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A Player's Sense of Place: Computer Games as Anatopistic Medium

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by

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ABSTRACT

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This project works to understand how open-world computer games help generate a sense of place from the player. Since their development over a half century ago, computer games have primarily been discussed in terms of space. Yet the way we think about space today is much different than how those scientists calculated space as a construction of time, mass, and location. But as computer games have evolved, the language has failed to accommodate the more nuanced qualities of game spaces. This project aims at articulating the nuances of place through phenomenological methods to objectively analyze the player experience as performed through various behaviors. Using a conceptual model that partially illustrates sense of place, I demonstrate how players create out of place—or anatopistic—places through play.

After a historical survey of play as it is manifested through interaction with miniaturized environments, I turn to computer games as they have helped embody their creators' sense of place. The third and fourth chapters offer a pair of case studies that reflect upon the experiences of the individual player and player groups. First, I compare virtual photography with tourism to reveal an array of sensibilities suggestive of the pursuit of place. This is followed with a look at Niantic's *Pokémon Go* and how player groups use the game to act out ritualistic forms of play. Positioning the player as a "ludopilgrim," I demonstrate how players perform individual or intersubjectively meaningful places as a form of transgressive placemaking.

For Sarah

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Introduction: A Player's Sense of Place in Computer Games

Immersion. Flow. Incorporation. Presence.

Since Ivan Sutherland's vision for what would become virtual reality was first articulated in his 1965 description of the "Ultimate Display," these have been the buzzwords used to describe the experience of playing computer games. This terminology used to describe the experience within computer games alludes to a desire, by both producers and users, to create and maintain an existence outside their physical bodies in what Sutherland then referred to as an abstract, "mathematical Wonderland" (506). Spawned from the same military-funded labs from which Sutherland's less speculative work (such as the SketchPad interface) was created, computer games have been fueled by a common fascination with immersion and the occupation of strange, electronic worlds. While currently experiencing a renaissance of sorts, virtual reality still eludes popular adoption and the fantastic visions of digitally born, immersive experiences remain confined to amusement parks and niche ventures.

In the development of computer games, however, the allure of the digital *Being* touches nearly every facet of design and development. Level and environment designers have the onerous responsibility of generating entire worlds that must be populated and imbued with the breath of life. Artists must produce a cohesive aesthetic while writers cobble together a story through one or more narratives. Programmers must unify these components, fusing them into a unified whole. But ultimately, these efforts try to evoke the player's *sense of place.* Difficult to define, this affective quality marks the feeling we have when we are physically, mentally, or emotionally situated in an environment that is imbued with a certain set of values. These values could be our own, such as those we infer from our office where efficiency might be prioritized.

Place can also be informed by one's family, such as the childhood home, in which one can be physically located or recalling from memory. A group's values also imbue place with a meaning that, while important to them, might not be as significant to others who also value the same place. A downtown Milwaukee hotel, for example, is a place of pride to its owners and managers, a place of work to its staff, one of respite for occupants, but for the Potawatomi who once lived on that spot, it might be a reminder of a lost history. It can also be called forth through literature, movies, photographs, and computer games. Places trigger a connection—a sense of place—to these values and inform our responses to them.

Just as sense of place is difficult to define, the ability to produce a sense of place from computer game players has been both serendipitously discovered as well as intentionally pursued. Mojang's *Minecraft* (2009), for example, is a game that places the player in a vast virtual space that can be deconstructed into bricks that can be turned into materials for constructing more complex objects and structures. This mechanic has attracted millions of players to *Minecraft* because of the affordances for making place. Hosted on networked servers, these virtual worlds can be shared, giving rise to virtual communities comprised of friends that I may or may not ever meet in the flesh and blood. Thousands of servers, most of them established and maintained by players, offer various themes and play styles. User-created modifications ("mods") expand the aesthetics and attributes to appear to audiences of other games. The custom "Grand Theft Minecraft" server, for example, includes weapons and vehicles inspired by the *Grand Theft Auto* franchise. "CivCraft," on the other hand, bills itself as an "socialist commune of Minecraft." Across these *Minecraft* instances, a sense of place can be evoked if certain criteria are met and one is open to them. Over time, these spaces can become as familiar as those of the "real" world - perhaps even more so. *Minecraft* was a surprise blockbuster (eventually

purchased by Microsoft) that was successful not just because it was developed by a small, independent team but because it so effectively produced a sense of place within players.

This outcome rarely comes easily for developers, however.

Hello Games' *No Man's Sky* (2016), for example, is one of the most infamous flops of the modern games industry. In an unprecedented feat, Hello Games created a server-based, procedurally generated universe occupied by over 8 quintillion planets that, according to developer Sean Murray, would take 584 billion years to fully explore (Kharpal 2016). Players were promised the ability to "discover places and creature that no other players have seen before —and perhaps never again" ("About this Game," Steam). Claims like this, along with a press junket and late-night talk show appearances by Murray, fueled the public's anticipation of the game. *No Man's Sky* was touted by many as Sony's big-budget response to the success of *Minecraft.*

This claim was undermined, however, by the overwhelming anger of players who felt the game fell far from reaching the expectations set by Sony's publicity blitz. Many of the trappings were there in this universe of materials ready to be harvested. In addition, there were an unimaginable variety of alien creatures and plants to discover versus *Minecraft*'s library of only a few dozen. But even those players who had initially been compelled to play the game (myself included) drifted away after a short period of time. While there are moments at which all my youthful science-fiction fantasies are being realized, these moments simply fail to resonate with me in any meaningful way.

