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Abstract

This article posits a future for game studies based on considering the ground—metaphorically and quite literally—upon which we play, produce, distribute, and work with games. Offering a critical consideration of the mobile game *Temple Run* inspired by both postcolonial and anticolonial scholarship, I explore some of the ways in which games transform our relations to land. This offers a multiscalar understanding of games and (in) place. From this perspective it becomes possible to understand how games are materially imbricated in some of our most urgent challenges—a central task for game studies, both present and future.

Keywords

Anticolonialism; postcolonialism; postdisciplinarity; games industry, media studies

Did you think that your feet had been bound By what gravity brings to the ground? Did you feel you were tricked By the future you picked? Well, come on down

Peter Gabriel, 'Down to Earth', 2008

My most memorable interaction concerning the future of games came courtesy of Warren Robinett, who was one of the first game designers for Atari in the late 1970s and is credited with introducing the first video game Easter egg (Consalvo, 2023). During the question-and-answer portion of his keynote at the 2019 East Coast Games Conference in Raleigh, North Carolina, Robinett answered an earnest question about the future of game design put to him by a young game industry worker. He responded to the effect of, "future of games?! Environmental collapse is going to wipe us out!" (Robinett, as cited in N. T. Taylor, 2019). As I recall, this blunt answer was met with a smattering of nervous laughter. He then followed up with a more

mollifying and audience-appropriate reflection on VR and pervasive games. Amid the corporate hype masquerading as sage insight that typically passes for claims about the future of games, Robinett's response felt unguarded; perhaps even authentic. It didn't have the same rhetorical weight of, say, Greta Thunberg denouncing an entire neoliberal world order at the United Nations (Keller, 2021), but it certainly did serve as a stark reminder about whether and how present conditions permit us to think of a future in which games continue to matter.

While I am sympathetic to this kind of response, and its urgency and earnestness certainly resonate, I want to challenge Robinett's proclamation. His assertion is that games—and by extension, pursuing an education in game design and game studies—are rendered frivolous, if not meaningless, when placed beside an existential threat like climate change, as if there's no meaningful connection between the two. For Robinett, 'how can games matter in the face of existential crises?' is a rhetorical question meant to undermine the self-importance of the games industry; but what if we treated it instead as a provocation for how we consider, and make, a future for game studies?

This particular essay is not about games and climate change, at least not directly; rather it is about how we might 'do' game studies in a way that deeply respects the sincerity of unguarded reminders regarding the multiple, interlocking crises we face, while also rejecting the underlying notion that these crises render meaningless the projects of making and/or studying games. Here, I follow the lead of numerous scholars who see games not only as texts that reflect and represent contemporary social, technological, economic, and ecological orders, but as technical and cultural systems that help usher in new ones. This literature is as broad and varied as the field of game studies itself, but invites us to look at how games are imbricated in the operations of the military-industrial complex (Crogan, 2011; Elam, 2018); emergent forms of surveillance (Partin, 2020; Whitson, 2013); the resurgence of ethno-nationalism and white supremacy (Richard & Gray, 2018; Trammell, 2023); the spread of exploitative and precarious work conditions under postindustrial capitalism (Bulut, 2020); and the degradation of our environment, given the ecological (not to mention humanitarian) tolls of streaming, networked gaming, and the construction and disposal of gaming hardware (Dyer-Witheford & Peuter, 2009; Monserrate, 2022). It is in the presence of this crucial scholarly work that I hope to posit one future for game studies: one that lies in our commitment and capacity to make sense of the innumerable connections, both historical and contemporary, between games and those seemingly immense transformations which seem to exist in larger scales of spatiality and temporality. These include the intertwined legacies of colonialism, capitalism, and climate change; these are all inescapably about locality and place, and the violences reaped upon land and its people, in the service of resource extraction (Liboiron, 2021).

This future for game studies—and it is certainly one among many—is modest in its aims, but it assumes a different epistemological perspective than conventional futurism, with its techno-determinist gaze resolutely ahead (Halley & Vatter, 1978; Keen, 2022; Taleb, 2012). If games scholarship were to adopt this TED-talk-futurism and its forward-looking gaze, it would inevitably fall into step behind the games industry, ensuring that the future of game studies lies in making sense of whatever shiny objects the industry might be toying with now (VR, or AI, or blockchain, or crypto). Instead, the stance I offer here requires a look *down*: to consider the ground on which we stand, study, and play. In doing so, I hope to offer a generative way of addressing the prompt offered by this journal's editors, which is to "investigate how games and play both shape and are shaped by the world" (Pötzsch & Jørgensen, 2022, p. 1).

