy asks how playing, understanding and designing games all embody crucial ways of looking at and being in the world,” (29). This argument is supported by public pedagogy advocates who view experiences outside of a classroom

as valid learning opportunities, and encourage educators to bring pop culture into their learning toolkit. In this way, games are a space for players to learn about real world privilege, biases, power, and agency, like the aforementioned “digital lab”. This aspect of public pedagogy acknowledges the digital sphere as being part of society’s consciousness. From this perspective, *SimCity BuildIt* is not simply “just a game”, so much as it is a cultural product, a simulacrum of a system of privilege, and a classroom for exploration of social justice issues.

Conclusion

Even something as seemingly objective as mathematics and algorithms used in programming is imbued with subjectivity and privilege, as seen with video game design and play. There is space in programming and gaming where privileged perspectives can seep into the code and the actions, and games demonstrate that the human element in both design and play can not be ignored. The critical variable is that players and designers *make choices*, be it conscious or unconscious, that reflect their privilege and viewpoint. In the case of *SimCity BuildIt,* these choices support oppressive beliefs about racial minorities and the systems of power that other them. In this way, games are a media assemblage of simulacra that transmit cultural knowledge, values, and perspectives to players; in turn, players engage with these simulacra, and those choices reflect their cultural knowledge, values and perspective. To this end, Galloway writes “It is because games are an active medium that realism in gaming requires a special congruence between the social reality depicted in the game and the social reality known and lived by the player,” (83).

Considering this problematic situation from an anti-oppression perspective, one possible approach to creating a counter-narrative lies with considering videogames like *SimCity BuildIt* as a sphere for engaging in public pedagogy and developing digital literacy. From there, the lessons learned about privilege and social justice could be brought back to the physical realm. By looking at the meaning created by the signs and the simulacra of the game, as well as the meaning created by the designer and the players interacting with the medium, a space is created for critical engagement and discussions not addressed by the game itself.

Manifest destiny of the empire: *Civilization VI* & the consequences of disruption[25]

> ***"****The White Man put that there, not us. I don't know why we have to put up with this bullshit." - one Mohawk man speaking to another about border issues over dinner at a Red Lobster in Lachine, Quebec during the late 1990s* (Simpson, A. 115).

"EXPAND YOUR EMPIRE" and "TAKING THE WORLD BY STORM" are some of the encouraging taglines on the *Civilization* website, advertising the sixth installment of the world-famous, turn-based 4X ("eXplore, eXpand, eXploit, and eXterminate") game (Civilization.com). First released in 1991, programmer and developer Sid Meier created the series at the game studio he co-founded. The series evolution includes the addition of features such as the climate change expansion in the sixth installment, but ultimately the game's procedural rhetoric remains the same— to win you must dominate Land and people and you must establish supremacy of your culture. Explore the maps. Expand your borders. Exploit the resources— be it human or Land. Exterminate those who challenge you. The victory condition of the game is supremacy through settler-colonialism. Whether the player achieves game victory through diplomacy, scientific achievement, or war— one culture must reign supreme and the conditions tend to be derived from settler-colonial understandings of progress, history, culture, and Land. In his book *Multimodal Semiotics and Rhetoric in Videogames,* scholar Jason Hawreliak explains that the game's procedural rhetoric makes the rules (and the philosophy behind

[25] References Haudenosaunee poet Janet Marie Rogers' poem *Forever*, cited throughout this chapter.

them) highly visible, writing, “At its heart, the *Civ* series is about progress and conquest” (90).

Theoretical & Methodological Framework

This essay is an Indigenized and decolonial semiotic analysis of the successful game series *Civilization*, a turn-based, land-conquest and empire-building game series. In particular, I will dissect the games’ very direct signs of colonization where colonizing powers enact manifest destiny to assert their society’s political dominance over other cultures and entities to gain more access to resources, further developing their idealized empire. As games studies scholar Souvik Mukherjee explains in his book *Videogames and Post-colonialism: Empire Plays Back*, “the spatial construction of empire in these videogames follows older, Western imperialist models” (31). While the game engine provides different cultures and leaders to emulate, each with their own strengths and weaknesses, there is only one path of progress to becoming “civilized”, and it is rooted in colonial frontier logics[26]. As well, the game actively encourages players to displace Indigenous peoples from their land and enact extractive industry on the land, ignoring any potential of relationality with nonhuman kin, instead emphasizing control, almost as if the player is enacting Carlylse’s “Great Man Theory”[27]. Media scholar Alexander Galloway compares the gameplay of the *Civilization* series to that of Deleuze’s concept of the societies of control, wherein networks and algorithmic black boxes have shifted away from confinement towards what Galloway calls “controlled mobility” (87) wherein

[26] Using Dwayne Donald’s definition: “Colonial frontier logics are those epistemological assumptions and presuppositions, derived from the colonial project of dividing the world according to racial and cultural categorizations (Willinsky 1998), which serve to naturalize assumed divides and thus contribute to their social and institutional perpetuation.” (2021, 550)

[27] Scottish philosopher Thomas Carlyle (1795-1881) posited the theory that history and societal progress are driven by “great men” - typically white European men.

the gamer enacts a settler-colonial society of control through transparent game rules. He writes,

> Video games don't attempt to hide informatic control; they flaunt it. In the work of Meier, the gamer is not simply playing this or that historical simulation. The gamer is instead learning, internalizing, and becoming intimate with a massive, multipart, global algorithm. To play the game means to play the code of the game. To win means to know the system. And thus to interpret a game means to interpret its algorithm (89-91).

Instead of a network of relations, it is dominance, supremacy, and colonial control forming the game and its procedural rhetoric.

Further, the 2019 expansion to *Civilization VI* adds the element of climate change to the classic series. Advertising "Face the threat and reap bounty from natural disasters. Manage your power sources wisely and unite with leaders of other civilizations to find solutions to the challenges of a changing climate" (Civilization.com), the game presents a relationship with the natural world that mirrors Cartesian dualism. The natural is below humanity in the hierarchy of being and able to be controlled. It exists as fuel to power the engine of empire. Even if the natural reacts against this ideology of extraction, those reactions exist to be harnessed; this understanding continues through to deadly natural disasters. In the afore-quoted promotional video, they suggest that "Desert sandstorms or ocean hurricanes can wreak havoc across your civilization, but also offer a chance of improved food yield in their wake", a reassuring line for the typically Black folks who suffered the worst of Hurricane Katrina and the government's response in 2005, prompting Kanye West's emotionally-delivered and unscripted line "[President] George Bush doesn't care about Black people" on live television (NBC). Unlike West's

"outburst", as it was called in the media of the time, the game narrative does not interrogate the environmental racism present in the real world, be it through the direct harms of settler colonialism itself or those ideologies that created and continue to feed climate change. While the game enacts environmental-based punishments in the form of climate change[28], the underlying message is that the environment can be, and should be, leveraged for success.

The narratives of climate change, colonialism, and environmental racism (as well as their intersections) are plenty in the "real" world, but are generally lacking within the game. Using Donald's methodological framework of Indigenous Métissage, I will bring in the stories of settler-colonialism and environmental racism from primarily the Haudenosaunee Confederacy, a culture that thrives despite the colonial borders and attempts at settler control over our bodies and the Land. The goal is to interrupt the settler-colonial assumptions about Land and culture as seen in *Civilization*.

Further, this paper will explore Mukherjee's assertion that empire-building games are an interactive pedagogical space to interrogate colonialism through "playing-back", with the notion of play as a disruptive potential (104). He writes

> Games, whether digital or non-digital, are a powerful medium for conveying this multiplicity. They enable a multiplicity of play strategies, whereby the empire-building games can be modded or played to get other outcomes and the colonial game of cricket be subverted to pose a challenge to the colonizers' normative discourses of superiority (111).

[28] The severity of the environmental events depend on the player's choices when setting up the initial game, one of which includes the severity of the events, and another the frequency.

While Mukherjee uses Derrida's classic essay "Structure, Sign and Play in the Discourse of the Human Sciences," for his exploration, I posit that this interrogation of the digital empire requires conscious exploration of the colonial frontier logics that underpin the game engine, wherein ideology manifests through design.

Contextual Métissage

> *We built up empires. We stole countries. That's how you build an empire. We stole countries with the cunning use of flags. Just sailed around the world and stuck a flag in.*
> *"I claim India for Britain!"*
> *And they go, "You can't claim this! We live here. 500 million of us."*
> *"Do you have a flag?"*
> *"We don't need a bloody flag. This is our country, you bastard."*
> *"No flag. No country. You can't have one. That's the rules that I've just made up, and I'm backing it up with this gun"* (Izzard, n.pg).

The *Civilization* series gamifies settler-colonialism as the end goal is dominance of one culture, and the criteria of the supremacy takes a rather Eurocentric view. Players (be it human or computer) all start with a small village with limited resources and borders, and the goal is to expand through resource consumption, the pushing of borders, and the subjugation of other people and their ways of being, converting them to your culture. There is no space for diversity, and even playing as a non-Eurocentric culture still pushes players into enacting Eurocentric values of progress and control. The only NPCs who disavow the settler-colonial narrative of the game are the uncomfortably-described "barbarians" who are hostile to the colonial powers, ignoring the other civilizations or city-states. They exist on the fringes of the game, committing

violence to any player who comes near their outposts. Stereotyped as tribal, nomadic packs that raid and attack, they are coded as “savages[29]”, the antithesis of civilization.

Outside of the virtual, the conceptualization of the Haudenosaunee Confederacy by settlers isn’t far from the game’s perspective on barbarians. In 1990, a proposed development of a golf course and townhouses on Kanesatake[30] land, including a burial ground, sparked a long-standing contestating land claims between Quebec settlers and the Kanien'kehá:ka[31] people with roots going as far back as the 1700s. The Haudenosaunee have always asserted independence from settler-colonial nations. Instead of respecting their rights, White settlers bought land from the French and British governments, and moved in, ignoring any requests or demands made by the original peoples to their own autonomy and self-determination. The French, British, and then finally the Canadian and American governments ignore the Guswenta[32] made between the Dutch traders and the Confederacy in 1613. During the original negotiations, the Dutch tried to propose a colonial and patriarchal relationship, seeing themselves as fathers and caretakers, and the Haudenosaunee as dependent children. Instead, the Haudenosaunee counter-proposal was that of two paths or a ship and a canoe travelling parallel down the same river together, each in their own vessel and not interfering in each other’s journey. There is no steering the other’s vessel. It was a proposal of equality and respect— one that has since been ignored in favour of interference, control, and colonialism. It is seen through the creation of provincial and settler nation

[29] The racist connotations of this word makes me deeply uncomfortable.
[30] An ongoing settlement of Kanien'kehá:ka at the confluence of the Ottawa and Saint Lawrence Rivers, predating contact between European settlers and Indigenous peoples. The settler settlement is known as Oka.
[31] One of the six nations of the Haudenosaunee Confederacy, the others being the Oneida, Onondaga, Cayuga, Seneca, and Tuscarora.
[32] Also known as “Kaswentha”. In English it is called the Two Row Wampum Treaty, or even just Two Row Wampum.

borders through Haudenosaunee land or Canadian courts siding with settlers. One such example is the reduction of Kanesatake territory from almost 700 km^2 to 6 km^2 (Scott and Curtis, n.pg) with the area known as “The Pines” becoming the the site of the conflict between Kanien'kehá:ka and settler police in the summer of 1990.

The Kanesatake Resistance (also known as the “Oka Crisis”) was an open clash between Kanien'kehá:ka land defenders, Sûreté du Québec officers, and the Canadian Armed Forces that lasted three months. Following an announcement that luxury condominiums and an expansion to the golf course would be built in The Pines, Kanien'kehá:ka land defenders, primarily women, would start occupying the land in a peaceful encampment in March 1990 that would only turn violent when settler police raided the camp on July 11 (Simpson A. 41). Following hundreds of years of petition to settler-colonial governments and courts, the Kanesatake land claim continues, as does other Haudenosaunee land claims such as 1492 Land Back Lane[33] near the Six Nations of the Grand River near Caledonia, Ontario. Both are sites of Haudenosaunee repudiation of settler claims to land, development, and colonial progress. Kanien'kehá:ka political anthropologist Audra Simpson describes this as a “refusal” to participate in the sovereignty of settler governments, writing

> Contorting oneself in a fundamental space of misrecognition is not just about subject formation; it is about historical formation. And by refusing to agree to these terms and to be eliminated, Mohawks are asserting actual histories and

[33] The Haudensaunee of the Grand River Territory affirm the land rights that were agreed to by Governor Frederick Haldimand in 1784 which states that the Haudenosaunee have right of refusal to development along the Haldimand Tract - six miles on either side of the Grand River. To this day, only about 5% of the original tract is a part of the Six Nations of the Grand River reserve (https://www.protectthetract.com/sixnations npg).