One of the reasons for this failure is that players—even those optimistic like me—failed to feel connected to the world. Earlier hopes that *No Man's Sky* would turn into a successful multiplayer game are still unmet. More diverse ecologies and alien species, more complex

landscapes and structures, and more dynamic aesthetics have improved the experience but still fail to compel new players. Steam user "soulgl0," for instance, described how the immersion felt at first ebbed over a short period of time and the experience failed to provide any "sense of achievement" (November 30, 2018). For "ftstani," there was "no sense of wonder whatsoever" (December 6, 2018). Despite several updates that bring *No Man's Sky* closer to what was initially advertised, the game still fails to foster a cohesive sense of place. One possible reason for this is in the way that places relate to one another. I introduce the concept of anatopistic places, or places-out-of-place. When we are "in place," we are aware that others may also share that place, even while our overlapping values might be different from one another. At times, our sense of place conflicts with others' senses, leaving us feeling "out of place." In *No Man's Sky*, players are (at the time of this writing at least) largely left to create the social elements outside of the game. What's left within the game is an amorphous mass of disconnected *spaces*: economy without reciprocity, exploration without landmarks, conquest without anyone around to notice. This is place-out-of-place in a negative sense.

Despite the inclusion of crafting, structure building, and other elements, there is still no sense of occupation within *No Man's Sky*. Even with the "soft" multiplayer capability, there is no cohabitation. This massive virtual world continues to turn away those who are looking for the limitless exploratory experience because these elements—all which factor into our sense of place in the world off-screen—fail to resonate with many players. Perhaps matters of taste are better left for the journalists and bloggers. Yet the player perspective is vital to understanding the affective and rhetorical powers of games and game spaces—which have thus far been systematized by developers in pursuit of creating pleasurable game experiences. As this project investigates, games are increasingly being designed to exploit those perspectives for profit, with

consequences that play out in the world off-screen.

Between *Minecraft* and *No Man's Sky,* open world games reached an apex that developers had long aspired to. Other game worlds have drastically ballooned in scale over the last decade. Nintendo's *Legend of Zelda: Breath of the Wild* (2016) has been widely praised as a hallmark in the open-world genre. Unlike the upstart *No Man's Sky,* the latest in the venerable franchise has no multiplayer mode, has a closed ending, and has no way of leaving evidence of one's presence on the landscape. Outside of this, both products are remarkably similar: Both games were developed with immersion as a priority; both feature colorful, yet realistic, child-friendly aesthetics; both successfully simulate the ability to freely roam and explore a variety of spaces. While *Zelda* inherits a popularity because of its connection to earlier games, does this explain why players feel "at home" while playing *Breath of the Wild*?

Sense of Place

This project works to understand how open-world computer games like *Breath of the Wild* and *Minecraft* help realize this sense of place. This undertaking is complicated by how discussions of computer games—by developers, players, and academics alike—tend to avoid the metaphysical. The earliest computer game designers, typically hobbyists from those fields who also had convenient access to mainframe terminals, employed the same technoscientific discourses used by Sutherland and other post-War engineers. Despite occasional calls for more attention to emotionally driven algorithms (Picard's work *Affective Computing* for example), digital spaces continue to be discussed in the jargon of the laboratory rather than the art studio. This is also true for computer games—a problem considering how anxious many developers and enthusiasts are for the public to consider games as *art.* The power of the arts, however, is that

they invite audiences into place. Whether it's a transcendentalist landscape by Christopher Pearse Cranch (1813–1892), one of Piet Mondrian's abstract compositions, or a Paleolithic cave painting, the work acts to make place with the viewer. Landscape paintings, in other words, are much more explicit attempts at illustrating the majesty of the natural environment while, in the case of a work like *Composition No. 10* (Mondrian, 1939–42), the viewer must be open to a reflective place that is intimate with the work and perhaps the intentions of the artist. To introduce this project, I argue that computer games are art in as much as they constitute a form of participatory media that invites the player into their places.

Since their development over a half century ago, computer games have primarily been discussed in terms of space. This tradition of thinking about games in terms of their spatial qualities is still the privileged form of discourse surrounding the medium. This is, again, passed down from a legacy born in the simulation labs. Yet the way we think about space today is much different than how those scientists calculated space as a construction of time, mass, and location. If we think of them as the more entertaining descendants of gravity simulations, it's understandable how and why computer games invite similar language. But as computer games have evolved far beyond vector graphics stored and isolated in MIT mainframes, the language has failed to accommodate the more nuanced qualities of game spaces.

In arguing for how games stoke a sense of place, I am therefore also making a subtler argument that computer games have always been works of art, holding all the aesthetic merit that may befit more conventional paintings, sculptures, or installations. This is an old and tired position to take—and I will not spend a great deal of time defending it here. John Sharp's eloquent *Works of Game* is among the most ardent arguments for the artistic merits of the medium (2015). Yet Sharp's primary focus is on those works, like Cory Arcangel's *I Shot Andy*

Warhol (2004), that use game technologies to create works of art (Sharp 34). Instead, I am focused on less avant-garde games and on a more popular, conventional genre, the open-world game. One of the issues at hand is the way computer games have been discussed *as* art. David Freeman's article, "Crafting Emotion in Games," for example, describes how designers can foster "emotional breadth and depth in games, as well as immersing a player in a role or in a game's world" using what he calls "Emotioneering™" techniques (4). From an architectural perspective, Christopher Totten describes how games convey narrative and meaning through designed spaces. Acknowledging how games should also accommodate a player's sociocultural sphere, Totten's remarks on *how this happens* is a cursory note in an otherwise excellent exploration of the gamespace (306). Other works cited throughout this project will echo these space-oriented perspectives that speak to games as designed experiences with profound influence on players.