Looking down also ensures that I remain grounded: that I begin from an attention to my own social location as someone embodying the intersections of most forms of privilege (cis-hetero, middle class, settler, white, English-speaking, and currently able-bodied), and to the networks of relations that have enabled me to research, write, and teach in relative comfort and stability. In the interest of further transparency, I should note that this discussion covers an example, and some of the same themes, I draw from in a forthcoming book that I have called *The Grounds of Gaming* (N. T. Taylor, 2024). Specifically, it borrows upon and expands themes explored in the book's first chapter on games, games research, and colonial logics of extraction.

Exploring new ground

'Ground' and associated terms provide a rich set of metaphors for conceptualizing the present and future of game studies. Ours is an interdisciplinary field, after all, in which our particular disciplinary and institutional terrains condition how we approach games. But it also stirs up the figure/ground motif of gestalt psychology, appropriated by media theorist Marshall McLuhan as a means of challenging conventional approaches to understanding media. Invoking McLuhan in an article concerned with futurity is not without baggage—he is, after all, repeatedly referred to as "the prophet of the information age" (see for example, Stephens, 2018, p. 1). But as other media scholars working with feminist and anti-racist aims have argued, McLuhan's work remains useful quite apart from (and in spite of) his cryptic proclamations regarding the wired world, mired as those are in misogyny and Eurocentrism (Sharma, 2022). McLuhan offered an understanding of media that was less

¹ To be clear, I am eschewing a particular form of futurism here: one which, to paraphrase Ursula K. Le Guin, imagines the end of the world more readily than it imagines the end of capitalism (Le Guin, as cited in Arons, 2014). I acknowledge that there are other futurisms, rooted in embodied experiences of oppression, which have more to say about the future—of game studies, or otherwise—than I do (see, for example, Capers, 2019; Muñoz, 2009).

concerned with the *content* of any given medium than with the ways media alter the pace and scale of our relations to each other and to the worlds we inhabit. He described this epistemic inversion—from analyzing the representational content of any particular media production, to considering the ways media transform how we relate to, move through, and make sense of the world—as a matter of perceiving and attending to the *ground*, the backdrop against which the figure comes into relief. This holds out a productive lesson for game studies, as it has for media studies more generally (Maxwell & Miller, 2012), particularly (though certainly not limited to) scholarship concerned with addressing systems of exploitation and oppression rooted in racial and gender hierarchies (Sharma, 2008; Singh, 2020; Towns, 2022).

Ground can also, of course, refer to land: to the foundational and inescapable reliance we have on soil (and water, and air). Media studies has begun paying attention to land in important ways, such as in theories of "elemental" media (Peters, 2015; Starosielski, 2019) and in the attention to matters of infrastructure and environment (Grandinetti & Ingraham, 2022; Hogan, 2018; Mattern, 2015; Starosielski, 2015). And yet, this is a set of concerns that game studies, as an adjacent and overlapping field, is not as accustomed to dealing with; outside, that is, of its more prevalent, figurative epistemology (as in, questioning how land is constructed and represented *in* games).

Over the rest of this article, I want to blend together these multiple senses of ground—metaphorical and disciplinary, epistemological, and resolutely material to offer an example of a future of game studies that is made possible by looking down, not forward. I offer a critical consideration of Temple Run (Imangi Studios, 2011), a mobile game made in Raleigh, North Carolina, where I lived from 2012 to 2022. For reasons that become more apparent below, I focus on *Temple Run* not only because it is a highly popular if understudied franchise that helped launch a ubiquitous mobile gaming genre (the 'endless runner'), but because the game had a hand in transforming the built environment of a place I called home for several years. The analysis proceeds in two parts: the first adopts a postcolonial approach, a critical reading of the game as a text that highlights how its imagery, narrative, and mechanics—the 'figures' animating the gameworld—traffic in ideologies that frame Indigenous cultures and lands as both savage and as endlessly available for extraction. The second is inspired by fields with which game studies has not yet had many encounters: anticolonial scholarship, and critical media studies influenced by the "infrastructural turn" (Parks, as cited in 2020). These perspectives help make sense of a different, more material way in which Temple Run reproduces relations to land rooted in the conjoined projects of colonialism and capitalism. I will show how Temple Run has been agential to the gentrification of my former neighborhood in Raleigh, North Carolina, made possible by and building upon a much longer process of racialized economic and political disparities that have their roots in Indigenous dispossession and Black slavery.