> thus legislating interpretive possibilities in contestation— interpretations of treaty, possibilities of movement, electoral practices— not only individual selves (22).

While the barbarians of the *Civilization* series might refuse settler land claims like the Haudenosaunee of 1492 Land Back Lane or the Kanien'kehá:ka of Kanesatake, there is no built-in space in the game for interrogation of that possibility.

Guswenta and gaming diplomacy

> *It's hard work to maintain the middle row*
> *One line makes I separating sides*
> *They navigate a boat down a similar river*
> *We paddle a canoe packing values*
> *Never touching, forever separate* (Rogers 33)

Galloway's aforecited assertion that the *Civilization* series encourages the player to enact extractive settler-colonial imperialism through play of the game's programmed code is undeniable. To win the game, you must partake in the 4Xes: eXplore the map, eXpand your borders and control, eXploit the resources of the land and people, and eXterminate anyone who is contrary to your supremacy. There is no living in relation with the Land or other people. Even if players chose to play as a non-Eurocentric, non-White civilization, there is no way to avoid enacting the colonial nature of the game and its procedural rhetoric. Borders and control must always be expanded. Resources must be obtained and used in distinct ways. Those who are not your allies must be destroyed. While trade and diplomacy can be enacted in the game, it's always with the end goal of one-upping the other players. Progress in the development of your society can only take a couple of distinct paths that model Eurocentric societies' historic and modern trajectories. Galloway further asserts that playing the game isn't learning culture,

diversity, or even history so much as they are learning the game's procedural rhetoric. He writes, "If Meier's work is about anything, it is about information society itself. It is about knowing systems and knowing code, or, I should say, knowing *the* system and knowing *the* code." This assertion is supported by media studies scholar Ted Friedman who explains that games like *Civilization* encourage players to "internalize the logic of the program" by playing by the rules of the game and predicting the responses coded into the game (136). You can't play and succeed by the games' standards by enacting relationality, nor can the peoples you colonize refuse to submit to the new order; you only win by following the programmed settler-colonialism and the only route for anti-colonial subjugation is violence.

Returning to the Haudenosaunee Confederacy, the Six Nations' foundation refutes the idea that the birth and development of civilization can only take the form of Eurocentric imperialism. The accepted story[34] is that the Creator sent the Peacemaker and his helper Aionwatha[35] to teach the five[36] conflicting nations of the Haudenosaunee about the Great Law of Peace[37], which would later become inspiration for the United States Constitution (Schaff 323). The Great Law of Peace set up an egalitarian democracy rooted in gender equality with both clan mothers[38] and male chiefs[39] serving in governance and leadership roles — a system that has existed for time immemorial. Clan mothers direct the internal affairs of each of their respective nations and choose (and if necessary, remove) the chiefs who lead in matters external to the respective

[34] More detail can be found on the Haudenosaunee Confederacy's official website: https://www.haudenosauneeconfederacy.com/confederacys-creation/
[35] Hiawatha, an Onondaga man.
[36] The Tuscorora joined the Confederacy in 1722.
[37] PDFs of the Oneida Nation's Great Law of Peace can be downloaded at https://oneida-nsn.gov/our-ways/our-story/great-law-of-peace/
[38] Hereditary role
[39] Delegated or elected role

nation and represent their nations at the Grand Council. Each of the original five nations plays a distinct and collaborative role in the Confederacy's Grand Council:

- The Onondaga are the Fire Keepers[40], who open and close the Grand Council meetings. They are the tie-breaking vote in the case of disagreement between the nations.
- The Kanien'kehaka and the Senecas are known as the "Elder Brothers" and they start the conversation and debate on policies with the others listening. Once they achieve a decision, they pass the discussion to the "Younger Brothers".
- The Cayugas and the Oneidas - known as the "Younger Brothers" - hold their own discussion while the "Elder Brothers" and the Onondaga listen. Once they have come to a decision, they pass the discussion back to the Elder Brothers for confirmation, or to the Onondaga to find a balance.
- As the Tuscaroras joined after the original agreement, they do not have their own voice on the council. Instead, any of their concerns or perspectives are brought forward by the Cayuga.

As far as the Haudenosaunee Confederacy is concerned, this system was the natural progression to "civilization". Gender equality, diplomacy, and democracy arrive at the same time in our world. Both clan mothers and chiefs are expected to uphold the principle of the Great Law, which includes a deep respect for the land from which we are given life.

Conversely, in *Civilization*, diplomacy is about outsmarting the other players— be it computer or human. There is no way to win the game by creating an egalitarian

[40] A spiritual leader who tends the sacred fire at important gatherings. The roles and responsibilities of the fire keeper changes from culture to culture, but consistently they start and keep the fire burning (and put it out) according to specific cultural protocol during the gathering.

confederacy with the other cultures represented, nor is it possible to be truly separate yet equal. One player must win by enacting supremacy; one player must try to determine the other's vessel. Alliances between other cultures is a means to an end, not a way of life or an enacted value of collaboration and kinship. There is no extended conversation and debate with computer players to sway them to your side (or vice versa). In the story of the Great Law, the Peacemaker, and Aionwatha, the greatest barrier to democracy and peace was Atatarho, a warmongering leader of the Onondaga. Instead of fighting and attempting to subdue him, the Peacemaker, Aionwatha, their allies, and the power of the Great Law were enough to change his mind through song, convincing him to join the Confederacy and uphold peace. As Haudenosaunee historian Susan Hill succinctly says, “Atatarho became the ultimate symbol of the Great Law’s ability to overcome the greatest obstacles through peace rather than war” (32). This is how the world’s oldest continuous democracy was founded and continues to function to this day. Following the start of this peace between the nations, our territories became places of stability, safety, and security.

“Playing back” against environmental racism

> *Protection of our relationship to our mother*
> *Not better than the other but something necessary*
> *To exercise caution*
> *Careful!*
> *...maintaining the middle row is most difficult (Rogers 33)*

As is common with many Indigenous cultures, it always comes back to the land and our relationship with it. Kanien'kehaka writer Courtney Skye explains that the

Haudenosaunee creation stories[41] detail our world coming into being when a pregnant woman falls from the sky and becomes the source of all life, including humans formed from clay. She writes “We do not claim our territory; our territory claims us in our bodies,” and with that, an expectation to steward the land that gives us life (n.pg). As Skye explains about the Haudenosaunee worldview, “We all exist in relation to the land in a delicate balance with one another. As a people, our relationships, laws, customs and ceremonies could not exist as we understand them in any other part of the world” (n.pg). Further to that point, Hill points out that even the original five nations’ names wouldn’t even be the same if we existed elsewhere, as our names in our own languages root us to the land we are from (Table 1), an intentional highlighting of our relationality she argues (5).

Table 1. Haudenosaunee Nation Names.[42]

English	**Onkwehonweneha**	**Translation**
Mohawk	Kanien'kehaka	People of the flint
Oneida	Onyota’a:ka	People of the standing stone
Onondgaga	Onöñda’gega’	People of the hills
Cayuga	Gayogohono	People of the marshy area
Seneca	Onöndowága’	People of the great hills

Nowhere in the *Civilization* series do we see this type of connectedness to the land on which a culture exists. The maps are randomly generated and players are placed

[41] For more detail, Chapter 1 of Susan M. Hill’s *The Clay We Are Made Of* is unparalleled. In there, she explains that “Considering the overarching themes of creation and the belief that creation is a constantly occurring and recurring process rather than something that happened once in the long-ago past, it is understandable that the story of creation cannot be expressed in a single form,” (17), hence the hesitancy I have to detail a “definitive” version.
[42] pg 5.

wherever. Unlike the aforecited poem by Haudenosaunee spoken word artist Janet Marie Rogers highlights, there is no consideration that people, cultures, and their values may in fact be the product of their environment and their kinship (or lack thereof) with the land.

While some cultures in *Civilization* get advantages on certain terrains, there is no deeper understanding as to why those game design choices were made. For example, in *Civilization VI: Gathering Storm*, Canadians get resource extraction and purchase discounts on snow and tundra tiles, which conflicts with the reality that climate change has dire effects felt acutely in the North[43] and that Canadian governments have done relatively little to counter climate change. While there is some amount of Indigenous representation and their diverse cultural values in the game, such as the Māori and their civilization's distaste for deforestation and rising CO2, other examples of representation tend to be surface-level. In *Civilization VI: Rise and Fall*, members of the Poundmaker Cree Nation raised concerns about the representation of Pîhtokahanapiwiyin (Chief Poundmaker) and their nation on CBC Radio's *The Current*, saying the game "continues to promote some of these ideologies that are connected to concepts of colonialism and imperialism and that doctrine of discovery, which are totally contrary to the beliefs and values of Chief Poundmaker" instead of an ethic of relationality and respect (Smith & Sturino n.pg). Pîhtokahanapiwiyin, like all the other leaders in *Civilization VI*, aims to expand his empire and the in-game Néhiyaw culture enacts the same settler-colonialism, environmental degradation, and imperialism that are the root of current harm.

[43] More on this in Chapter 4.

While the game itself does not provide space for questioning or critiquing imperialism, environmental racism, or settler-colonialism through game mechanics or narrative, Mukherjee suggests that it is possible to “play back” against empire and settler-colonialism. He writes “Play itself becomes a strategy for both colonial and the anti-colonial discourses,” as play is contrary to the structures of colonial notions of progress and the settler-colonial-capitalist values of production (104). It’s a complicated proposal from Mukherjee, one he recognizes when the post-colonial subject plays games that are colonial, calling it “a process of mimicry” wherein “the playing out of the colonial logic is simultaneously accompanied by breaking the boundaries that colonizer has with the colonized when the latter ‘becomes’ the former” (105). Ultimately, the question becomes whether or not one’s goal is anti-colonialism or postcolonialism. Mukherjee rightly points out that postcolonialism is a Western-centric paradigm, writing “To fully deny the ‘othering’ that occurred during colonial and, arguably, persists in neocolonial systems is also to be disingenuous” (20), whereas anti-colonialism is an outright rejection of imperialism. Anti-colonialism is all but impossible to enact in the *Civilization* series[44], whereas postcolonialism might be a bit more straightforward, considering the political environment post-US Civil Rights movement in which the game was created.

A thought-provoking mechanic introduced to the *Gathering Storm* expansion that might allow for potential “playing back” is that of anthropogenic climate change. Cut down too many trees - up goes the CO2 levels; be prepared for rising global temperatures to melt tundra and raise water levels, putting coastal cities at risk for flooding. Lead game producer Dennis Shirk refuted the suggestion that including this

[44] I tried. It did not go well.

mechanic was political, arguing that "We just like to have our gameplay reflect current science" (Bratt n.pg). Still, despite the science being settled on anthropogenic climate change, it's still considered a hot-button issue, especially where racism is concerned. In their book *Pollution is Colonialism*, Michif scientist Max Liboiron explains that the structures of racism amplify the realities of pollution and climate change, writing "Environmental violence is about who gets to erase — or produce — and how that is structured so that pollution becomes normal, even ubiquitous" (88). This reality is reflected in the game play of *Civilization VI*, to a certain extent. While the game's advertising suggests positives can come from climate change, there are some clear negatives, such as population loss, environmental degradation, citizen anger, and destroyed resources. Returning to Mukherjee's proposal, he writes that

> Games, whether digital or non-digital, are a powerful medium for conveying this multiplicity. They enable a multiplicity of play strategies, whereby the empire-building games can be modded or played to get other outcomes and the colonial game of cricket be subverted to pose a challenge to the colonizers' normative discourses of superiority (111).

More simply, game play decisions mired in the colonial frontier logics of imperialism, such as unfettered resource extraction for capitalist gain, can undermine colonial discourse itself. If players are constantly trying to undo the effects of climate change, "progress" as defined by settler colonial capitalism and imperialism are hindered, not unlike a real-life reality[45].

[45] For example, the Horse River Wildfire of 2016 cost almost $9 billion in damages. Scientists have linked the severity of the fire to climate change - particularly notable as Fort McMurray, one of the main municipalities affected by the fire, is an epicentre of the Canadian resource extraction industry (Di Liberto n.pg). It is also worth noting that this fire highlighted the lack of consideration that provincial officials had for Indigenous communities like Anzac and Fort McKay (Thurton n.pg.).

Conclusion

It's about balance and focus
It's about commitment and loyalty
Hard things, put in place
Speaking the language of agreement
Being included from a distance
Peace and respect and prosperity
Do NOT cross that line, we said...
Disruption results in consequences (Rogers 34-35).