Place, however, rarely enters the discussion. As Edward Casey has famously argued, however, place precedes space (*Getting Back Into Place* 16). So why, if this is the case, do we continue to negate place and when discussing games and their design? With this project I hope to address this gap in the discourse. Just as place seems overlooked and ill-defined, sense of place is even more resistant to rote definition. In fact, "sense of place" is a saying so often used, it has lost much of its meaning as well as significance. John Jackson, for example, traces the etymology of this phrase to its Latin roots (157–158). Typically associated with rituals and celebrations, "genius loci"—literally, spirit of the place—was derived from a collective communion with the spiritual. With the 18th century and the New World embrace of Enlightenment thinking, however, the phrase took on a certain specificity. Instead of the natural *genius* of a space, focus shifted towards an identifiable *locus* that could be empirically

quantified. With the increased reverence towards schedules and timekeeping, which supplanted regard for spontaneity and happenstance, place likewise diminished in importance.

Players of modern games like those mentioned above can explore vast spaces that cover the equivalent of hundreds of miles. Other players might also be there. Players of the multiplayer role-playing game *World of Warcraft* (Blizzard 2004) might spend a great deal of time together doing various activities, forming fast friendships and small communities over time. Or they might log in, play in isolation a bit, then depart without investing much time thinking about the experience. "Part of the power of place," described geographer Edward Casey, "is found in its encouragement of motion in its midst, its "e-motive" (and often explicitly emotional) thrust" (*Getting Back into Place* 23). Places draw in objects, he describes, and maintain or reject certain objects and qualities whether these places are material or in memory. In this way, he argues, the place is "more an event than a thing" (26). Viewed as such, it is easier to understand why games are not often properly discussed as places.

Even at times when it is discussed as a part of computer games, "place" is described in terms that are spatial. Those like game development luminary Richard Bartle, for example, advocated for games as "places" even while describing them in terms of their architecture and design (475). This misinterpretation of place will be discussed in further detail in the second chapter. To consider "sense of place" is ultimately to consider the player perspective. While game scholars have focused on communities of play (Pearce and Boellstorff 2009) and identity (Yee 2014), these examinations rarely proceed to consider how communities and identities are formed through sense of place—despite sense of place being crucial to the development of both!

To look at the player's sense of place is even more confounding. "Rather than being one definite sort of thing," Casey continues, "a given place takes on the qualities of its occupants,

reflecting these qualities (physical, spiritual, cultural, social) in its own constitution....Places not only *are*, they *happen"* (27). In other words, places inspire a sense of place from those who are open to the value systems that are embodied in place. For computer game designers interested in creating rich, compelling places, this subjective quality can pose obstacles in anticipating tastes, values, perspectives, and aptitudes beholden to players. From the perspective of the player, finding a virtual space that evokes a sense of place can feel transcendent, even providing feelings of belonging and security typically looked for in the world off-screen.

This sense of place, therefore, is difficult to design while, to attain a sense of place can be unintended, surprising, and even unwelcome. Yet computer games, as architectures of space and code designed for certain experiences, have become more sophisticated in tactically evoking a sense of place. This project looks at a specific category, open-world games, and the specific ways they are designed to accomplish this. These games have certain shared affordances—the ability to explore large territories, for example—that characterize their kind.

Open-World Games

Throughout this project, I argue that almost any computer game that invokes a significant form of playful activity (and it is hard to imagine a game that does not), can elicit a sense of place from the player. Although many forms of play and games are discussed, this project focuses primarily on those of the open-world genre. Unlike unidirectional, linear games (*Super Mario Brother*s) or arcade-style games like *Tetris* (Pajitnov 1984) that are confined to a "board," open-world games are those that involve an immense, navigable terrain that unfolds before the player over the course of play. Games of this type come with the assumption that the player is unfettered by such constraints. At the extreme end, the eight-quintillion planet count of *No*

Man's Sky is hard to overlook. But most open-world games have a well-defined map of play that must be explored to some extent to be completed. The map of Avalanche Studios' *Just Cause 3*, for example, covers nearly 1000 km² of tropical terrain. Bethesda Softworks second installation of the *Elder Scrolls* fantasy series, *Daggerfall*, includes a map that spans the virtual equivalent of 16,000 km². Within these spaces, players can freely explore even though doing so may result in encounters for which they are not prepared.

In addition to the large area of play, the open-world game is characterized by the ability of the player to pursue almost any direction she chooses to achieve any number of goals taken on simultaneously (Squire 170). Although there is often a narrative imposed for some sense of cohesion, this is typically complemented by "side quests" that take the player on different arcs. Some so-called "sandbox" games like *Minecraft* eliminate narrative altogether.

Most contemporary games of this genre are rendered in 3D graphics and the player's perspective is projected in first or third person. Players inhabit the body of the protagonist in the former while in third-person perspective, the player's vantage point hovers above the character. Not all games rendered this way have open worlds, however. Not all games that use this perspective are considered open-world however. Games like *Wolfenstein 2: New Colossus* (Machine Games 2017), for example, are first-person, 3D games that have large, explorable maps, but players are restricted to a certain path. There may be shortcuts and hidden rooms along the way to a goal, but a player is by and large confined to the "rails" of the game. This perspective is important in that it reinforces the illusion that there is space beyond the screen. As the fourth chapter will discuss, the ability to view the world in 360-degrees is important for one's sense of orientation within the game space.

Open-world games are typically thought of as being confined those games played on

computers and videogame consoles. I posit that augmented reality games, whose virtual facades are superimposed over the world of flesh and blood, are also part of the genre. By supplanting the messy world of flesh and blood with a virtual, game-like structure, augmented reality games like *Pokémon Go* (Niantic 2016), map out new spaces, borders, and thresholds onto the world. This strategy points to one of the conundrums in occupying an open-world game: players are *not* free to do whatever they wish. What Jesper Juul refers to as "emergence structures" which constrain the player through, "a small number of rules that combine and yield large numbers of game variations, which the players then design strategies for dealing with" ("The Open and the Closed" 324). In Nintendo's *Legend of Zelda: Breath of the Wild* (2017), for example, the world is freely explorable by the player, but varying levels of difficulty quickly inform the player that certain zones are best tackled after she has gained more experience. Part of the challenge for an open-world game, then, is in fully investigating the virtual environment and revealing the entire map and all the hidden parcels, caves, and floating palaces within its borders.