Postdisciplinarity in play

In carrying out this analysis, I rely upon an orientation to games and game studies that might best be called 'critical postdisciplinarity.' At first glance, postdisciplinarity seems to be at least terminologically well-suited for the future, given its prefix. But as with postcolonialism, the prefix is not meant to indicate a chronological relationship, as if we are 'past' either disciplinarity or coloniality. We won't go far into the future if we presume such a naïve stance towards our intellectual and political present. Nor does postdisciplinarity assume resistance to the disciplines. Rather, according to tourism scholar Frédéric Darbellay, it is a mode of inquiry "that can both capitalize on the contributions of disciplines while transforming them into new theoretical, methodological, and practical frameworks" (2016, p. 370). As I understand and practice it here, critical postdisciplinarity involves finding connections between quotidian moments of game play (and its attendant practices, including research and design) and the broader relations of power that make these practices possible and which they help reproduce. This stance compels us to read broadly, even promiscuously, and to engage intellectual traditions outside of normative approaches in game studies, even (and perhaps especially) when that means decentering games themselves (Harvey, 2015; T. L. Taylor & Witkowski, 2010; Tobin, 2015; Tran, 2022). For me, this entails enriching the conceptual soil of game studies through theories of anticolonialism, critical accounts of infrastructure, cultural geography, and the colonial histories of the lands on which I live, work, and play as a settler scholar. It is an orientation to knowledge production that is indebted equally to anecdote and abstraction; that understands narrative as a wellspring of insight, learned from ethnography and Indigenous knowledge production, among other knowledge traditions (Collins, 1989; D. E. Smith, 2005; P. L. T. Smith, 2021); and that privileges eclecticism over methodological formalism. Note that in outlining critical postdisciplinarity and demonstrating it in what follows, I am certainly not offering it as a prescription—as 'the' approach for the future of game studies. Rather, I espouse it here because it is well-suited to the project I set out in this essay, and more fully in The Grounds of Gaming: that of locating and articulating connections between video games and place.

Decolonialism, postcolonialism, and anticolonialism

It should be noted that my understanding of colonialism and the modes of resistance to it are, themselves, grounded in place: in the contexts of lands that are now called Canada and the United States, in which I have lived as a settler (though during my decade in the US, I was also an immigrant). These are lands in which it is difficult, if not impossible, to refer to colonialism as a historical epoch that is now behind us. For the white, wealthy elite of these countries, Indigenous dispossession is an integral process in the ongoing and contemporary project of *settler capitalism* in which Indigenous lands are given over as resources for the accumulation of

wealth, which is then distributed according to intersecting hierarchies of race, class, gender, and geography (Denoon, 1983; Paulson & Tomiak, 2022; Shipley, 2020).

Set in this context, I do not feel it appropriate to describe the work I sketch out here as "decolonizing", in which practitioners "interrogate how knowledge is produced; denaturalising and critiquing Western knowledge as neither superior nor universal" (Hiraide, 2021). As one example, academics and instructors are encouraged to decolonize our syllabi by centering Black, Indigenous, and other people of color (BIPOC) voices and perspectives. These are no doubt worthy pursuits. Nonetheless, Eve Tuck and Kenneth Yang powerfully assert that for places where Indigenous dispossession is still at work, including those places in Canada and the US I have called home, "decolonization" is far more than a textual or discursive strategy. It is a political and economic goal that only becomes fully possible through Indigenous sovereignty and repatriation of lands (Tuck & Yang, 2012).

Likewise, it is not entirely accurate to describe the work I undertake here as postcolonial. Following the historical account outlined by Anil Loomba (1998), I understand postcolonialism to be an intellectual movement emerging out of and in response to nationalist movements in the mid-twentieth century, as formerly colonized territories in South America, Africa, and Asia gained at least nominal independence as sovereign states. Strongly associated with poststructural philosophy coming out of language and literature departments in the 1960s to 1980s, early proponents of postcolonialism adapted Marxist historical materialism and Foucauldian understandings of discourse to the purpose of understanding how relations of subjugation and oppression between European imperial powers and the 'others' of the world are portrayed, reworked, and reinforced through texts. Postcolonial critiques of gaming have proven generative, with scholars applying the tools of textual analysis to analyze how games' representational and interactional meanings traffic in colonialist discourses, while also moving beyond games themselves to consider (among other things) video gaming paratexts and technologies, and the relations of power characterizing game studies as a field (Apperley, 2018; de Wildt et al., 2020; Mukherjee, 2017; Murray, 2018b; Trammell, 2022). That said, as the special issue on 'Postcolonial Perspectives in Game Studies' edited by Souvik Mukherjee and Emil Hammar for the Open Library of Humanities Journal makes clear, textual analysis of games remains a, if not the, central focus of postcolonial critique in game studies. The first analysis of *Temple Run* that I provide below operates within this important subset of games research, attending to the hyperkinetic and endlessly problematic 'figures' of and in games.