The *Civilization* series provides a complicated opportunity for an Indigenized semiotic analysis. While the game's representation of Indigenous peoples and relationships with Land have evolved, there are still aspects that are colonial frontier logics in their most indisputable form. Despite adding the signs of anthropogenic climate change and actual Indigenous peoples, the game remains a 4X simulation with eXploit and eXterminate being contrary to the relationality valued by a wide diversity of Indigenous peoples. One culture in the game (or real life) enacting those two aspects is not unlike a violation of the Guwenta with the effects of climate change, imperialism, and death as "crossing the line", as Rogers' poem highlights. In Hawreliak and Lemiux's essay on the semiotics of social justice in videogames, their key questions are "How do game developers use semiotic resources to reinforce or counter normative ideologies through their representative practices? ...More broadly, what are the semiotic affordances of videogames, and how do such affordances allow developers to address issues of social justice?" (724). Considering the *Civilization* series through this lens, the game's own procedural rhetoric conflicts with attempts to add Indigenous representation and values to the game. The game's own affordances undermine the potential for

greater countering of the normative ideologies of settler-colonial capitalism and imperialism.

"There is no innocent gaming[46]": *Fallout: New Vegas* and the Migrant Crisis

> *War. War never changes.*
> *When atomic fire consumed the earth, those who survived did so in great, underground vaults. When they opened, their inhabitants set out across ruins of the old world to build new societies, establish new villages, forming tribes.*
> (Fallout: New Vegas)

The invitation to explore and interact with a post-apocalyptic world forms the premise of *Fallout* series by Bethesda Softworks. The world as we know it has ended, but the problems that plagued the "old world" did not die with nuclear annihilation. Each installment of the *Fallout* series takes a different potential aspect of the post-doomsday reality and opens it up for exploration as an open-world roleplaying game. The *Fallout* universe theorizes a world that might-be, or as scholar Jason Wallin writes, "constituting an augury on the end of civilization, the Fallout series asks 'what comes next'?" (n.pg). In *Fallout: New Vegas,* the game centers on the conflict for sovereignty, power, and control while demonstrating little regard for the folks living in the Mojave Desert who are trying to survive. A border is drawn across the people by the powers that be. Access to resources critical for survival is limited. Privilege writes across the bodies of the racialized and impoverished without concern, and the end result is suffering and death. More simply, the virtual is authentic and the game engine is a striated space for exploration of a life possibly unfamiliar to players acting through the avatar of "The Courier".

[46] Consalvo, 415.

Theoretical & Methodological Framework

Blending anti-oppression and activist research about race, borders, and migration with ludological thought and social justice education philosophy on teaching evil[47], this chapter will explore how it might be possible to use speculative fiction videogames and play to critique racist environmental policy in the non-digital world. Games studies scholar Mia Consalvo explains this understanding of the "dividing line" between reality and the virtual as a permeable membrane in the world of gaming, declaring that there is no magic circle— a reference to the structuralist concept of the game existing within its own bubble (408). Consalvo articulates that game players constantly disrupt that "border" by bringing in outside knowledge and experiences into gameplay; while she primarily focuses on the act of cheating to investigate and dismantle the magic circle assertion, she also explains that "we cannot understand gameplay by limiting ourselves to only seeing actions and not investigating reasons, contexts, justifications, limitations, and the like. That is where the game occurs and where we must find its meaning" (415). This poststructuralist lens, when applied to *Fallout: New Vegas*, means exploring the socio-political context of game play.

Fallout: New Vegas is clearly a fictional setting, and as with much speculative fiction, this game becomes a space to explore social issues and interrogate our current society and politics. When receiving the National Book Foundation's Medal for Distinguished Contribution to American Letters, groundbreaking author Ursula Le Guin explained that speculative fiction can bring hope and philosophical thought in the face of

[47] Recognizing that this is a complicated word, I defer to education scholar Cathryn van Kessel's deconstruction of the term, wherein acknowledging that it is a subjective and multifaceted construction, but any definition ought to "open up critical thinking" as opposed to "one that shuts down those higher-order thinking processes" (3).

change and fear, saying “We will need writers who can remember freedom— poets, visionaries— realists of a larger reality” (Le Guin n.pg.). In other words, imagination becomes a place wherein we examine reality. Sheridan and Longboat validate Le Guin’s assertion in their essay “The Haudenosaunee Imagination and Ecology of the Sacred,” writing that the settler-colonial understanding of imagination is critical to living in good relations with one another, and with more-than-human relations, describing it as a sort-of spiritual instruction (368). They write, “without that instruction, we are less human because we are less natural” (368).

While the irony of a videogame playing a role in being more human and more natural is a cognitive dissonance that is not lost, the potential of imagination in interrogating our current ways of being cannot be ignored. As such, to more holistically explore the themes within *Fallout: New Vegas*, I will layer theory with the stories of the migrant crisis[48] at the border of the United States and Mexico with creative fiction written by Mexicanx authors Jose Luis Zárate and Alberto Chimal using the Indigenous Métissage methodology, as detailed by Papaschase Cree scholar Dwayne Donald. The goal of this use of this Indigenous-centric praxis is to humanize the horrifying realities of privilege, as well as to center decolonial ways of being and knowing. Donald explains that “story can shift the narrative” (no date. n.pg), meaning that both fiction and non-fiction stories are a tool that can be used to change the conversation on a specific topic. It can be a gateway to a new facet, and provide a previously-unseen vantage point. To this end, I will detail a lens with which to see the migrant crisis through Mexicanx fiction, news clippings, and *Fallout: New Vegas.*

[48] While the migrant crisis is a worldwide reality, I’ll be focusing on the U.S.-Mexico border.

The interactivity of videogames provides a particularly creative potential for opening up discussion about *how* evil happens within the scope of environmental racism. Accepting the premise that the harm by the powers-that-be (and possibly the player) enact on NPC[49]s in *Fallout: New Vegas* can be coded as "evil", Salen and Zimmerman suggest that game play is interactive meaning-making (359), writing that since "games are complex, dynamic systems, the exact way representations operate within a game to generate meaning is quite complex. Even the most basic set of game signs are always bound up in larger systems of meaning" (360). With this perspective, it is possible that the player could be enacting evil as understood by Hannah Arendt, wherein "evil is a form of thoughtlessness" be it through mindlessly following orders or "a lack of critical thought about how an individual can affect others" (van Kessel 39). In other words, players or the game's powers-that-be enact the banality of evil upon NPCs, and the game becomes a potential space for a possibly more holistic understanding of how the harm of the migrant crisis continues to be perpetuated.

Contextual Métissage

> *An incandescent light crackled across the desert. An electrical storm that divided Mexico and the rest of the world from the United States. Who could deny them the right to mark their territory with an impenetrable wall? The complicated ecosystem that had been the "Border" collapsed in an instant: the coyotes[50], the routes of the immigrants, the secret paths, the bribes, the multi-million dollar business of transporting people like livestock, the predators who lay in wait for the immigrants.* (Zárate 14)

[49] Non-playable characters
[50] Refers to those who help migrants cross the border, for a fee.

Set in the American Southwest and the northwestern corner of Mexico, both Jose Luis Zárate's afore-cited short story *Fences* and the video game *Fallout: New Vegas* detail a world where the fight for survival in a harsh landscape is augmented by borders enforced by territorial powers more concerned with resource control and adherence to their way of life than the well-being of their citizens. The scene is stark. It's a world post-nuclear annihilation. Territories and borders are redrawn, and new battles over critical resources write over the people who inhabit the land. These people are critically dehumanized by the powers that be; their suffering, survival, or death is trivial. Desperate circumstances lead to desperate actions by NPCs, and a common end result is death.

On Sunday, June 23, 2019, Salvadoran migrants Óscar Alberto Martínez Ramírez, and his two-year old daughter Angie Valeria drowned in the Rio Grande river, the border between Mexico and Texas. Unable to claim asylum in the United States due to restrictive administration border control policies such as metering[51], and recognizing the dangers for migrants staying outside a border crossing, Oscar led his family to the river, and their deaths (Thebault n.pg). They traveled over 1500 kilometers from a country plagued by crime and poverty. These problems were growing and festering, the legacy of U.S. Cold War foreign policy and interference which stoked instability in Central American countries seen as "at-risk" of becoming communist (Kazdin n.pg). The Martínez family sought a better life, one out of reach.

Elsewhere, U.S. Immigration and Customs Enforcement (ICE) officials hold families who have crossed the border in detention facilities while their asylum claims are

[51] Metering is the practice by U.S. Customs and Border Protection wherein they limit the number of people allowed to approach the border to request asylum. Candidate for the 2020 Democratic nomination Julian Castro attributed the deaths of the Martinez family to this practice (Miroff).

processed. These facilities, and the subsequent treatment of asylum claimants, are under fire in the media and political discourse with accusations that these buildings are rife with human rights abuses. Children are separated from parents, and they endure hunger and squalid conditions (Stuart n.pg). Medical care is denied, sometimes resulting in death, such as that of a seven-year old girl (Miroff and Moore n.pg), or a miscarrage (Murphy n.pg). This is the reality of thousands of people. According to the Migration Policy Institute, “U.S. Customs and Border Protection (CBP) intercepted nearly 46,900 unaccompanied children and more than 70,400 family units from El Salvador, Guatemala, and Honduras arriving at the U.S.-Mexico border” in 2016 alone (Lesser, et.al. n.pg). These people risk their well-being and lives, as well as that of their families, all for the dream of a better life.

Dehumanization of migrants is an ongoing theme of the migrant crisis. From the 45th American President calling migrants “bad hombres”, drug dealers, and rapists (Wolf), to the accusations of inhumane conditions and abuse at detention centers, to an estimated 8,600 migrants dying in the desert and criminalization of those attempting to provide aid to migrants (Orlovsky-Schnitzler n.pg), it’s horrifying[52], but shockingly consistent with recent history. Borderlands and Chicanx historian Mary Mendoza argues that racialized exclusion by dehumanization and environmental control are “nothing new”, pointing to American border control efforts around cattle and tick control in 1906 wherein Mexican cattle were characterized as “diseased” (119). From there, Mendoza argues that the discourse changed from cattle to people in the middle of the twentieth century, citing William F. Kelly, the assistant commissioner for the U.S. Border Patrol in 1954 who described the influx of Mexican migrant workers as “‘the growth of a social

[52] The opinion of the author.

fungus that infects any who come in contact with it.' Mexican immigration, he said, was 'the greatest peacetime invasion ever complacently suffered by any country'" (121). The ongoing characterization of migrants as subhuman and deserving of their fates reflects the rhetoric about folks in the wastelands from the powers-that-be in *Fallout: New Vegas*.

The Lottery and The Analogy

> *Foreigners had to stay on the other side of the barricade.*
> *Racial purity had never been so important for North Americans, but this was not a purity measured by genetic code, but by the issuing of documents: the citizenship card, the passport which identified you as a citizen of that country was enough to prove your lineage.* (Zárate 15)

The premise of *Fallout: New Vegas* is relatively simple—an escalating crisis between three emerging powers after the nuclear devastation of "The Great War": the New California Republic (NCR), the New Vegas Strip, and Caesar's Legion rise from the ashes, each ready to fight for land and water. The NCR resembles pre-war USA— a democratic federation of states rife with corruption; Caesar's Legion are totalitarian slavers, and the New Vegas Strip is an independent political-economic zone run by criminals (not completely unlike the *Star Wars* franchise's planet Tatooine). These powers, based in the American-Southwest and crossing into Mexico, face-off for control of the Hoover Dam, a source of uncontaminated water. The player's character, the Courier, must navigate the world created by the powers-that-be.

As such, the game's narrative is immersive and experiential. Scholar Marie-Laure Ryan describes the power of game narratives as on par with classic literature, writing "the thrill of being in a world, of acting in it and of controlling its history, makes up for the

intellectual challenge, the subtlety of plot, and the complexity of characterization that the best of literature has to offer" (195). This reality is inescapably clear from the first interaction the Courier has with Caesar's Legion forces at Nipton– a required encounter in the game's narrative. Nipton in the game is in disputed territory between the NCR and Caesar's Legion. When entering Nipton, the Courier encounters a celebrating resident who "won the lottery" — a reference to Shirley Jackson's short story[53] wherein who survives or dies is random. After speaking with the resident, the Courier explores the small town as it burns. As the Courier investigates, players start to see victims of crucifixion crying in pain, decapitated heads on spikes, and incinerated corpses on piles of flaming tires. This leads to an encounter with Caesar's Legion elite forces leader, Vulpes Inculta. He callously details why Nipton is in ruins and why he and his forces enslaved or tortured and brutally killed the residents, calling them "degenerates" for existing outside of his extremist moral code. The actions of the legionaries is the embodiment of Kant's "radical evil"[54] as it is implied that the legionaries and Vulpes Inculta made a rational-to-them choice that is meant to horrify.