One facet of this project's exigency is the prominence of open-world games not only as a form of entertainment but as a platform for learning and *living*. Daniel Short, for example, has extolled the academic merits of using *Minecraft* as a virtual laboratory (2012). Nicola Whitton's *Learning with Digital Games* offers a wealth of potential applications for computer games that can be integrated into the general curriculum (2009). As will be discussed throughout this project, the tradition of game-as-lab is a formidable one that traces back more than half a century to military funded projects housed in labs across the globe. It would be remiss to ignore the fact that, as the humanities strain under the buckling of their disciplines, one would not have to dig far to reach these works' technoscientific roots underneath.

Phenomenology

My ambition here, however, is not to critique the decline of the humanities or the "gamification" of the classroom. Instead, my goal is to better reflect on what these open-world games *are* to better understand what they are *to the player.* To do so, this project undertakes a phenomenological method to reveal the sense of place. Phenomenology offers a method for objectively analyzing subjective experiences through demonstrated behaviors. Put forth by Edmund Husserl, phenomenology is an approach taken up by later geographers focusing on place, offering a convenient yet robust mechanism for uncovering and reflecting on the metaphysical. Husserl's concept of the "lifeworld," that quotidian space in which we are all a part, must be deconstructed into its experienced components. These distinct entities and relationships are then reflected upon.

Phenomenology emerged as a critique of positivism and scientific reductionism that removed human elements and concerns from the world. Yet phenomenology does not eliminate the affective or reflective. As part of this "bracketing" off, assumptions and predispositions are simply sequestered from that which is being observed. Husserlian phenomenology separates the human perspective from the everyday world but does so only to better understand how the experience of both the human and the world are inextricably connected to one another. This approach, according to Louise Johnson, makes clear, "both unselfconscious experience and systematic reflections upon it" (103). For Heidegger, a phenomenological approach demands that we play close attention to things not just to perceive how they seem but how they *are* (Wisnewski 26). Both Heidegger and Husserl's approaches opened a metaphysical branch of inquiry yet, to some, fell short of adequately accommodating the significance of perspective.

The work of Maurice Merleau-Ponty is extremely valuable to this end. Following

Heidegger, Merleau-Ponty's work in *Phenomenology of Perception*, maintained a focus on Being-in-the-world as a framework for examining *le sentir,* or the "sense experience" and how the embodied subject intentionally relates to its surroundings (3). For Merleau-Ponty, one's body served as the locus of origin and the sensorium how one "communes" with the world (246). This form of co-existence, he described, is one where the perceiver and the perceived are both acting on one another. I actively see the redness of a tomato, for example, while the tomato acts through being red. Through this deconstruction of hegemonic relations, Merleau-Ponty opened the door to theories that focused on place-based ontologies espoused by human geographers who are vital to this project.

Although more psychological in approach than what I undertake here, Merleau-Ponty's theories of perception provide valuable insights into computer game experience and his positioning of the intentional body as perceiving subject helps establish a through line to how we experience the digitally mediated gamespace. As will be seen throughout this project, the player's relationship to the place of play is always embodied and the point of origin from which one perceives and negotiates that place. The intentionality of this position helps empower the player to make place wherever she might be. Renegotiating one's setting alone or with others through play is an authentic performative act by which the player acquires a sense of place. This sense of place manifests itself through play in the form of feedback loops between the player and the social and environmental spheres of experience.

This reflexivity of the phenomenological method serves my project in numerous ways. As someone whose lifeworld has always included computer games, I want to ensure that my appreciation and criticism of games is set aside. It is not the intention of this project to either advocate for games as cultural objects nor deride them as products of the military-entertainment

complex. I am here looking at games as artifacts that have been with us for a half century and, like it or not, they are here, and they are growing in significance. Husserl's objectification of experience was not an end in itself, however, but only a method for more fully recognizing the ways in which the cosmos and the beings within it form a recursive relationship. A conscious subject, according to Husserl, must have an object to be conscious of. We are in and of the world just as it is in and of us.

The other reasoning for using a phenomenological approach is that, in doing so, this project answers recent object-oriented perspectives such as those put forth by noted game scholar and philosopher Ian Bogost. As a game developer, Bogost is among the more compelling yet polarizing figures in the field. Across his numerous works, Bogost has advocated for games as significant rhetorical and philosophical tools. More recently, however, Bogost has taken a more philosophical path. With *Unit Operations* (2008), Bogost took on the rhetorical significance of computer games, using design thinking to articulate how games work through distinctive processes that could be broken down into constitutive elements. With later, works, however, Bogost has focused more on the object-oriented philosophies he and other thinkers aligned with the speculative realist movement (such as Levi Bryant and Eugene Thacker) have promoted. The first of his works where computer games play only a marginal role, *Alien Phenomenology or What It's Like to Be a Thing* (2012), articulated a hands-on approach to philosophy as an activity akin to carpentry. In this approach, Bogost speculates on the experiences of various unconscious objects. As Bogost argues, "things are not *merely* what they do, but things do *indeed do things*" (28). It is through this doing that we can comprehend those other, "alien" experiences.

In the face of ecological disaster, a respect for the non-human is not an unwelcome perspective to take. But in doing so, objects as disparate as fire hydrants and cockatiels are

regarded as ontologically equivalent to everything else at the sacrifice of agency and identity. Cultural and historical contexts, so vital to the human experience, are not perceived by non-humans. "The experiences of things," Bogost explains, "can be characterized only by tracing the exhaust of their effects on the surrounding world and speculating about the coupling between the black noise and the experiences internal to an object. Language is one tool we can use to describe this relationship, but it is *only* one tool, and we ought not feel limited by it" (100). In arguing for a comprehension of Being, Bogost is arguing for alternative ways of revealing experience.