The second analysis of *Temple Run* that I provide owes more to theorizations of anticolonialism, as offered by Indigenous and Métis scholars in Canada and the US. Anticolonialism looks very different for those of us living in these parts of the world than it does for scholars and activists in other colonial contexts where land and sovereignty have been ceded back to native populations—even as new forms of colonialism and imperialism continue to shape their lives. But regardless of the conditions

under which they operate, Métis scientist Max Libioron (2021, p. 10) asserts that all anticolonial projects center land and relations to land. Applied to critical considerations of gaming, working with anticolonialism entails a shift from asking how colonial relations are enacted and/or challenged in games and related texts (a key question for postcolonial critique) towards considering how digital games transform relations to land—bringing ground to the fore, in a very direct sense. As I explore below, such an approach considers how the systems for producing, distributing, operating, and disposing of games transform our environments, often in ways that extend and reproduce colonial patterns of extraction and dispossession, also at a material level.

These definitional distinctions matter, but again, these terms ought to resonate differently depending on where we are—geographically, socially, physically—as authors and readers. I consider my work here more aligned to theorizations of anticolonialism, because that's how the scholars and activists whose lands I am on, and who are at the forefront of resisting the ongoing legacies of colonialism and capitalism, describe their work. Just as place matters to how we play, so it matters to how we make sense of our world. As both Indigenous and feminist scholars insist, locating ourselves is a crucial step towards ensuring we are accountable for what we know and say (Haraway, 1988; TallBear, 2014). This is part of what it means to ground game studies: to make clear where we stand—as scholars, players, designers, and (in many instances) settlers.

Figuring out Temple Run

The relationship to land highlighted by the following postcolonial critique of *Temple Run* borrows from the work of scholars much more adept at this kind of analysis. I am particularly grateful to Souvik Mukherjee in his emphasis on "cartographic" (2018, p. 509) analyses of games and their fundamentally imperialist orientations to virtual space, and to Soraya Murray, in her look at how video game landscapes "model systems of engagement that betray values, priorities, ethical positions, and biases" (2018a, p. 174).

Temple Run was first published in 2011 by Imangi Studios, an outfit founded by the husband-and-wife team of Natalia Luckyanova and Keith Shepherd. Originally available for a low price on the Apple Store, the game moved to a free-to-play model offering in-app purchases for upgrades, which are also available through earning coins in-game (Chen, 2012). A pioneer in the 'endless runner' genre, the game presents players with a third-person view of their character, who runs very quickly down a single narrow corridor (endlessly, meaning without input from the player) until they fall, stumble, or are caught by pursuing enemies. Despite the genre's name and the game's title, the character does not really move, but rather runs in place while the procedurally generated corridor scrolls underneath them. Players swipe left or right to follow the corridor's ninety-degree turns, swipe up or down to jump over or slide under obstacles, and tilt their smartphone to position the character laterally in

order to pick up coins. Luckyanova describes how their development team—initially herself, her husband, and artist Kiril Tchangov—came up with the mechanics first before settling on a theme and artistic direction (Lefebvre, 2012).

The game's premise provides a rationale (albeit flimsy) for these mechanics. The playable character has just pillaged treasure from an Aztec temple and, borrowing heavily from the famous boulder scene in *Raiders of the Lost Ark* (Spielberg, 1981), must run for their life to escape with it. As in the film and so many other narratives (including games) set in the ruins of pre-Columbian Meso-American civilizations, such as *Shadow of the Tomb Raider* (Eidos-Montréal, 2018) and *Uncharted: Drake's Fortune* (Naughty Dog, 2007), the act of seizing treasure triggers swift and lethal reaction set by the temple's clever but long-dead builders. These include various traps in the case of *Shadow of the Tomb Raider*, mutated Nazis in *Uncharted*, and supernatural "demon monkeys" (Lefebvre, 2012) in the case of *Temple Run*. But unlike these other portrayals of temple- and tomb-raiding, the central act of plundering the treasure is never shown in *Temple Run*, nor is any motive established, as there is in other games and movies, in which the white, pure-hearted protagonists *must* disturb long-dormant ruins of Meso-America and seize their devastatingly powerful mystical instruments, lest evil-doers get there first.