This hyperreal aestheticization of violence (with players as spectators) in this *Fallout: New Vegas* scene is meant to stimulate fear and disgust. Be it the affect of the suffering of the still-living crucifixion victims that players can't remove from their crosses (lest they cause them more pain in their inevitable death) or the almost incoherent joy of the lottery winner, the game tries to convey that these are real people who lived in Nipton. This dehumanization of the residents of Nipton is meant to shock game players

[53] First published by *The New Yorker* in 1948, this classic horror story details a small town, ensnared by a mob mentality, that randomly selects a resident to die in a yearly stoning.
[54]Described as prioritizing selfishness over everything else, a choice that every human is capable of making (van Kessel 21).

and allow them to conclude that by othering people, it is possible to commit horrific acts. It is possible to justify to oneself to perpetuate gruesome harm. While the game does provide an option to support the Legion's efforts at brutalizing civilians and pushing their borders further, three of the four endings of the game has the Courier opposing the Legion. As well, the context of the legionaries enslaving, torturing, and massacring the citizens of Nipton early on in the game articulates that the choice to side with the Legion will mean that the player will commit harm by supporting their cause and taking on their side-quests.

The NCR is not portrayed in a particularly more positive light. Living in enclosed, secure facilities where only military personnel are able to access resources such as food, water, munitions, and a sense of security, the NCR tends to enact more of a banal evil, as understood by Arendt, that is bureaucratic and non-thinking. The NCR commandants do not consider *why* wastelanders might turn to raiding by stealing or shooting soldiers to survive. All they see is a danger to themselves, as opposed to people committing acts of desperation. The cavalier way they encourage the Courier to hunt down wastelanders and slaughter what are the NCR's own citizens is arguably just as horrifying and harmful as the actions of the Legion. However, the game does not necessarily highlight that potential understanding. The NCR can be understood as a stand-in for American "wild-west" expansionism and exceptionalism. It's not evil or harmful to kill wastelanders if they are subhuman or dangerous, even if the NCR is better equipped. Continuing with the manifest destiny analogy, it is understood that the NCR has a "right" to be in that territory, and there is little exploration of whether or not the wastelanders were actually on that land first. While the game is devoid of direct signs of indigeneity as racialized bodies, the characterization of the wastelanders by the

NCR forces echoes that of Indigenous peoples of the past and current Latinx migrants in what is the same landscape, be it virtual or natural.

As such, the game's narrative holds a great deal of creative potential for dissecting what is evil and how it happens. Returning to Ryan, she writes that for a game to feel natural and effortless (as opposed to a didactic game), "its narrative design must be more developed than the general analogy between competitive games (good vs evil): it must reside in the concrete surface structure and not merely in the abstract deep structure" (192). *Fallout: New Vegas'* representation is clearly more complicated than a simple good versus evil analogy. It's nuanced, flawed, and complicated. While the Legion is an obvious simulacra of evil, the NCR is more subtle, more normative. The overt analogy made in the game is that the NCR represents the closest simulacra of the American government (or at least the one of 2010 when the game was released). It's a bloated, ineffectual government bureaucracy that does not put the people first, but highlights the privilege of the powerful and the violence they enact to protect their position. It's a militaristic push for assimilation or death of the wastelanders, or as Chelsea Vowel defines it, "it is a denial of the principles of peace, harmony and justice" (226). Both the Legion and the NCR unilaterally declare who are their enemies, and there is no appeal process.

The Simulacra of Fences and Water

> *Fences began to grow around the planet. Isolation became normal: for the nationalism of confinement the only things of worth were internal, the only justice was a nation's own, the Norm was what happened within the Fence*. (Zárate 18)

The NCR and the Legion can be understood to represent different sides of the American government. The Legion are intensely jingoistic, moralistic authoritarians who incarcerate or enslave those deemed as subhuman— not as far of a stretch of the imagination when one considers the state of the migrant detention centers or the behaviour of the CBP agents. From reports of starving minors and detainees begging to go free (Montoya-Galvez n.pg) to desensitized CBP agents making jokes about dead migrants in a secret Facebook group that contains 9,500 members— almost half of all CBP employees (Thompson n.pg) — the analogy seems apt. The NCR represents the America that allows migrants to die and dehydrate in the desert, the colonizers of the Indigenous people of the land; in *Fallout: New Vegas*, the wastelanders live and die on the receiving end of this metaphor.

In retrospect, the idea that the NCR and Legion would rise from the ashes of the current American political landscape seems prescient. It's an allegory made possible partly due to the genre of speculative fiction. In Jean Baudrillard's classic text *Simulacra and Simulation*, he theorizes that science fiction enables a hyperreal articulation of reality, writing

> in this way, science fiction would no longer be a romantic expansion with all the freedom and naiveté that the charm of discovery gave it, but, quite the contrary, it would evolve implosively, in the very image of our current conception of the universe (124).

While Baudrillard's theorizing for this specific quote centered on Philip K. Dick's writing, the suggestion holds when applied to *Fallout: New Vegas*. If the thematic essence rings true, the metaphor does not not have to be "real" to be effective.

Further to this point, Consalvo argues that it is unrealistic to separate the game and the real-world context. She writes that “players exist or understand ‘’reality’’ through recourse to various frames (their daily life, the game world, their characters’ alleged knowledge and past) and move between those frames with fluidity and grace” (415). There is no “inside” or “outside”, she postulates; if gamers move between the spaces divided by the magic circle fluidly, the boundary serves no purpose (415). Consalvo and Baudrillard’s perspectives can have troubling implications when considering the potential actions *Fallout: New Vegas* asks players to take. Players can choose to side with the NCR or the Legion, take on side quests for them, and help them achieve their ultimate goal - region supremacy and control over the most important resource, the Hoover Dam. The actions players take on start small, even quite simply, but all roads lead to taking a side at the final stand-off.

While the players aren’t the ultimate symbol of villainy, they take part in the narrative on a smaller scale. Arendtian scholar Elizabeth Minnich would describe this as “extensive” evil, wherein the many take part in systemic actions (170). While the 45th American president might be caricatured as a villain and a symbol of the harm inflicted by the handling of the migrant crisis, Minnich’s explanation that many perpetuate the system better explains both *Fallout: New Vegas* and the migrant crisis. Individual actions by a solo person, like the Courier, seem inconsequential when compared to Caesar, Vulpes Inculta, President Aaron Kimball, or even Mr. House, but they do impact the final outcome of the game, and the wellbeing of the wastelanders. The same could be said for the migrant crisis. The orders may come from the Oval Office, but the ICE and CBP agents choose how to follow through, and those small, individual actions can add up to an immense amount of suffering and death.

However, in contrast to the thoughtlessness characterized by Arendt's understanding of the banality of evil, playing games with intentionality and a social justice lens opens the game engine to become a pedagogical space. Education theorist Peter Pericles Trifonas suggests that the interactivity of games makes them a more effective learning space:

> Where traditional spatial representation relied on the willingness of the spectator to conform to a constructed point of view, spatial representation in digital culture allows the spectator the freedom to act, to move around, to make choices and to manipulate or even construct the spectatorial positions suggested by the representation (182).

More simply, the player can take different actions and see how it plays out. They can see how their actions can uphold oppressive systems and groups, and they can explore how to subvert them. The one thing that truly separates the game space from real life, the boundary of the contentious magic circle, is that actions are replayable. Players can undo what they have done by returning to a previous save point, or replay a different narrative. They can explore siding with any of the four major players in the game and see the impact of their in-game choices. This option is not afforded to those acting in the migrant crisis.

Environmental Racism in Life Reflecting Art

> *1. Immigration was officially banned in a large number of countries, mostly developed ones. This happened first.*
> *2. Later, summary executions began at the borders, on the coasts, and (in some cases) at internment camps and reeducation camps that were established within those countries...*

> *5. They were invaders, they said, little more than animals, perverse beings, committed to evil, hordes determined to destroy the culture, values, traditions, and purity of the countries they were attempting to enter.*
> *6. Many drowned in the sea, died of thirst and hunger in deserts and hostile terrain, or were executed in their countries of origin, which were often embroiled in civil war or taken over by extremist governments, caciques, or cartels.* (Chimal n.pg)

The environment can be leveraged as a tool of power, racism, and privilege, with both *Fallout: New Vegas* and the migrant crisis at the U.S.-Mexico demonstrating how this impacts people of colour and leads to death. In both the game and the crisis, the powers-that-be weaponize borders and access to water, as described by Mexican writer Alberto Chimal in the aforecited speculative and experimental fiction essay. In *Fallout: New Vegas*, it's accessing the untainted water in the Hoover Dam or smaller clean water sources; in real life, it's the lack of water in the Sonoran Desert, and the attempted criminalization of activists who try to provide water to migrants[55]. In both the game and the United States, it's a border that's used to restrict movement of migrants seeking a better life. In *Fallout: New Vegas*, the right to freedom of movement and asylum, as described in the Universal Declaration of Human Rights Articles 13 and 14[56] (United Nations), is not afforded to any regions' citizens in the Mojave. Armed checkpoints and the threat of death prevent migration. If you are attempting to flee the Legion's slavers, you are not afforded asylum by the NCR, and the Legion either kills or enslaves anyone

[55]As of Summer 2019, the United States government plans to retry Scott Warren, an activist with No More Deaths/No Más Muertes under federal charges that he "harbored illegal aliens; a previous federal trial against Warren was declared a mistrial (Ortega).
[56]"Article 13. (1) Everyone has the right to freedom of movement and residence within the borders of each state.
(2) Everyone has the right to leave any country, including his own, and to return to his country.
Article 14 (1) Everyone has the right to seek and to enjoy in other countries asylum from persecution." (United Nations)

who does not adhere to their totalitarian moral code. Functionally, the borders are closed. In the United States, one of the only developed nations to not sign onto the Universal Declaration of Human Rights, CBP agents separate families and cage migrants who attempt to claim asylum. Attempts to avoid incarceration by CBP lead migrants to cross the border illegally at risk of death, not unlike the migrants who die of dehydration and exposure to the elements in the desert. In this way, the border and desert are used in tandem to control migration of non-white people; in comparison, no such set-up exist between Canada (a majority caucasian country) and the United States, colloquially known as the world's longest undefended border. Scholars Antoine Pécoud and Paul de Guchteneire[57] assert that "border controls indirectly feed racism by reinforcing the idea that foreigners and foreign-looking people are undesirable" (79), something seen in the United States' historic and modern practices and policies, as reflected within the speculative vestiges known as the NCR and the Legion. Consalvo argues that this societal paratext seeps into a game beyond gameplay, writing that "the concept of a space 'apart from' everyday life, whether geographic or conceptual, becomes harder to maintain" (410-1).

Returning to Mendoza's historiographical article, she describes the incrementalism of American policy and rhetoric that created the current crisis. After the propaganda about Mexican cattle, a burgeoning environmental movement encouraged the restriction of immigration. In particular, she cites the Sierra Club publishing Paul Ehrlich's *The Population Bomb* which argued too many people in the United States would place unsustainable demands on US resources (122). In contrast, modern environmental publications tend to focus on the potential environmental harm from the

[57]Former head of UNESCO's International Migration Program.

proposed border wall, all while ignoring the collateral damage to migrants. In a *National Geographic* article, the head of Defenders of Wildlife expressed his concerns: "'Whatever they build, it's going to be destructive to natural habitat. It's about the physical reality of what a permanent barrier will do in one of the most sensitive landscapes in North America'" (Parker n.pg). Mendoza argues that this mindset "reifies the false dichotomy between nature and culture, ignoring the vast web of socioecological connections in the borderlands because projects of environmental control tend to separate nature from human realities" (123-4). In both cases, whether for or against border control, the environmental movement prioritized land over people, without realizing the connection between people and land. Sheridan and Longboat push Mendoza's point further, arguing:

> Seeking solutions to its environmental problems, Dominator Culture turns to the concept of "sustainability," which becomes the watchword of those wishing to preserve Western culture's longevity and its voracious appetite for even its own folk/Indigenous cultures. Is there a difference between "sustainability" and "survivalism" except for the one's use of planning and the other's use of firepower? (312)

More simply, both *Fallout: New Vegas* and the United States leverage borders and resource control as weapons just as deadly as a gun, and those who come to harm tend to be people of colour.