Unlike this position, I am here focusing only on the human experience. But in accord with Bogost, I argue that a sense of place is indicative of a Being-in-the-world that articulates the traces of the world's impact upon us. How are *we,* in other words, cognizant of these virtual worlds? How does the manufactured world of the computer game, more specifically, communicate a sense of place? How does this sense of place manifest itself through behaviors and actions that occur while in such worlds? To answer this, one would have to be aware of those value systems that guide our perception of some things while obscuring others. One of the oversights inherent in the speculative realist approach is that these values are reduced to opinions that cloud our ability to see what an object truly is.

Chapter Descriptions

In addition to more sufficiently articulating my methodology, I survey the most relevant of theories pertaining to space, place, and sense of place in the first chapter. Much of this literature comes from humanist geographers, architects, anthropologists, and philosophers of the so-called "spatial turn" who have explored space and place as being impacted by modernity. Phenomenological views emerging from this array of fields have contributed to current

humanistic thinking. Much of what is said in academic circles about games confuses space and place. Part of this is due to the inheritance games received from their forebears in the military and entertainment industries. “Space” is engineered for a purpose. “Place” is used to sell that space to audiences. Scholarly discussion further complicate matters by objectifying the spatial and designed components of games (Bogost) When researchers have looked at the players of computer games, they typically focus on the groups with which they play (Pearce) and how games foster self-identification (Yee). But how to account for those qualities of games that *speak* to players. What subjectivities are being designed to when deciding to incorporate cooking into a game like *No Man’s Sky* or *Breath of the Wild*?

Looking at how sense of place is revealed in play and games, the second chapter takes the long-view of the history of play and games. Play, I argue, is a conscious act of placemaking. Not only is this form of placemaking significant, it is perhaps the most powerful intervention one can make in the spaces one inhabits. From ancient religious totems through Dutch dollhouses to urban playgrounds, toys and spaces for play have acted as lightning rods for playful subversions, empowering players to create meaningful places for themselves and others. While the first half of this chapter focuses on “analog” forms of play, the second returns the focus to computer games. Beginning with the advent of the medium in MIT Labs, I investigate how placemaking has been a considerable factor in its development. Examining the *Ultima* series, for example, we can expose the signs that embody developer Richard Garriott’s sense of place. For both the player and developer, I argue, computer games have *always* been about the embodiment of a sense of place.

The third and fourth chapters offer a pair of case studies that reflect upon the experiences of the individual player and player groups to prove this claim.

Focusing on a specific form of emergent play, I examine how in-game photography is the manifestation of the individual's sense of place in the chaotic open-world arena of *Grand Theft Auto V* (Rockstar 2013). Looking at those practices associated with "screenshotting" reveals an array of sensibilities suggestive of the pursuit of place in virtual spaces that is comparable to tourism. In the images captured and shared, one can see how computer game spaces are embodiments of what geographer Doreen Massey refers to as the "throwntogetherness" of place (2005). Games of the scope and scale of *Grand Theft Auto V* display an unprecedented capacity for encapsulating the *happening*—those events that Casey described as so significant to place. It is this capacity, I'll argue, that has served the larger computer game industry long before open-world games were feasible. But with the development of high-speed networking and realistic graphics, however, the ability to capture and share photorealistic imagery has been a boon for the player's sense of place—as well as for the game industry.

The industry's dedication to evoking a sense of place is most evident in the fourth chapter, which looks at Niantic's *Pokémon Go* (2016) and how player groups use the game to act out ritualistic forms of play. Milwaukee, Wisconsin serves as a historical and geographical backdrop for this chapter in which I look at how segregationist practices of the New Deal and the prevailing racism of the city that still exists, is further reinforced and codified by *Pokémon Go.* Outside of how the game aligns with pre-existent racial boundaries, the most intriguing development is the ways in which the game offers opportunities to transgress them. Through play and the interface of the game, *Pokémon Go* reminds us how games enable an intersubjective sense of place—one that is so powerful that it can subvert generations-old geographies. As this example will illustrate, play becomes a way for the out-of-place to emplace themselves. Through their collectively held sense of place, they reveal anatopistic places, or places out of place.

I conclude this project with an interpretation of what these activities and behaviors say about the player's sense of place and how it is being exploited by various forms of platform capitalism. Because the phenomenological method asks that the observer set aside judgements, it is for these concluding pages that I reserve a reflection on the vulnerabilities of games and play as well as players who pursue meaningful experiences in virtual worlds. But it is here that I will also offer reassurance that play and games continue to serve as powerful methods for intervening in space and usurping the values and priorities of those prevailing powers that work through space and place.

Concluding Statement

Throughout the existing scholarship of games and place, there exists two primary gaps: the erasure of the player and the lack of evidence related to the player's sense of place. While writing this in a coffee place I have frequented for over twenty years, I have a distinct sense of place. The wobbliness of the table, the post-punk decor and questionable music played a bit too loud, and the coffee itself, with its odor and taste, are aesthetic values that affirm my orientation and location. This is prefixed by the location of the cafe and the route I took to get here. If someone were observing me, they would note my confidence in navigating to the cafe without a map or GPS, my recollection of the menu, as well as the number of people I recognize from the neighborhood. My observer might notice how the person behind the counter offers me extra service—perhaps because I am a familiar face, perhaps because I tend to tip well.