Perhaps given the lack of a more involved narrative and its status as a casual mobile game, Temple Run has not been considered by academics; mobile games typically draw attention from critical theorists for their mechanics, gendered and racialized politics of access, and monetization strategies rather than their representational content (Akil, 2016; Anable, 2018; Chess & Paul, 2019). Similarly, while it has received substantial press from both game journalists and tech journalists, its setting and premise are usually only mentioned in passing. Nevertheless, its reliance on hypercolonialist renderings of pre-Columbian civilizations is hard to miss. The initial playable character is a white 'jungle explorer' in dungarees and collared shirt, reminiscent of Nathan Drake's or Indiana Jones' attire. Among other unlockable characters is an actual Spanish conquistador. Notably, the game does not portray any Indigenous characters. The only agency remaining to those who constructed the temple is to engineer savage retribution upon trespassers: the demon monkeys, which become a kind of stand-in for murderous natives. Gold, in the form of endlessly collectible coins and the squat imp-like statue figuring prominently in the interface and loading screens, is the game's primary treasure, simultaneously invoking and sanitizing the brutal, centuries-long regimes of plunder, conquest, and subjugation through which hundreds of tons of gold were extracted by European imperial powers (most notably the Spanish) from the lands and populations of the 'New World' (Bryant, 2014). We can see in the games' relatively bloodless and benign portrayal of European imperialism echoes of El Requiremiento: the white, western European framing of Indigenous lands and peoples as savage, inhospitable, yet endlessly open to plunder (Couldry & Mejias, 2019, p. 340). As an endless runner, the character can never escape the temple; yet at the same time, this guarantees that the plunder never ends.

The house on the hill

Turning from a consideration of how *Temple Run* portrays land to a mode of analysis more indebted to anticolonialism, I now consider how we might make sense of *Temple Run* if we started from the ground up—meaning physical, rather than virtual land. This is done by examining how the game's developers have leveraged its success to exert influence over the built environment, in a place I called home for several years—a place in which histories of colonialism and racial segregation remain very much in play.

The neighborhood I lived in for the majority of my time in Raleigh is called Boylan Heights. Like so many other facets of urban planning carried out in the United States (and particularly the south) in the decades following the Civil War and the abolition of slavery, Boylan Heights was constructed as a white enclave, on land formerly owned by slave owners, and named after slave owners and/or heroes of the Confederacy. In this case, Boylan Heights was established in the early 1900s through land sold to the city of Raleigh by the descendants of William Montfort Boylan Sr., a prominent plantation owner credited with introducing cotton to North Carolina and "embracing slave ownership" to support this cash crop (Infanzon, 2022; William Montfort Boylan Sr. (1777-1861), 2008). Boylan Heights and other Raleigh neighborhoods characterized by single-family homes on relatively spacious lots were governed by "explicit deed covenants" that forbade the sale of land to African American citizens (Mattson, 1988). While Jim Crow-era practices like racialized deed covenants and redlining no longer exist, the demographics of Boylan Heights reflect their accrued legacies, as it is primarily affluent white families that continue to occupy the charming, colourful one- and two-story family homes, with their wrap-around porches and deep front lawns. In the decade we lived there, white wealth continued to push into the south-east pockets of the city, historically occupied by African American families, and new single-family housing developments continued to force lowerincome, rental-based residents away from the city's center. This enabled my partner and I (like many other relatively well-off, majority white families) to buy into Boylan Heights and build a small but elegant single-family home at the lower outskirts of the neighborhood. At both the local and national levels, this recent gentrification builds on and intensifies patterns of racial wealth distribution. The accrued legacies of Jim Crow-era racist economic policies have been exacerbated, on the one hand, by efforts to revitalize' American downtowns through attracting white professionals to economically fallow areas, and on the other, by the Great Recession of the late 2000s, in which the sudden evisceration of real estate-based equity was felt disproportionately by Black and Hispanic homeowners (Kochhar, 2011).