Conclusion

> *96. Their inhabitants told legends: how the world had been in other times, its magical origins.*

> *97. Even today, some of those stories speak of the rain that fell in other times, of green plants, of large populations in illuminated cities, like fields of stars on the ground.*
> *98. These are the ones that are believed least, those that seem like the most irresponsible and absurd fantasies, in the darkness of the ruins that could be the final result of the Grand Experiment: the accumulation of everything for no one.* (Chimal n.pg)

The ultimate conclusion of Mia Consalvo's landmark article lives in the title—"there is no magic circle". That is to say that players bring the rules of everyday life, social norms, and societal structures into the gameplay space. Players live in a real-world context, and when players enter the gameplay space, it is impossible to truly separate the player from their reality. Players themselves are the conduit, permeating the magic circle with context. Using Dwayne Donald's assertion that story is a form of thought (no date, n.pg), the narrative at the center of *Fallout: New Vegas* brings a new possibility for understanding the migrant crisis happening at the United States-Mexico border. In particular, it helps explain how humans are capable of what can be defined as "evil" within the context of the migrant crisis. How are CBP able to turn a blind eye to the squalid conditions in the detention centers, to the abuses inflicted upon asylum seekers? How can the American government criminalize giving water or shelter to asylum seekers? Players in *Fallout: New Vegas* explore extreme situations where water is withheld, where border enforcement kills. The gameplay space demonstrates how land and resources can be leveraged as weapons as players experience thirst in the desert, or threat of enslavement if they cross the border. Reality infiltrates the game when players choose certain actions, but the insight into the weaponization of land and

resources against people of colour by the systems of power and privilege in the game can permeate reality.

Agniq Suaŋŋaktuq[58] and *Kisima Inŋitchuŋa* (*Never Alone*): ‘Cause Gaia likes it cold’[59]

> *Sila is the weather. It is also the atmosphere. Here’s the nuna, or the land, and it’s anything from the land into the moon, the sun, the stars. That’s Sila. It’s very spiritual and we have a relationship with Sila. Sila has a soul in the same way we do as people in the same way animals do. I think spirit helpers in and of themselves are really about how we’re connected with things and so maybe that there is a spirit helper that shows themself as a bird, to show you the way home. I think one of the things that’s hard to understand is that it’s not one way of seeing things. It’s one way of knowing you’re connected to everything.* (Kisima Ingitchuna - Cultural Insight: Sila has a soul, n.pg)

Kisima Ingitchuna (*Never Alone*) is a side-scrolling, cooperative adventure-puzzle game set in the Iñupiaq landscape amidst a blizzard. Players are placed into the northern setting as a young girl, Nuna, and an arctic fox and the duo are set on an adventure to solve the mystery of the destruction of Nuna’s village. The design of the game, as well as how players interact with it, show a fundamentally different understanding of the environment or land[60] than typical mainstream, AAA games. The land (ie. climate, creatures, spirits) are both challenges to overcome, but also the supports in the game. Blizzard winds hinder movement, but they can also aid characters cross large divides. Bears may try to eat Nuna, but her trusty arctic fox companion helps players solve puzzles. In this way, it demonstrates a non-Western, decolonial perspective about land; the digital landscape becomes a pedagogy of relationality with

[58] Translates from Iñupiaq to “the blizzard is getting stronger” (Webster 106 and 122).
[59] References a line in Tanya Tagaq’s song *Cold*.
[60] Because it matters, I will be using scholar and artist Leanne Betasamosake Simpson’s definition of land/environment (or Aki, as she calls it in Anishinaabemowin): “Aki includes all aspects of creation: landforms, elements, plants, animals, spirits, sounds, thoughts, feelings, and energies and all of the emergent systems, ecologies, and networks that connect these elements.” (161)

the environment or land[61] through an Indigenous lens as opposed to a Western, colonial perspective which sees nature as a threat to be harnessed. Or, put more eloquently by video game scholar and AbTEC founder Jason Edward Lewis (Cherokee-Hawaiian-Samoan), “critical technology studies have long made the point that technology designers and developers design much more than mere functionality. Rather, they design the epistemological protocols through which culture operates” (61). In the case of *Kisima Ingitchuna*, to succeed in the game, players learn to develop respectful relations with the main “antagonist” of the game— nature or Sila. Players learn about the natural world and learn how it can support them in their quest to discover the source of the deadly blizzard. While Sila is an antagonist, it is also an ally.

Theoretical & Methodological Framework

This chapter will explore alternative ways of knowing and theorizing relationality with the natural world using the virtual as a mode of pedagogical inquiry; in particular, this essay will focus on videogames as the medium of choice, using *Kisima Ingitchuna* as the example. Theoretically, there will be integration of various Indigenous worldviews on kinship and relationality with the land, recognizing that humans are a part of the land and the land is a part of us. This concept undercuts the colonial, Cartesian perspective that sees humans and nature as separate, and nature as something that must be harnessed or overcome. To this end, I will use Papaschase Cree scholar Dwayne Donald’s definitions of relationality and kinship as follows:

[61] Because it matters, I will be using scholar and artist Leanne Betasamosake Simpson’s definition of land (or Aki, as she calls it in Anishinaabemowin): “Aki includes all aspects of creation: landforms, elements, plants, animals, spirits, sounds, thoughts, feelings, and energies and all of the emergent systems, ecologies, and networks that connect these elements.” (161)

> “Where is here, who am I, who is here, and how might we live together in ways that maintain good relations, how can I tell a story that honours that, how can I tell a story that inspires imagination of new ways of living together that aren’t traced by colonial logics? How are we simultaneously different and related, and how do we recognize it through story?” (no date, n.pg)

In other words, knowing and understanding one another, even if the other is a blizzard, means we can discover different ways of living together.

Further, *Kisima Ingitchuna* can be an example for how videogames can reimagine the process and praxis of video game design for the industry. Instead of perpetuating the Western colonial understandings of land, knowledge, and imagination, Upper One Games and E-LINE MEDIA (the studios that designed *Kisima Ingitchuna*) collaborated with the Iñupiat community and integrated them into the game design. By leading with this example, the studios show how it is possible to disrupt the colonial values and practices embedded in Western society through relationality and collaboration, bringing a state of Indigenous survivance. It is not a mourning of what is passed on, but a celebration and recognition of what lives *in spite of* the motives and harm of colonialism. It is a demonstration that Indigenous cultures are vibrant, and their various pedagogical practices have value beyond anthropological curiosities. As such, this collaboration brought forth a creation that was not possible without the recognition of the game designers positionality of privilege, creating a testament that undermines what education scholars Robin Diangelo and Özlem Sensoy refer to as the “Ideology of Individualism” (126). Or, more simply put, relationality in practice can illustrate new ways of knowing and being that are anti-racist, even in videogames.

Contextual Métissage

> *The great sea moves me, sets me adrift.*
> *It moves me like algae on stones in running brook water.*
> *The vault of heaven moves me.*
> *Mighty weather storms through my soul.*
> *It carries me with it.*
> *Trembling with joy.* (Uvanuk 2-3)

Running through the Arctic landscape, winds howl, knocking you over, or sending you flying. Bears fight you when you accidentally disturb their caves. Spirits whose presence is triggered by a fox companion help you platform through the natural and constructed worlds. You might find yourself in the belly of a whale, or at risk of death by the Aurora Borealis. *Kisima Ingitchuna* is definitely not the side-scrolling platformer to which the gaming world is accustomed. It's definitely not *Super Mario.* The hero is not a strong, typically white, male, nor is she a battle-ready vixen like Chun-Li. Your character is a young girl or an arctic fox, another hint that this game is different and does not fall into the stereotypical video game tropes. This game takes the structure of a classic video game, and reimagines it with a decolonial, anti-patriarchal perspective. Lewis explains how this praxis is critical for media industries and their consumers if they are to commit to anti-racist living, writing: "An understanding of that structure is central to the ability to transform it, to remediate it from an oral form into a playable form. This, in turn, lays the groundwork for embracing networked technology as potential sites of cultural expression" (66). In the case of *Kisima Ingitchuna,* the game reflects the choices made by the design studios Upper One Games and E-LINE MEDIA, creating the aforementioned site of cultural expression.

More about that design process of Upper One Games and E-LINE MEDIA— the short version is that their approach is truly unique in that Iñupiat elders were not just "cultural consultants" so much as active drivers in the design process. In 2012, the Cook Inlet Tribal Council's president Gloria O'Neill suggested that the council develop a video game. Not only would the game provide creative opportunities for the Iñupiat community, if it was successful it could also provide funding to supplement their other initiatives, such as education and social services. Thus, Upper One Games was born, a for-profit off-shoot. Upper One Games entered a collaboration with New York City's E-LINE MEDIA, an organization that self-identifies as "passionate about harnessing the power of games to help players understand and shape the world" (E-LINE MEDIA). Together, the two organizations embarked on an endeavor that was creative and ground-breaking in both practice and product.

> *When I was young, my mom whenever the Northern Lights came out, she'd whistle. Boy they come alive. Just keep whistling and that aurora will… you can almost hear it. And then she explained to me a little bit later that those are children who've passed away when they're children. You don't want to draw them in too much is what she said, because then they can play football with your head, and that's what they want to do. They're always playing, those children up there.* (Kisima Ingitchuna - Cultural Insight: Northern Lights, n.pg)

Instead of developing a game around a new story or concept, the team investigated already-existing Iñupiaq cultural resources: oral stories, recordings, and books. With the consent of his daughter, the development team chose late storyteller Robert Nasruk Cleveland's version of the tale "Kunuuksaayuka". In this story, a young Iñupiaq boy goes on a quest to save his village from a powerful blizzard. The team worked with Iñupiat elders and community representatives to reimagine the story and

build a narrative framework for the game. One of the most notable changes was to make the playable human character female, named Nuna, instead of male. The other was to give Nuna a companion, Fox. The two work together to progress throughout the game. Fox can hop and climb to higher places that Nuna cannot, but he can rearrange the set up so a rope drops down and Nuna can follow. Nuna can distract a bear while Fox tries to come up with a solution for escape. Together the two emphasize collaboration and relationality for game success. As such, the game is either two-player cooperative, or a single player utilizes both characters.

This game design reflects a critical perspective often lacking in Western society, the idea that respectful relations with the land is an act of pedagogy in itself. Anishinaabe artist and scholar Leanne Betasamosake Simpson explains that “the land, Aki, is both context and process. The process of coming to know is learner-led and profoundly spiritual in nature” (151). By weaving Iñupiat stories, lessons, and values into a digital landscape, Upper One Games and E-Line Media made a platform where players can “come to know” through their own engagement and experiences, similar to procedural rhetoric but from an Indigenous worldview. While the game engine itself articulates this narrative and pedagogical praxis through action, looking to “encourage the growth of a critical learner as opposed to lecture and regurgitation” (Barnes, n.pg) as educator Trudy Cardinal explains, the game also pairs “Cultural Insights” that further explain the game design choices and Iñupiaq cultural context. Iñupiat knowledge keepers and storytellers explain cultural knowledge likely not familiar to a Western audience through stories, spiritual teachings, music, norms, and more. These cultural insights add to the pedagogical experience in the game, like citations in an academic paper.

The approach taken by the game designers of *Kisima Ingitchuna* highlights how "other", contrary, or non-normative it is for the industry. In reference to typical Indigenous representation by Western media and society, Anishinaabe philosopher Gerald Vizenor once wrote "The simulation of the Indian is absence of real natives — the contrivance of the other in the course of dominance"(vii). More simply, Indigenous peoples generally do not see themselves or their realities accurately displayed because of the colonial powers that be. Simpson takes this perspective further, arguing that even engaging in Indigenous worldviews such as land as pedagogy means "coming face-to-face with settler colonial authority, surveillance, and violence, because this practice places Indigenous bodies in between settlers and their money" (166). This is to say that capitalism, or colonial economics, often furthers the oppression of Indigenous bodies and perspectives, a reality seen in many AAA studio videogames, be it intentional or not. In contrast, *Kisima Ingitchuna* foregrounds an Indigenous way of knowing through Indigenous representation, creating a discourse of relationality and shows how land is pedagogy.

Relationality in a Digital Landscape

> *Once all the ice is melted*
> *The once-covered ice area will heat up 81 times faster*
> *There will be no stopping it*
> *A new steady state of high heat tolerant might mean*
> *Hopefully, rapidly evolve*
> *But human civilisation as we know it will no longer exist*
> *'Cause Gaia likes it cold* (Tagaq, n.pg)

In an interview, Papaschase Cree scholar Dwayne Donald defines relationality as "understanding yourself as part of a network of relations," (no date, n.pg) an idea he takes further in his landmark essay "Indigenous Métissage: a decolonizing research sensibility", writing that

> human beings are seen as intimately enmeshed in webs of relationships with each other and with the other entities that inhabit the world. We depend on these relationships for our survival. This insight finds expression through philosophical emphasis on the need to honour and repeatedly renew our relations with those entities that give and sustain life. (2011, 4)

This idea of relationality is contrary to a Cartesian colonial perspective that sees the natural world and humanity as separate, and that the natural is to be harnessed or overcome by humanity. Instead, relationality embraces difference between the natural and human, recognizing that humanity's survival is dependent on the natural and, not unlike the aforementioned Tanya Tagaq lyrics, suggests that non-respectful relations will lead to devastation for humanity.