On the other hand, someone who has never been here before—a visitor—is more likely to feel out of place: The decor is strange and disconnected from what their prior ideal of "cafe" has been. The people behind the counter might display and utter their exasperation with someone

who doesn't know what they want before they approach to order. Perhaps the questions this visitor asks to demarcate themselves as familiar with a different sort of cafe. The people are oddly dressed. A derelict not-so-stealthily asks for spare change in the corner. An almost equally disheveled graduate student taps on a laptop, surrounded by papers and books…a sense of place is unlikely to take root for this visitor at this cafe. Another perhaps.

As we spend more of our day-to-day within electronic spaces, our places both on-screen and off become conflated. Places where we once worked, socialized, and played, are now virtually indistinguishable for many. Open-world games, which offer vast simulations of a wilderness that is difficult to locate anywhere in the Western world, are increasingly popular. For many players of these games, the sense of place can be so strong that many profess to prefer the game world over the "real." McLuhan had anticipated incorporation through the spatial in *Medium is the Message,* noting how digital communication "fosters and encourages unification and involvement" (8) while "recreating in us the multi-dimensional space orientation of the primitive" (57). More recently, Gordon Calleja's argument that games do more to *incorporate* than immerse players is supported by his "Player Involvement Model" that discerns several means by which the computer game attracts players. Spatial involvement is one among the many affective forces that are particularly profound within many open-world games. According to Calleja, virtual landscapes inspire players to survey the space and their position with the world to build a "cognitive map" (79). Through this survey, players internalize this map of landmarks, routes, and activities to orient themselves and develop their ability to navigate the space (86–7). In turn, the player is incorporated into a location within the virtual environment.

Admittedly, one of the shortcomings of this project is a heavy reliance on Western thinkers and industries. Despite the interdisciplinary design of this project, this is a massive

oversight that will be rectified as further research is conducted. To be sure, non-Western approaches to place are significant to a thorough understanding of these concepts and will be pursued as this project is further developed. For the time being, however, I will now consider the theories of place as they pertain to computer games

Chapter One

Setting, Community, Happenings: A Model for Articulating the Player's Sense of Place

St. Paul's Episcopal Church is a venerable historic site and functioning parish located on the edge of downtown Norfolk, Virginia. Confirmed by the cannonball that has been embed in the outer wall since the mid-17th century, the church has occupied this location since before the American Revolutionary War. The smooth-faced grave markers (long since moved from their original locations) can still be read under the shade of magnolias, some of which overlooked the first bricks of the church being set. Inside of the simple chapel, the vernaculars of power reverberate from within the architecture: the hardened oak pews, the elevated pulpit and cut marble altar, feel saturated in several centuries worth of sermons and hymns. The slave galley located at the back of the church is a reminder that not all voices are just as easily heard.

Such structures of power are also imposed through the written language. Just as an architectural space can contain multiple places (that of the priest, the parishioner, the slave, etc.), the written word can also be interpreted numerous ways. But while the walls of St. Paul's are resistant to cannonballs, they also restrict the movement in space by their physical structures. Written spaces, such as those in computer games constructed through language, are more fluid and malleable once encountered by the audience. "Meaning," Derrida argued, "is neither before or after the act" (11). Visiting the online virtual space *LambdaMOO* for the first time, one feels the imposing sense of place that is akin to that felt in the old church. *LambdaMOO* is one of numerous descendants "multi-user dungeons" (MUDs) that are created and rendered in text. As will be detailed further in the following chapter, these games articulated space through their descriptions. Players interacted with them using typed commands. Although only having been

accessible barely thirty years, *LambdaMOO*s significance as one of the earliest and longest-lasting online virtual spaces is palpable when logging in and arriving in "The Linen Closet." What is this space? Very few clues can be "seen" in this text-based space except for the doorknob and the lever next to it tantalizingly tagged "NOISY!" Resisting the urge to pull the lever, I use the knob to exit the closet and enter a hallway that leads into several directions. The space is empty but, as indicated by the welcome message, there are over 60 denizens about.

Despite the lack of conventional historic significance, friendly, forthcoming people, and aesthetic elements, *LambdaMOO* still evokes a sense of awe and wonder (perhaps with a tinge of the uncanny) from the observer. Despite their surface-level differences, these spaces are remarkably similar in the way one might feel them: I read the tombstone of a long-dead pirate with the same curiosity with which I read the descriptions of even the least idiosyncratic of *LambdaMOO*'s spaces. This sense of place that I experience when walking the same steps congregants took two centuries ago is almost identical to that felt when wandering the vacant catacombs of *LambdaMOO.* The similarity is, of course, is that I am experiencing the affective powers of these spaces. Were both designed to do so? To an extent. Both are extraordinary places but often churches and computer games are discussed as spaces rather than as places, a distinction that will be addressed more sufficiently below. This chapter parses out this phenomenon to help establish a base for further examination of how spaces, places, and senses of place are examined in computer games.

Before proceeding, I should briefly define these terms as they are used in this project. For my purposes here, space is the amorphous, malleable plane of abstracted knowledge that, embodied in physical and programmatic structures, inform and orchestrate behavior. This does not mean that space is permanent—far from it. Walls and landscapes erode. Borders and laws

likewise change over time. Place, on the other hand, is the unquantifiable yet stable plane of spaces that are experienced and over time, informed with meaning. Place, describes David Morris, "is a limit because it is irreducible" (179). At its simplest, places are spaces that have been informed with value. To use the introductory snapshots as examples, the perimeter surrounding St. Paul's and the programmatic codes of *LambdaMOO* create space. As a lucrative, yet tax-exempt, downtown property, the space of St. Paul's is often scrutinized and considered for takeover. The spaces of *LambdaMOO* are even more precarious and can literally be turned off with the flick of the server switch. Yet even when these spaces are gone, they will continue as places so long as there are people alive who are connected in some way to those spaces. Places can be passed on to others as stories and images. Spaces exist with or without our knowledge of them, yet places require activity and care. In other words, if space is the house, place is the home.