Of course, the white wealth of Boylan Heights stretches back much further. Its grounds were laid by the violent dispossession of the Tuscarora and Siouan tribes, and by the brutal extraction of West Africans from their lands to serve as slaves in the colonized American South, their labor providing the foundation on which American wealth and American empire were built (Dial, 2022; Towns, 2018). My morning

commute in Raleigh, from our home to my office at NC State University where I would write and teach about games, encapsulated this history and so much of its contemporary legacies. Leaving the white enclave of Boylan Heights, I passed both the Raleigh Central Prison, a large maximum-security facility in which disproportionate numbers of Black men are put to work as cheap labor (Nellis, 2021), and Pullen Park, established as a playground for the predominantly white families of Boylan Heights and Cameron Park. I then arrived at NC State, established in the 1880s in part through the federal government's 'gifting' of lands violently expunged of Indigenous populations (Lee & Ahtone, 2020).

Sitting atop Boylan Heights, a stone's throw from the prison, is the building formerly known as Montfort Hall. Completed in 1858 by William Boylan Jr. on the plantation bought by his father, the Italianate mansion is a registered historic landmark, and boasted several architectural firsts for its time—including the first indoor gaslighting in North Carolina (Heights House | History, n.d.). When we moved to the neighborhood in 2014, Montfort Hall lay dormant, shuttered and shrouded in vines. After an extensive and very well-publicized three-year renovation, the site was reopened in 2021 as Heights House, a boutique 10-room bed and breakfast. The site's new owners, another husband-and-wife team, are well-attuned to the colourblind liberalism of their neighbors and their clientele of affluent "staycationers" (Sharma, 2009); the Heights House website lists "inclusivity" as one of the owners' core values, explaining that the name change is their attempt to reconcile with the building's historical roots (Heights House | Our Story, n.d.). Nowhere on the "history" page of the website is any mention made of slavery. Ignoring the past is, of course, one of the preferred modes in the US of "reconciling" with it (Alexander, 2020), and here—as well as touting inclusivity while charging \$400 USD a night—we can see how the mansion's legacies of gaslighting live on.

This, then, is a snapshot of colonialism's legacies in and on the built environment I called home for those years: for about one fifth of the amount of average monthly rent in Raleigh (Parker, 2023), you can spend a night in an 'inclusive' bed and breakfast in a former plantation mansion, at the top of a hill named after the slave-owning plantation owner, in a neighborhood originally set up to keep Black people out, steps away from one of the sites of modern day racialized indentured labour.

We can now reintroduce *Temple Run* and ask what connection the game might possibly have to this boutique bed and breakfast. The restoration of Montfort Hall and its rebranding as Heights House was funded by Imangi Studios, with profits generated primarily by the *Temple Run* franchise. Keith Shepherd's brother, Jeff, works at Imangi and makes up the husband-and-wife team behind the boutique inn, and money for the renovation was funneled from Imangi through a limited liability company formed by the Shepherds (Eanes, 2018). Despite attempts by Heights House's new owners to ignore the mansion's (and neighborhood's) roots in the slave-based economy of the pre-Civil War American South, it is clear that in both instances, the white, wealthy elite of the time have claimed this house on a hill as a symbol of their

mastery over their respective economic systems. Acknowledging this fact, without lapsing into naïve and misguided comparisons between plantation slavery (and the genocide of Indigenous societies which preceded it) and the contemporary operations of the media and technology industries, requires an attention to at least some of the systems and practices through which gaming transforms our relations to land.

Games and the built environment

I am indebted to the work of other games scholars who document the effects of the game industry's operations on our environments. These range from quirky, as with searching for buried copies of the failed E.T. Atari (1982) game in the New Mexican desert, to grim—including mining for coltan and other conflict minerals in Africa (Dyer-Witheford & Peuter, 2009; Ruggill et al., 2016). The account I find most helpful for understanding how games transform relations to land in the urbanized centers of game production, however, comes via Ergin Bulut in A Precarious Game (2020). His ethnographic study follows a game studio in the Midwest United States as it gets purchased by a AAA publisher and, via an influx of people, capital, and corporate management, shifts from an indie outfit to the publisher's flagship games developer. One of Bulut's key contributions is to show how this transformation alters the urban landscape of "Game City", the name he gives the small Midwest town. Attracted by the lure of a short commute and cheap housing not found in major nodes of game production (cities such as Montréal, San Francisco, Dallas, and Toronto, which receive the lion's share of scholarly attention) the studio's workers nonetheless crave bars, breweries, "artisanal coffee shops", hip restaurants, and other hallmarks of affluent urban life (Bulut, 2020, p. 76). The desires of the studio's employees, city planners, and real estate developers aligned to drive the 'revitalization' of the formerly abandoned downtown. In this way, the game studio became both impetus for the city's "micro-urban" redevelopment, and a template for the city's reliance on "publicprivate partnerships" (Bulut, 2020, p. 85): a thoroughly neoliberal configuration in which public resources and infrastructures are expressly calibrated to the needs of private companies. My partner and I encountered a similar transformation upon moving to downtown Raleigh in 2014, at the same time as many technology businesses (including Red Hat and Pendo) were doing the same. In both mid-sized cities, "Game City" and Raleigh, key actors in the new media industries formed the motive core of a "constellation of material developments, practices, and discursive forces" that shaped "the emerging micro-urban scene" (Bulut, 2020, p. 85).