In *Kisima Ingitchuna,* the main theme of the game is clear through the English name of the game, based on a direct translation from Iñupiat: never alone, or "I am never alone". Nuna may be the only human actant in the vast majority of the game, but she's never solo. She has her steady and dependable companion, Fox. Fox's dependability continues after their death and they are reimagined as a spirit that can continue to connect Nuna with both the natural and spiritual world, something seen as one-in-the-same in Iñupiaq culture[62]. Spirits, the Aurora Borealis, and other animals are constant presence throughout the game, and engaging with these beings in respectful

[62] This bit of cultural knowledge is explained in "Cultural Insight: Animal Spirits".

relations brings game play success. There is no fighting the natural— it always wins. The bear will kill you. The Aurora Borealis will snatch you. Instead, playing alongside these hazards as opposed to against them brings game play progress and success. You dodge and duck around the Aurora while platforming. Nuna and Fox work together to find a creative solution to escaping the bear's lair. Players learn that the blizzard winds can knock over Nuna and Fox, or help propel them through the platforming. In game studies discourse, we describe this as mechanics changing the game play; from an Indigenous worldview, it's called "land as pedagogy" as the land is an interactive-ergodic device. Both mean that we learn from the world around us.

> *We are taught that there is no hierarchy. It's not everything else* [gestures downward] *and humans on top and they are separate from everything. We're taught that everything is equal and that all the animals have a human form or can be seen in a human form. And so they have just as much or more intelligence, in fact have a lot to teach people.* (Kisima Ingitchuna - Cultural Insight: Animal Spirits n.pg)

These respectful relations that *Kisima Ingitchuna* embeds into the game play are a common theme amongst many Indigenous ways of knowing. These relations are not just amongst the human or even the commonly accepted "living" creatures, an understanding that can be applied to the virtual as well. Kanien'keha artist and cultural theorist Jackson 2bears explains that,

> for us this applies, not only to obviously living things like animals and plants, but equally to seemingly inanimate things like mountains, rivers, and human-made artifacts — such is the way we often understand technology, as something alive and filled with spirit, something with which we are interconnected in what Little

> Bear called a ‘circle of relations,’ and something that is a part of a universe of ‘active entities with which people engage.’[63] (14)

These aforementioned circles of relations can be understood in Western philosophical lexeme simply as simulacra of signs: disrespectful or respectful relations in the virtual reflect an understanding of the natural. The repetition is not, intrinsically, difference. French poststructuralist philosopher Gilles Deleuze explains that “when we define repetition as difference without concept, we are drawn to conclude that only extrinsic difference is involved in repetition; we consider, therefore, that any internal 'novelty' is sufficient to remove us from repetition proper and can be reconciled only with an approximative repetition, so-called by analogy. Nothing of the sort is true” (27). More simply put, circles of relations in either the virtual or natural are not unlike. An understanding of one is reflected in the other, even if the medium is not the same.

Survivance of Indigenous Worldviews in Games as Pedagogy

> *It was like TV, you know? And the storyteller told it so clearly that it was just as powerful as any of the greatest movie blockbusters you’ve ever seen. There was a reason behind the stories that we were told because they held traditional knowledge They held things that we might need to know in life.* (Kisima Ingitchuna - Cultural Insight: It would be really nice to hear a story, n.pg)

Kisima Ingitchuna takes a traditional practice of storytelling as a pedagogical praxis and reinvents it as a side-scrolling platformer available on many gaming systems. The game engine (including the Cultural Insight videos) encourages learning from storytelling, learning from the elders, a practice traditional to the Iñupiat and many other

[63]Little Bear, Leroy “Foreword,” in Native Science: Natural Laws of Interdependence, ed. Gregory Cajete (Santa Fe, nm: Clear Light, 2003), x and 27.

Indigenous peoples. Put in another way, games studies researcher Jason Hawreliak explains that this is procedural mode or an “expression through interactive, rule-based systems enacted by a player” (82). If players learn by interactive action, the rules become an important component of both game play and pedagogy. In the game, the knowledge might be insight to aid in a practical context, such as hunting with a bola[64] is more effective as it’s quieter than a gun; it is also more easily reusable with no reloading required, just a strong, steady arm. The wisdom in the stories might be more general, such as how to live as a good community member or in relation with the natural world. Storytelling, quite simply, is a medium of cultural transmission and a critical part of Iñupiat culture, and videogames have the potential to be a facet of this practice. It is a reflexive simulacra of traditional games and storytelling as pedagogy and the intergenerational relationships in this act. Games scholar Elizabeth LaPensée (Anishinaabe-Métis) explains that “Indigenous digital games uniquely enact survivance by passing on teachings, telling our stories, and expressing our ways of knowing through varying weavings of code, design, art, music, and audio” (i).

Representation of Indigenous worldviews and practices through traditional pedagogy is a critical part of the survivance described by LaPensée. This imperative is described by Simpson as “a mirroring or a reenactment process where we understand Nishnaabeg[65] epistemology to be concerned with embodied knowledge animated, collective, and lived out in a way in which our reality, nationhood, and existence are continually reborn through both time and space,” (161). More simply, traditional

[64] In the Iñupiat language, it is called kilauwitawinmium. It is a throwing weapon made of braided sinew with heavy bone pieces tied onto connected strings, like spokes on a wheel. It is typically twirled then thrown.
[65] An alternate spelling of Anishinaabe; also plural.

knowledge survives and thrives when it is learned and practiced. In the case of *Kisima Ingitchuna*, this reality is quite literal as the game enacts traditional pedagogy. The value of this practice as survivance cannot be understated in terms of the impact on the learner. In contrast, Simpson describes how undervalued she was made to feel in a Western education system, writing: "My experience of education from kindergarten to graduate school was one of coping with someone else's agenda, curriculum, and pedagogy, someone who was not interested in my well-being as a girl, my connection to my homeland, my language or history, or my Nishnaabeg intelligence" (149). *Kisima Ingitchuna* instead stands starkly against this reality. Not only is it a game as pedagogy (a continued survival of cultural knowledge), it was leveraged as an income stream for the community within a Western, capitalist society— another act of survivance.

> *I think most central to the ideology of the Iñupiat is the idea of sharing. Being able to feed the community, feed others— that's why we hunt. The sharing is important because its how the community survives together collectively. Because of who we are, we always think about other people first. If our people didn't share in the old days, we wouldn't have survived.* (Kisima Ingitchuna - Cultural Insight: Sharing for Survival n.pg)

Beyond pedagogy as survivance, *Kisima Ingitchuna* demonstrates the resiliency of the Iñupiat as a people and a culture as it is an adaptation of traditional gaming practices, explains scholar Katherine Meloche. She writes that "It is not a direct adaptation or remediation of a particular traditional game, but a continuance of values and relationships to people and to place that is performed through play" (2), calling it a "digital qargi[66]". Meloche posits that the game's structure, as opposed to the game play tasks, are what makes *Kisima Ingitchuna* a digital simulacrum of the qargi; specifically,

[66] A traditional community space where games were a part of pedagogy between generations.

she points to the main relationship dynamic—Nuna and Fox. She explains that “When two players engage in co-op mode to play Nuna and Fox together, they are invited to make community by playing the game and learning in the same space, thereby evoking the social dynamics of a qargi“ (7). As such, this game structure mimics the collaborative and communal aspect of the qargi learning space and the lessons therein. By acknowledging and acting under the premise that one is “never alone”, the importance of community takes center stage. In this way, Simpson’s call for “learning spaces where we do not have to address state learning objectives, curriculum, credentialism, and careerism, where our only concern for recognition comes from within?“ (172) finds a new platform. Nuna and Fox risk their lives multiple times in the game to learn more about the cause of the blizzard that destroyed her village and stop it. Community as a value and a pedagogical space are alive in this digital qargi and it is emblematic of survivance.

Conclusion

> *The blizzard man is the physical embodiment of an element of nature. There’s a person that needs to go up and take away the adze that’s chipping away at the snow. In that community, the person least expected is the one who stands up and makes a difference. Humility is something we value, and where that comes from is the idea that you are not the biggest thing in the world. When you live in an extreme environment like where the Iñupiat reside, you are at the whim of the environment, of the climate, of the animals, you are not the biggest force in the world.* (Kisima Ingitchuna - Cultural Insight: Kunuuksaayuka, n.pg)

In *Kisima Ingitchuna,* the culture and values of the Iñupiaq people are on display and central to game play success. Unlike many AAA games, game designers with cultural knowledge transposed a non-Western understanding of the natural world into a digital simulacrum, along with specific lessons central to survivance and thrivance in that

environment. To survive and thrive, players must acquiesce to constraints of the world and accompanying worldview, and by doing so they learn a significant amount about the Iñupiat, their knowledge, their perspective, and their lives. The digital land is pedagogy, from an Indigenous worldview; the procedural rhetoric dictates the terms of success and the game's meanings, as explained in game studies. If the premise is that computational systems, including videogames, reflects society, its structures and its systems, then representing Indigenous worldviews in videogames becomes a critical point in decolonizing the technological. Returning to AbTEC's Lewis, he explains that "by engaging in the conversation that is shaping new media systems and structures, Native people can claim an agency in how that shaping carries forward. And, by acting as agents, not only can we help to expand the epistemological assumptions upon which those systems and structures are based but we can stake out our own territory in a common future," (63). More simply put, self-determination in the digital can lead to decolonizing the natural and social spheres.

Central to decolonization are concepts of land not prevalent in Western, colonial understandings. In particular, *Kisima Ingitchuna* becomes a digital land as pedagogy, teaching players that the natural is not an enemy or a force to overcome. It is a part of humanity, and we are a part of the land. The practice is relationality and the end result is sacred ecology. Nuna doesn't bring harm to the Blizzard Man to save her village; instead, she steals his adze and then leads him to her home so he can see why she must destroy his tool. Nuna and Fox don't kill the polar bear when they are attacked in the den; in the end, the polar bear becomes an aid in the final escape. Lessons about relationality with more-than-human relations permeate the story and the game play

actions. Euskaldun[67] scholar Michelle Brown explains that “this example of indigenous digital media is not new, but a new emergence of a centuries-old way of relating to others, which has much to offer on many levels as it (re)maps cultural practices, deepening and rewiring human and nonhuman interdependence” (23). That is to say, E-Line Media and Upper One Games took a classic tradition and made it new with *Kisima Ingitchuna.* This reimagining of traditional ways of knowing and being, and transposition into the medium of videogames is survivance, a continuation of Native stories and Native life.

[67] Basque Indigenous people

No-So-Final Thoughts: A Closing Letter[68]

Dear Reader,

Thank you for joining me in this decolonial and Indigenized semiotic analysis of environmental racism in videogames and the exploration of the educative potential these cultural artifacts hold, as flawed as they may be. *SimCity BuildIt, Civilization VI,* and *Fallout: New Vegas* and their respective series were designed by primarily neoliberal, settler-colonial capitalist understandings of Land (and the lack of relationality shows). The incredible harm experienced by both the Land and bodies of colour from these settler-colonial worldviews of Land is indisputable: the Flint Water Crisis, the US-Mexico Border Crisis, the ongoing settler-colonial extraction across the planet, and more. Still, the aforementioned series have established places in the canon of videogames, signaling their staying power. As such, I think it is invaluable to turn a critical eye to these and other AAA games and reimagine their place in an education for social justice, anti-oppression, and anti-racism, and for relationality. As demonstrated by *Kisima Inŋitchuŋa (Never Alone)*, there is room for Indigenous worldviews and values in gaming, and they can be incredible pedagogical tools.

Still, it seems counterintuitive to write a conclusion, when the goal of this collection is to spark a decolonial analysis of videogames, with the express goal of decoding environmental racism in both virtual and natural worlds. How does one "conclude" at the starting line? Our toes have just pierced the veil of the tide, and we have an ocean of racism and colonialism yet to be crossed. Racism, settler-colonialism, environmental degradation, white supremacy is ever exhausting and, in keeping with the

[68] Inspired by the closing of Felicia Rose Chavez's book *The Anti-Racist Writing Workshop*.

ocean metaphor, the systems of power and subjugation seem to extend far into the horizon.

We're gonna need a bigger boat.