A sense of place, then, is to be active in the value systems that make place. Our sense of place is how we are connected to the world, how we render the spaces of the world into recognizable, understandable forms. Despite its resistance to being quantified, designing to a sense of place has been, from time to time, a goal of urban planners (Goodey 109). This is likely one reason why, for John Jackson, the phrase "sense of place" has become commodified and meaningless through advertising (157). For our purposes here, however, sense of place is a personal impression of place as a combination of setting, community, and perception. Through performance within these spheres (see Fig 1 on page 26), one's sense of place can develop over time or near instantly if the happening is particularly significant. Because of this, a sense of place can take the form of positive or, according to negative feelings towards place.

To further discuss how a sense of place is pursued and acquired within virtual worlds,

this chapter must first briefly survey theories of space and place. Due to the breadth of thinking on these theories, the survey provided is cursory and will only touch on those aspects that are most important to the immediate purpose. What's more, the defining of these terms is still a contentious, ongoing endeavor. According to some, the stakes could not be much higher: as geographer David Ley points out, "the struggle to define the language of space and place has often formed part of the struggle for the definition of culture itself" (45). This has been an ongoing preoccupation within computer science, for example, whose empirically grounded definition of space had been drastically impacted by both revised understandings of place and telecommunications technologies that expanded collaborative possibilities (Dourish 306). These are heavily theoretical concepts most familiar to geographers and architects but have been heartily adopted by media scholars, particularly those most invested in computer game studies. On the other hand, place has been rendered almost insignificant judging by the dearth of discussion. This is especially problematic given how, according to humanistic geographers, place is of primacy to the emergence and construction of space.

Using a phenomenological perspective towards computer games is not new. What scholarship has focused on, however, is an object-oriented approach that subordinates the player's experience to the works being played. As I will detail, this has only served to reinforce the reliance on the spatial and the empirical analysis of computer games. We have focused on the space of games. At times, scholarship has paused to consider the place of games. But we have thus far taken very little time to reflect on how we come by a sense of place within these digital worlds. This chapter provides a theoretical foundation for articulating this sense of place and an argument for a more substantial understanding of how we come by this sense through our experiences.

The secondary aim of this chapter is to therefore survey the existing discourse surrounding games to not only show how the field has prioritized space but also highlight those works where place makes an appearance. Space is of course, crucial to most computer games and is the most comfortable parlance given the medium's origins in computer labs. As games have pushed the state-of-the-art, however, the objectifying discourse of engineers and computer scientists. Because the chapters following this one focus more on how sense of place is experienced in games, what is offered here may seem all too brief. By couching these discussions in their historical contexts or as part of the final case studies, it will better illustrate how space, place, and sense of place are made manifest in computer games.

Ultimately, the ambition of this chapter is to specify—as best as possible—a methodology for identifying how a sense of place is experienced by the player. For reasons that will be made clear over the course of this chapter, sense of place is subjective and therefore difficult to define. Therefore, a hard-and-fast rubric that can be applied to any player-game relationship is beyond both the scope and ambitions of this project (for a valiant attempt at this, see Bott 2000). But there are components of sense of place that can be identified and positioned to reflect upon player experience and how certain activities and behaviors within game spaces allude to player motivations that will be more thoroughly discussed in chapters hereafter.

Although Western theorizing about space and place reaches back at least as far as Aristotle (Bostock 2008), I am approaching the complex theories of the two as they have been discussed beginning with the so-called spatial turn. The spatial turn is that point at which thinking about space had begun to coalesce around a more cohesive framework. Thinkers of this turn include Henri Lefebvre, Michel de Certeau, and Michel Foucault. These, and other thinkers cited in this project, began to look back through time to reclaim the concept of space from its

Cartesian interpretation and identify the ways spaces had been used to articulate the will of the powerful. Empiricists were perhaps understandably resistant to this reconciliation: according to Charles Withers, the technoscientific communities did not take note of these developments until the early 1990s but increasingly attended to the ways scientific knowledge was affected by the settings in which it is produced (650). The latter half of the twentieth century, the period in which spatial theory flourished, is also a convenient starting point due to the paralleling development of humanistic geography from where I derive an understanding about place. Drawing primarily from Yi-Fu Tuan and Doreen Massey, I elaborate on place and how it is distinguished from space. From here, I am best able to offer a definition of *sense of place.*

If place has been difficult to define, sense of place defies definition altogether in its subjective nature. Fortunately, the philosophical school of phenomenology provides a substantial method for not only discussing but approximating and analyzing intentions as evidenced through activity and behavior. This metaphysical approach is useful not only because it privileges the subjective but because it celebrates place as a fundamental framework for examining experience as it is performed by the person.

Theories of Space

In the fourth volume of his *Physics,* Aristotle delivered one of the first treatises on space and place. Aristotelian concepts of place situated the concept within the objectifiable, natural order of things. Aristotle's concept of place as a "receptacle" reads like a set of nesting dolls, with each subsequent layer defined by that preceding it (61). "Thus," he describes, "a place surrounds that whose place it is; a place is not part of what it surrounds; a thing's primary place is neither smaller nor greater than it; a place can be left behind by a thing and be disassociated from

it; and every place is either up or down, since each of the [simple] bodies moves up or down to come to rest in its resident place" (63). For Aristotle, then, place was equivalent to space, a definition that would be taken up by Descartes centuries later. As should be expected, this definition is fraught with contradictions and paradoxes resulting in centuries of subsequent analysis and debate. Thomas Aquinas, for instance, expounded on Aristotle's perplexing argument that place is primary yet cannot be defined without the objects it contains (192). More recently, the mobility of Aristotelian place prompted a published debate between Benjamin Morrison (2002) and David Bostock (2006) over etymology and translation, which has complicated interpretation. For Morrison, Aristotle reads places as false, "parasitic entities, an 'epiphenomenon' of the way the world is" (4). While Bostock believes Aristotle viewed place as external to the object, he points out that, in the philosopher's view, place was absolute and not affected by context (134).