In recounting an interview with one of the game studio's HR personnel, Bulut (2020, p. 84) notes how a book by Richard Florida sat in their office, and learns that it was given to them by the real estate company that built their new headquarters in downtown Game City. This small detail is indicative of how Bulut understands the material circuits in which ideas and ideologies travel, and the effects that such ideas can end up having over transformations in our physical world—in this case, 'how to revitalize an urban environment by attracting the creative class'. Of course, Richard Florida's

heavily trafficked and highly influential ideas have been increasingly associated with the erosion of the very conditions that made downtown living so compelling for a mobile, white, upper middle class (at least, before the Covid pandemic): a thriving arts scene, independently owned shops and restaurants, inexpensive housing. As one pundit explains, Florida's blueprint for revitalizing cities "has proven to benefit the already rich, mostly white middle class; fuel rampant property speculation; displace the bohemians he so fetishised; and see the problems that once plagued the inner cities simply move out to the suburbs" (Wainwright, 2017). Such is the legacy of this particular vision of urban renewal in cities across North America, myopically fixated on the desires and needs of a mobile, mostly white creative class.

Heights House, with its \$400 USD per night rooms chock-full of products and design flourishes created by North Carolina artists and craftspeople, and its lip service to inclusivity, embodies the contradictions of Floridian urbanism. It sits at a different stage in the 'production pipeline' of urban space that Bulut describes with respect to the game studio in Game City. It is not itself a site of games industry production, but rather a site that the games industry has produced: a symbol of the games industry's success in this region. No longer just partnering with city planners in a drive to establish the amenities that retain creative industry talent, the games industry is directly bankrolling the "aestheticization of urban experience and commodification of art", in the form of this boutique bed and breakfast (Bulut, 2020, p. 85). Heights House announces that the games industry in the Raleigh region is, in its own right, a major player in the real estate market.² For the established and mature games industry in Raleigh, home to Imangi Studios but also to Epic, Insomnia, Red Storm, and others, the boutique hotel serves as an embodiment of the industry's tentacular reach over and through the built environment, and its vaunted position in the platform economy.

What makes Temple Run run?

The platform economy runs on extraction, albeit in more voluntary and technically complex forms than the brutal regimes that initially built Montfort Hall. Like so many other free-to-play digital games, *Temple Run*'s most obvious source of income is the sale of cosmetic and gameplay upgrades via microtransactions. But in 2013, Imangi partnered with NativeX (known at the time as W3i), a monetization platform that connects Imangi with advertisers. Every time a user clicks through an ad shown on *Temple Run*, Imangi gets a minute drop of income (Williams, 2012). NativeX is one small part of the vast surveillant apparatus that gathers, stores, processes, and circulates data gathered from our interactions with networked technologies. The cen-

² More extensive transformations are visible in other, more intensified centers of game production, such as Montréal (S. Smith, 2017).

tral logic by which NativeX and other monetization services operate was first outlined by Marxist communication scholar Dallas Smythe, studying the relationship between advertisers, television viewers, and television producers. In Smythe's (1977) model, television studios create products targeted at certain audiences (striated by age, gender, region, and so on), who are then delivered to advertisers. The central commodities exchanged in this relationship are not the advertised products, but audiences themselves, whose attention is first secured by cultural producers, aggregated by demographics and preferences, and then sold to advertisers (Smythe, 1977). At the time of Smythe's (1977, p. 5) writing, the "audience commodity" was an imperfect construct, a set of probabilities cobbled through imprecise instruments like Nielsen boxes and focus groups (p. 5). But under contemporary technological conditions, in which smartphones and other connected devices are able to gather data on our location, identity markers, second-to-second interactions with other users, biometrics, and so on, the audience commodity is a fine-grained composite of our individual actions, preferences, and tendencies assembled through thousands of points of data: the "dividual" of Deleuze's (1992, p. 5) control society.