I am exhausted by the colonial state and its inherent racism and subjugation of our bodies and the land both in the natural and digital worlds. I'm tired of the endless extraction and push to produce perpetually. I no longer have the energy to tolerate the intolerable injustices that lead to multispecies extinction and violent deaths of bodies of colour. The trauma from this violence and subsequent attempts at recovery and reintegration into a passibly-functioning member of this society becomes an unyielding and unending cycle. As world-renowned psychiatrist Bessel van der Kolk writes "Trauma by nature drives us to the edge of comprehension, cutting us off from language based on common experience or an imaginable past," (54). With that in mind, I would rather remove myself from the source of that trauma, that extractive settler-colonialism. Instead, I look to decolonial knowledges and practices, to relationality with each other and the natural world, for healing and resilience, for survivance and hope— Le Guin's "realists of a larger reality" (n.pg). Traditional decolonial and relational ways taught to us by elders, knowledge keepers and anti-racist educators are my visionaries, the ones who remember freedom.

Like the legendary Māori navigator Kupe[69] who traversed the Pacific Ocean to Aotearoa using his culture's traditional knowledge of ocean currents and the patterns of the night sky to navigate, we are not without skills or tools to get us to an anti-racist and relational destination. Diverse, decolonial knowledges and practices from Black, Indigenous, and peoples of colour provide a map to a worldview contrary to the

[69] One of my player character choices when playing *Civilization VI: Gathering Storm.*

extractive ethos of settler-colonialism—ones we can explore in videogames, or at the very least we can find a starting point of these worldviews to learn how to disrupt the Western society's ingrained mindset. It is my hope that this research can be one more tool or one more voice of support for extending the pedagogy of relationality to our worlds. As Chavez writes, "The pedagogy is necessarily personal. I can only hope that someone, somewhere, might read it and attempt a different way, a better way, freeing our bodies to speak more and suffer less," (179). Chavez's hope is one I echo for my own research, and those of anti-racist and decolonal scholars and activists.

Hope, to me, is resilience built on the desire for a future or reality better than the one in which we reside. Better, in this case, means more relational and less extractive; less colonial and more equal. Hope, however, is not a passive act that is intellectualized. Better put, Rebecca Solnit writes that

> Hope is not like a lottery ticket you can sit on the sofa and clutch, feeling lucky. I say it because hope is an ax you break down doors with in an emergency… Hope just means another world might be possible, not promised, not guaranteed. Hope calls for action (4).

For me, this research was a starting point in acting for hope. Hope for a relational future using decolonial knowledge from many Black, Indigenous, and peoples of colours. Hope that even our recreation, like videogames, can contribute to understanding a different trajectory of our world, wherein we live relationally as opposed to extractively, without trauma to bodies of colour or the natural world.

The next steps in hope through games— I look to creators who make games that are relational and decolonial:

- AbTeC's[70] numerous projects such as their Skins Workshops, where Indigenous youth make videogames;
- *Coyote and Crow*[71], a tabletop role-playing game set in an alternative future where colonialism never took place;
- *Into the Mother Lands*[72], an African-centric science fiction tabletop role-playing game;
- Gonzalo Alvarez, who made the heartbreaking and politically-charged game *Borders*[73] about Mexicanx migration; and
- Achimostawinan Games, whose game *Hill Agency: PURITY & decay*[74] looks to explore Indigenous futurism in a detective-noir.

While I am unsure whether I'll continue academic research into games or learn to make my own in the future, I believe that this work into decolonial and relational gaming is not my own but that of a community and that fact alone brings me hope.

In solidarity and with gratitude,

Kateryna

[70] Aboriginal Territories in Cyberspace, founded by Jason Edward Lewis and Skawennati, based at Concordia University.
[71] More information at https://coyoteandcrow.net/
[72] More information at https://www.kickstarter.com/projects/cypheroftyr/into-the-mother-lands-rpg
[73] More information at https://gonzzink.com/portfolio/borders/
[74] More information at https://achimogames.ca/our-games/hill-agency-purity-decay/

Works Cited

2bears, Jackson. “My Post-Indian Technological Autobiography.” *Coded Territories: Tracing Indigenous Pathways In New Media Art.* eds. Steve Loft and Kerry Swanson, University of Calgary Press, 2014. pp.12-29.

“About – E-LINE MEDIA.” *E-LINE MEDIA,* no date. elinemedia.com/about/.

Angelou, Maya. “Caged Bird.” *Shaker, Why Don't You Sing?*. Random House, 1983. pp 189.

Anyangwe, Eliza. “20 Ways of Thinking about Digital Literacy in Higher Education - Josie Fraser.” *The Guardian*, 15 May 2012.

Associated Press, Flint, Michigan. “Flint water crisis: expert says lead levels normal but warns against celebration.” *The Guardian*, 15 Sept. 2017. http://www.theguardian.com/us-news/2017/sep/15/flint-water-crisis-lead-levels-marc-edwards

Associated Press, Flint, Michigan. “Michigan official faces manslaughter trial over Flint deaths.” Yahoo News, 20 August 2018. https://www.yahoo.com/news/judge-orders-trial-michigan-official-flint-charges-201215526.html

Barnes, K. SE. Personal interview with Trudy Cardinal. 24 January 2019.

Belcourt, Billy-Ray. *This Wound is a World.* Frontenac House Poetry, 2017.

Bell, L.A. “Theoretical foundations for social justice education.” *Teaching for diversity and social justice*. eds. M. Adams, L.A. Bell, & P. Griffin. Routledge, 2007. pp. 3-26

Bogost, Ian. *Unit Operations: An Approach to Videogame Criticism*. MIT Press Ltd, 2008.

Bratt, Chris. “Civilization 6: Gathering Storm's climate change not a political statement, Firaxis says”. *Eurogamer.* 21 November 2018. https://www.eurogamer.net/articles/2018-11-20-civilization-6-gathering-storm-isnt-interested-in-debating-climate-change-says-firaxis

Brown, Michelle L. “Never Alone:(Re)Coding the Comic Holotrope of Survivance.” *Transmotion*, vol. 3, no. 1, July 2017, pp. 22-44. http://journals.kent.ac.uk/index.php/transmotion/article/view/257/1036

“Bush Doesn't Care About Black People.” *YouTube.* Uploaded by NBC, 2 September 2005, https://www.youtube.com/watch?v=zIUzLpO1kxI

“Game Series Sales: Platinum Titles.” *CAPCOM IR.* 31, Dec 2017. https://www.capcom.co.jp/ir/english/finance/million.html

Cardinal-Schubert, Joane. “Flying with Louis.” *Making a Noise! Aboriginal Perspectives on Art, Art History, Critical Writing and Community.* Ed. Martin, Lee-Ann. The Banff Centre, 2004.

Chaves, Felicia Rose. *The Anti-Racist Writing Workshop*. Haymarket Books, 2021.

Chimal, Alberto. “The Grand Experiment.“ *World Literature Today*. trans. George Henson. Summer 2019. https://www.worldliteraturetoday.org/2019/summer/grand-experiment-alberto-chimal

Civilization VI: Gathering Storm. Steam ed., Firaxis Games, October 2016.

“Civilization VI: Gathering Storm - New Features Explained.” *YouTube*. uploaded by Sid Meier's Civilization. 30 Jan. 2019, https://www.youtube.com/watch?v=EZ8XRJNitCE.

Consalvo, Mia. “There is No Magic Circle.” *Games and Culture*, 4(4), 2009. pp. 408-417. DOI: 10.1177/1555412009343575

Deleuze, Gilles. *Difference and Repetition*. trans. Patton, Paul. Columbia University Press, 1968.

Deleuze, Gilles and Felix Guattari. *Anti-Oedipus: Capitalism and Schizophrenia*. Trans. Robert Hurley, Mark Seem and Helen Lane. Penguin Books, 1977.

Derrida, J. *Demeure: Fiction and Testimony*. Trans. Elizabeth Rottenberg. Stanford UP, 2000.

DiAngelo, Robin. “White Fragility.” *International Journal of Critical Pedagogy*, Vol 3:3, 2011, 54-70.

Diangelo, Robin and Özlem Sensoy. *Is Everyone Really Equal? An Introduction to Key Concepts in Social Justice Education*. Second Edition. Teachers College Press, Columbia University, 2017.

Di Liberto, Tom. “Climate connections to Fort McMurray fire.” *NOAA Climate*. 12 May 2016. https://www.climate.gov/news-features/event-tracker/climate-connections-fort-mcmurray-fire

Donald, Dwayne. “Homo Economicus and Forgetful Curriculum: Remembering Other Ways to Be a Human Being”. *Indigenous Education: New Directions in Theory and Practice*. Ed. Sandra Styres. Edmonton, AB: University of Alberta Press, 2019. pp. 103-125.

---. “Edmonton Pentimento: Re-Reading History in the Case of the Papaschase Cree.” *Journal of the Canadian Association for Curriculum Studies,* Vol 2 No 1., 2004. pp. 21-53.

---. “Indigenous Métissage: a decolonizing research sensibility.” *International Journal of Qualitative Studies in Education*, 25:5, 2012, pp. 533-555.

---. “Indigenous Métissage”. *University of Alberta.* dir. Adams, Catherine. no date. https://vimeo.com/438977113

Dunn, Jeff. “Why getting Super Mario is such a huge win for the iPhone.” *Business Insider*, 8 Sept. 2016.

Elliot, Alicia. “A memo to Canada: Indigenous people are not your incompetent children.” *The Globe and Mail*, 5 January 2018.

Ensslin, Astrid. *The Language of Gaming.* Palgrave, 2011.

“Errant.” *Oxford Dictionaries* | English. en.oxforddictionaries.com/definition/errant.

Fallout: New Vegas. Steam ed. Obsidian Entertainment and Bethesda Softworks, 19 Oct. 2010.

Farman, Jason. *Mobile Interface Theory: Embodied Space and Locative Media.* Routledge, 2012.

Flanagan, Mary. *Critical Play: Radical Game Design*. MIT Press, 2009.

Friedman, Ted. “*Civilization* and Its Discontents: Simulation, Subjectivity, and Space.” *Discovering Discs: Transforming Space and Genre on CD-ROM*. Ed. Greg Smith. New York University Press, 1999. pp. 132-150.

Galloway, Alexander R. *Gaming: Essays on Algorithmic Culture*. University of Minnesota Press, 2010.

GameSpot. “Grand Theft Auto V sales reach $1 billion in three days.” *GameSpot*. 20 Sept 2013.

Graham, Luke. “Digital games market to see sales worth $100 billion this year: Research.” *CNBC*, CNBC, 15 Feb. 2017.

Hawreliak, Jason. *Multimodal Semiotics and Rhetoric in Videogames*. Routledge, 2019.

---. “On the Procedural Mode”. *Approaches to Videogame Discourse: Lexis, Interaction, Textuality.* Eds. Astrid Ensslin and Isabel Balteiro. Bloomsbury Academic, 2019. pp. 13-38.

Hawreliak, J & Lemieux, A. “The semiotics of social justice: a multimodal approach to examining social justice issues in videogames”, *Discourse: Studies in the Cultural Politics of Education*, 41:5, 2020, pp. 723-73. DOI: 10.1080/01596306.2020.1769936.

Hayles, N. Katherine. “Hyper and Deep Attention: The Generational Divide in Cognitive Modes.” *Profession*, no. 1, 2007, pp. 187–199. DOI:10.1632/prof.2007.2007.1.187.

Hill, Susan M. *The Clay We Are Made Of: Haudenosaunee Land Tenure on the Grand River*. University of Manitoba Press, 2017.

Hughes, Langston. "Let America be America Again." *The Collected Poems of Langston Hughes.* Harold Ober Associates, Inc., 1995. pp. 92

Izzard, Eddie. *Dressed to Kill*. dir. Lawrence Jordan. Vision Video Ltd., 1998.

Jackson, Shirley. “The Lottery.” *The New Yorker*, 26 June 1948. https://www.newyorker.com/magazine/1948/06/26/the-lottery

jagodzinski, jan. “Introduction.” *Interrogating the Anthropocene: Ecology, Aesthetics, Pedagogy, and the Future in Question.* edited by jan jagodzinski. Palgrave 2018, pp. 1–71.

Justice, Daniel Heath. *Why Indigenous Literatures Matter.* Wilfrid Laurier University Press, 2018.

Kazdin, Cole. “The Violence Central American Migrants Are Fleeing Was Stoked by the US.” *VICE*, 28 June 2018. www.vice.com/en_us/article/qvnyzq/central-america-atrocities-caused-immigration-crisis.

Kisima Ingitchuna (Never Alone). Steam ed., E-LINE MEDIA and Upper One Games. Nov 2014.

Konzack, Lars. “Philosophical Game Design”. *The Video Game Theory Reader 2*, Eds. Perron, Bernard, and Mark J. P. Wolf., Routledge, 2009. pp. 33-44.