There are certainly connections to be drawn between this relatively new mutation of capitalism—variously called *platform capitalism* or *surveillance capitalism*—and colonialism, with its histories of forceful dispossession (Srnicek, 2017; Zuboff, 2019). This is the central focus of Nick Couldry and Ulises Mejias' (2019) *The Costs of Connection: How Data Is Colonizing Human Life and Appropriating It for Capitalism*, and their notion of *data colonialism*. The authors regard contemporary techniques of datafication as refinements of the extractive regimes that converted Indigenous lands and peoples into raw resources, powering the spread of European imperialism and providing material wealth for the growth of capitalism. For Couldry and Meijas (2019, p. 85), these techniques have become largely immaterial; they write that "the colony" is no longer a "geographic location", but the virtual networks that connect us socially and economically (p. 85). In their words:

The resources that are being colonized are the associations, norms, codes, knowledge, and meanings that help us maintain social connections, the human and material processes that constitute economic activity, and the space of the subject from which we face the social world. (Couldry & Mejias, 2019, p. 85)

From the perspective provided by Couldry and Mejias, the transformation from Montfort Hall to Heights House was made possible through Imangi's mastery of these new techniques of extraction, put to work in their endless runner. *Temple Run* is not merely colonial through its imagery, but through its developers' expert deployment of the extractive tools constituting the new regime of immaterial colonialism.

In the reckoning provided by Couldry and Meijas (2019, p. 45), "historical colonialism" ended with the nationalist movements of the mid-20th century. It provided for

the material infrastructures (in the form of "primitive accumulation"), legal and ideological frameworks, and global distribution of capital upon which this contemporary economic order is constructed. As trenchant as their critique is, though, it is difficult to reconcile their claim that its operations as largely immaterial, working primarily upon the "enhanced reality" (2019, p. 85) of digital data, with the inescapably material realities of colonialism as described by anticolonial and Indigenous scholars and activists living in what are now called Canada and the US. Hence, my insistence in this essay on the localization of theory. The hill upon which Heights House sits is part of the territory from which the Sioux and Tuscarora were violently expunged. It was then worked upon by West African slaves for the enrichment of the white settler-capital elite, whose control over the land continues through a shifting series of exclusionary legal, economic, and ideological apparatuses. Under these conditions, as Max Liboiron reminds us, colonialism is not at all behind us; rather, it forms the "active set of relations" (2021, p. 65) in which we live. What connects both Temple Run and Heights House as artifacts of this colonial present, therefore, is neither just their aesthetics nor the extractive techniques on which they run. It is the ways that both the game and the mansion came into existence through, and further the production of, active sets of relations in which land and labour are both instrumentalized as resources for extraction, to have their value determined by and funneled to a settler-capitalist elite.

Conclusion

As I mentioned in the introduction, the 'grounded' analysis I offer here may seem at odds with the aim of presenting a future for game studies. After all, I have not mentioned AI, or VR, or blockchain, or esports. Instead, the future for game studies that I encourage here is more concerned with looking down, at the ground, rather than ahead. I do not hold out much hope for the field of game studies if it is fixated, however critically, on whatever new objects the games industry decides are its future. Such a path would ensure game studies' productivity at the cost of its broader social and political significance. Tethering the future of this field to the interests of an industry which frequently touts itself as new and forward-looking ensures that game studies' relevance will only ever be measured by its capacity to keep up, to follow the hyperactive gaze of technocapital as it scans the horizon for new forms of game-based extraction. Souvik Mukherjee and Emil Lundedal Hammar frame this tension in similar terms, asking:

Will game studies continue to be subsumed under the neoliberalisation of academia, in which the only telos is profit, and which churns out workers for the factory that is mainstream game development? Or will game studies reflect on and question the ways that games are embedded in the (historical) global power structure? (2018, p. 10)

Clearly, I believe that aligning game studies (and academia more generally) to projects and communities engaged in resistance to hegemonic power relations—to the struggle for a future in which we can truly be post-colonial, -capitalist, -racist, -gender, in a chronological sense—is well worth it. Looking down, rather than ahead, understanding where we stand in relation to games, and what relations to land the games industry relies upon and in turn reproduces, seems a good place to start. This stance invites us to broaden our understanding of what sorts of relations are in play when we push for justice and equity in digital gaming and, as a result, it increases the range of interventions, both theoretical and practical, at our disposal. Looking down opens up new opportunities for critique, but also possibly for postdisciplinary sense-making, activism, and visions for more just and sustainable futures: not just for games, but for people and planet.

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