“Kuwait .” *Data, WorldBank.* no date. https://data.worldbank.org/country/KW

LaPensée, Elizabeth. “Editorial.” *Transmotion*, vol. 3, no. 1, July 2017, pp. i-ii., doi:10.1177/1206331206292503.

LaPensée, Elizabeth. “Self-Determined Indigenous Games.” *Routledge Companion to Media Studies and Digital Humanities*. Ed. Jentery Sayers. Routledge, 2018. pp.128-137.

Lawler, Emily. “Protesters crowd governor's office, demand bottled water for Flint.” *Michigan Live*, 22 May. 2018. http://www.mlive.com/news/index.ssf/2018/05/protesters_crowd_governors_off.html

Le Guin, Ursula K. “Ursula Le Guin Acceptance Speech.” *YouTube.* Uploaded by *National Book Foundation*. 19 Nov. 2014. www.youtube.com/watch?v=Et9Nf-rsALk.

Lesser, Jeanne, Batalova Gabriel, and Jeanne Batalova. “Central American Immigrants in the United States.” *Migration Policy Institute*, 29 Aug. 2018, www.migrationpolicy.org/article/central-american-immigrants-united-states.

Lewis, Jason Edward. “A Better Dance and Better Prayers: Systems, Structures, and the Future Imaginary in Aboriginal New Media.” *Coded Territories: Tracing Indigenous Pathways In New Media Art*. eds. Steve Loft and Kerry Swanson, University of Calgary Press, 2014. pp. 56-77.

Liboiron, Max. *Pollution is Colonialism*. Duke University Press, 2021.

Lorde, Audre. “The Master’s Tools Will Never Dismantle the Master’s House” *Sister Outsider: Essays and Speeches*. Crossing Press, 2007. pp.110-114.

Lippard, Lucy R. *The Lure of the Local: Senses of Place in a Multicentered Society*. New Press, 1998.

Meloche, Katherine. “Playing in the Digital Qargi: Iñupiat Gaming and Isuma in Kisima Inŋitchuŋa.” Transmotion, vol. 3, no. 1, July 2017, pp. 1-21. https://journals.kent.ac.uk/index.php/transmotion/article/view/246/1018

Mendoza, Mary. “Treacherous Terrain: Racial Exclusion and Environmental Control at the U.S.-Mexico Border,” *Environmental History 23*, 2018, pp. 117–126. DOI: 10.1093/envhis/emx124

Minnich, Elizabeth. “The Evil of Banality: Arendt revisited.” *Arts & Humanities in Higher Education*, 13, 2014. pp. 158-179. DOI: 10.1177/1474022213513543

Miroff, Nick. “'Metering' and the Deaths of the Salvadoran Father and Daughter.” *The Washington Post*, 26 June 2019. www.washingtonpost.com/politics/2019/live-updates/general-election/fact-checking-the-first-democratic-debate/metering-and-the-deaths-of-the-salvadoran-father-and-daughter/.

Miroff, Nick, and Robert Moore. “7-Year-Old Migrant Girl Taken into Border Patrol Custody Dies of Dehydration, Exhaustion.” *The Washington Post*, 13 Dec. 2018. www.washingtonpost.com/world/national-security/7-year-old-migrant-girl-taken-into-border-patrol-custody-dies-of-dehydration-exhaustion/2018/12/13/8909e356-ff03-11e8-862a-b6a6f3ce8199_story.html.

Montoya-Galvez, Camilo. “New Pictures Show ‘Dangerous Overcrowding’ at Border Patrol Facilities in Texas.” C*BS News*, 2 July 2019. www.cbsnews.com/news/dhs-inspector-general-report-reveals-squalid-conditions-at-migrant-detention-centers/.

Mukherjee, Souvik. *Videogames and Post-colonialism: Empire Plays Back*. Palgrave McMillan, 2017.

Murphy, Elaine. “A Look at the Deplorable Conditions Inside Immigration Facilities.” *Teen Vogue*, 17 Jan. 2019. www.teenvogue.com/story/inside-american-immigration-facilities-and-detention-centers.

“Original Peoples.” *Kanien‘Kehá:Ka Language Initiative*, 20 Sept. 2016, kanienkeha.net/people/onkwehonwe/.

Orlovsky-Schnitzler, Justine. “The Desert Should Not Be a Death Sentence.” *The New York Times*, 19 Dec. 2018. www.nytimes.com/2018/12/18/opinion/migrants-border-death.html.

Ortega, Bob. “Prosecutors to retry volunteer worker who aided migrants.” *CNN Investigates*, CNN, 2 July 2019. https://www.cnn.com/2019/07/02/us/scott-warren-migrant-humanitarian-prosecution-invs/index.html

Parker, Laura. “6 ways the border wall could disrupt the environment.” *National Geographic*, 10 January 2019. https://www.nationalgeographic.com/environment/2019/01/how-trump-us-mexico-border-wall-could-impact-environment-wildlife-water/

Pécoud, Antoine & Paul de Guchteneire “International migration, border controls and human rights: Assessing the relevance of a right to mobility.” *Journal of Borderlands Studies*, vol. 21:1, Spring 2006, pp. 69-86, DOI: 10.1080/08865655.2006.9695652

Protect the Tract. https://www.protectthetract.com/

Pulido, Laura. “Geographies of Race and Ethnicity II: Environmental Racism, Racial Capitalism and State-Sanctioned Violence.” Progress in Human Geography Vol 41, no. 4 2017, pp. 524 – 33.

---. "Rethinking environmental racism". *Annals of the Association of American Geographers*. 90.1, 2000 pp. 12–40.

“U.S. Census Bureau QuickFacts: Flint city, Michigan.” *US Department of Commerce*, July 2016. https://www.census.gov/quickfacts/flintcitymichigan

Reiheld, Alison. “Canada's Biggest Health Problem: Indigenous Health.” *Impact Ethics*, 2 June 2017.

Rogers, Janet Marie. “Forever”. *Peace in Duress.* Talonbooks, 2014. pp. 33-35.

Ryan, Marie-Laure. *Avatars of Story*. University of Minnesota Press, 2006.

Sandlin, J., et al, “Mapping the Complexity of Public Pedagogy Scholarship: 1894–2010”. *Review of Education Research*. Vol 81 no. 3, September 2011, pp. 338-375.

Schaff, Gregory. “From the Great Law of Peace to the Constitution of the United States: A Revision of America's Democratic Roots”. *American Indian Law Review,* Vol 14 No 2, 1988, pp. 323-331.

Schwartz, Leigh. “Fantasy, Realism, and the Other in Recent Video Games”. *Space and Culture*, vol. 9, no. 3, 2006, pp. 313-325.

Scott, Marian & Curtis Christopher. “Oka Crisis, 30 years later: Kanesatake's long struggle for land rights.” *Montreal Gazette*, 11 July 2020. https://montrealgazette.com/news/local-news/oka-crisis-30-years-later-kanesatakes-long-struggle-for-land-rights

Sheridan, Joe, and Roronhiakewen "He Clears The Sky" Dan Longboat. “The Haudenosaunee Imagination and the Ecology of the Sacred.” *Space and Culture*, vol. 9, no. 4, Nov. 2006, pp. 365–381. DOI:10.1177/1206331206292503.

---. “Walking Back Into Creation: Environmental Apartheid and the Eternal— Initiating an Indigenous Mind Claim.” *Space and Culture*, vol. 17, no. 3, Aug 2014, pp. 308–324. DOI: 10.1177/1206331212451536.

Sicart, M. “Family values: Ideology, Computer Games & Sims.”*Level Up Conference*. DiGRA, 2003.

SimCity BuildIt. iOS ed. Electronic Arts, October 2014.

Simpson, Audra. *Mohawk Interruptus: Political Life Across the Borders of Settler States*. Duke University Press, 2014.

simpson, jaye. “urban NDNs in the DTES.” *it was never going to be okay*. Nightwood Editions, 2020. pp. 44-45.

Simpson, Leanne Betasamosake. *As We Have Always Done: Indigenous Freedom Through Radical Resistance*. University of Minnesota Press, 2017.

Skye, Courtney. “From Six Nations to Christie Pits and Back”. *The Local.* Summer 2021. https://thelocal.to/from-six-nations-to-christie-pits-and-back/

Smith, Willow & Sturino, Idella. “*Civilization* video game paints an 'inaccurate and dangerous' picture of Poundmaker Cree Nation chief.” *CBC: The Current*. 09 January 2018. https://www.cbc.ca/radio/thecurrent/the-current-for-january-09-2018-1.4478144/civilization-video-game-paints-an-inaccurate-and-dangerous-picture-of-poundmaker-cree-nation-chief-1.4478159

Solnit, Rebecca. *Hope in the Darkness: Untold Histories, Wild Possibilities.* Haymarket Books, 2016.

Steffenhagen, Janet. “Our Four Blocks of Hell”. *Vancouver Sun*. 8 Dec 2006, A1 & A4. https://www.pressreader.com/canada/vancouver-sun/20061208/281496451794191

Stuart, Tessa. “Children Inside Texas Detention Centers Describe Squalid Conditions.” *Rolling Stone*, 27 June 2019, www.rollingstone.com/politics/politics-news/texas-border-children-parent-separation-migrant-detention-centers-853055/.

Tagaq, Tanya. “Cold”. *Retribution,* composed by Tanya Tagaq. Six Shooter Records, 2016. *Spotify* app.

Thebault, Reis, et al. “The Father and Daughter Who Drowned at the Border Were Desperate for a Better Life, Family Says.” *The Washington Post*, 26 June 2019, www.washingtonpost.com/world/2019/06/26/father-daughter-who-drowned-border-dove-into-river-desperation/.

Thomas, Gregory. [@metacog01] “If you gave people a bucket of dirt, could they teach a science lesson in biology, chemistry, physics, & earth sciences, as well as FNMI, religion, geopolitics, history, & civics about it?...” *Twitter,* 10 Dec. 2019, 5:21 p.m., https://twitter.com/Metacog01/status/1204556843617587200

Thompson, A.C. “Inside the Secret Border Patrol Facebook Group Where Agents Joke About Migrant Deaths and Post Sexist Memes.” *ProPublica*, 3 July 2019, www.propublica.org/article/secret-border-patrol-facebook-group-agents-joke-about-migrant-deaths-post-sexist-memes.

Thurton, David. “Indigenous communities neglected during Fort McMurray wildfire, report suggests.” *CBC News*. 30 October 2018. https://www.cbc.ca/news/canada/edmonton/indigenous-community-fort-mcmurray-wildfire-1.4883391.

Trifonas, Peter Pericles. “Digital Literacy and Public Pedagogy: The Digital Game as a Form of Learning.” *Handbook of Public Pedagogy: Education and Learning Beyond Schooling*. Second Edition eds. Sandlin, Jennifer A., Brian D. Schultz, Jake Burdick. Routledge, 2010. pp.179-184.

“The Universal Declaration of Human Rights.” *United Nations General Assembly*. Paris, 10 December 1948. https://www.un.org/en/universal-declaration-human-rights/

Uvavnuk. “Earth and the Great Weather.” *Dark Visions: Personal Accounts of the Mysterious in Canada*. Dundurn Press, 1992. pp. 2-3.

van Kessel, Cathryn. *An Education in 'Evil'. Implications for Curriculum, Pedagogy, and Beyond*. Palgrave Macmillan, 2019.

Wallin, Jason. “‘Fix my post-apocalypse’: The speculative horror of civilization end in Fallout 76.” *First Person Scholar*, 1 May 2019. http://www.firstpersonscholar.com/fix-my-post-apocalypse/.

Vowel, Chelsea. *Indigenous Writes: a guide to First Nations, Métis & Inuit issues in Canada*. HighWater Press, 2016.

Wayne, Mike. *Marxism and Media Studies: Key Concepts and Contemporary Trends.* Pluto Press, 2003.

Webster, Donald H. and Wilfred Zibell. *Inupiaq Dictionary*. Summer Institute of Linguistics, Inc, 1970.

Vizenor, Gerald. *Manifest Manners: Narratives on Postindian Survivance*. University of Nebraska Press, 1999.

Wolf, Z. Byron. “Trump Basically Called Mexicans Rapists Again.” *CNN*, 6 Apr. 2018, www.cnn.com/2018/04/06/politics/trump-mexico-rapists/index.html.

Zárate, José Luis. “Fences”. Trans. Joey Whitfield. *A Larger Reality Speculative Fiction from the Bicultural Margins*. Ed. Brenda, Libia. Cúmulo de Tesla, 2018. pp. 13-21.

Zimmerman, Eric. “Gaming Literacy: Game Design as a Model for Literacy in the Twenty-First Century”. *The Video Game Theory Reader 2*, Eds. Perron, Bernard, and Mark J. P. Wolf., Routledge, 2009. pp. 23-32.