Reintroduced to Europe by Islamic scholars, merchants, and scribes, the influence of Aristotle and other works of antiquity would inspire the humanistic approaches of Renaissance thinkers and artists for centuries. Raphaelite illustrations of Athenian landscapes and Greek mythos exemplify European desires to reclaim classic approaches to art and knowledge. Italian artists associated with the Quattrocento movement were particularly interested in mathematically derived techniques for realistically depicting three-dimensional perspective on a two-dimensional surface. The ability to render three-dimensional space was soon complemented by the Cartesian coordinate system, further reinforcing the objectification of space. This forced perspective technique continues to be a fundamental concept for contemporary architecture and visual design as well as digital space engineering.

Rationalist thinking would prevail almost unabated until the end of the eighteenth

century. British colonization, global trade, and American expansion unveiled revealed the world to be populated by other cultures and perspectives. Although dominionism and conquest would prove to be the West's primary response to these encounters, the viability of an objective, universalist outlook began to wane. Photography would assist in documenting and distributing images from the emergent world, confirming the exotic locales and landscapes that had thus far had only been seen in paintings and illustrations. As the world leaned into the first World War, subversive movements like the Dadaists used mass publication technologies and graphic design to disseminate a fractured, absurdist to decry the notions of truth and common sense that had ruled the West for centuries.

By the mid-twentieth century, the world had survived two world wars but was busy defining the Cold War from the rubble of Europe, Asia, and the USSR. As borders were being redrawn, the notion of space began to take on new significance. In America, where rebuilding entailed the retooling of industries to manufacture consumer rather than military goods, the burgeoning landscape was being converted into new playgrounds for the middle class. Umberto Eco, in his essay "Travels in Hyperreality," would reflect Americans' desire for authentic experiences even if that experience was little more than a "hyperreal" cultural pastiche of impressions gleaned from a world that had gone mad (6–7).

It is from this period that the so-called spatial turn would emerge. Cartesian notions of space, which had reduced space to locations on a map, no longer had much meaning when those maps had proven to be malleable. On a smaller scale, the home was being renegotiated as a place that no longer seemed safe nor certain. Heidegger's phenomenology not only privileged the home as a point of origin but heralded a reinvigorated interest in *place*. Two works followed Heidegger's examinations of the human experience of space. Taking similar phenomenological

approaches, O.F. Bollnow and Gaston Bachelard leaned in on the metaphysical aspects of phenomenology and published two landmark works that while overshadowed by their predecessor, and despite a more reflexive, musing tone, still warrant discussion.

These discrete spaces were of great interest to Bachelard who used phenomenology to reflect on what the origins of the poetic image are (1958). Interested neither in critique nor interpretation Bachelard read the relationships of spatial minutiae to uncover what he refers to as the "soul" of poetry. The "alveoli" of spaces—the nooks, pockets, imprints, and drawers—presented the French philosopher with a metaphysical laboratory for experimenting with the phenomena of the home-space. "Miniature is an exercise that has metaphysical freshness," he explained, "it allows us to be world conscious at slight risk. And how restful this exercise on a dominated world can be! For miniature rests us without ever putting us to sleep. Here the imagination is both vigilant and content" (161). Bachelard's interests translate quite literally into the dollhouse which I discuss in the following chapter. This miniaturization of place is also important to my subsequent analyses of computer games which situate players in miniaturized places. Even more important, however, is Bachelard's insistence that vision and how the visual connects the viewer to a larger network of relationships were best suited for the discussion of space and place. Since writing *Poetics of Space*, Bachelard's examinations of the miniature spaces have proved to be invaluable to studies of place. Despite speaking most explicitly to space, in fact, contemporary scholars of place have situated Bachelard as part of the foundation that spearhead later interest (Altman and Low 1992, Cresswell 2014, Casey 1998).

In *Human Space* (1963), Bollnow also examined the spatial condition of human experience yet asserted more explicit moves against the grain of the Cartesian tradition. Allowing for orientation as the primary centering point of experience, Bollnow is primarily

concerned with the misplaced perception that space is objective. Arguing against mathematics' claims to be unbeholden to perception, the author reiterated how experienced space—even one that is produced through mathematical means—is a space that resonates with meaning. Experienced space, he describes, "is not an area neutral of values. It is related to the human being by vital relationships, both supportive and obstructive in nature. Whether supportive or obstructive, it is the field of human conduct of life" (19). The intentionality of space, he concludes, does little for the relational development of the universe but instead generates a universe that is overarching "reference to us as subjects" (254). This intentional space, he continues, is the "space of the sense" that is "above all as a space of seeing" (255).

Postmodernism would only further this schism. Modernism's adherence to temporal-historical contexts, rationalized efficiency, and narrative cohesion, was loosened under postmodernism's more spatial focus. Recalling Heidegger and Bachelard, Henri Lefebvre sought to expand on the omission of production (and labor) that both had committed. In doing so, he catalyzed a radical shift in spatial theory with *The Production of Space* (1991) wherein he would deconstruct the long-cemented understanding of space into fluid, overlapping conceptualizations. Questioning the primacy of space, Lefebvre argued that space represents the political use of knowledge and the production of social relationships. These relationships are delineated into discrete spaces that dedicate behavior and perspective to sustain the space occupied.

For Lefebvre, these meanings were not entirely discernible through sight. "No camera, no image or sequence of images can show these rhythms. One needs equally attentive eyes and ears, a head, a memory, a heart" ("Writings on Cities" 227). In other words, not only must we have an open sensorium, our minds must also be receptive to the everyday. It is not enough to be passive, casual observers of the city, we must also seek out the poignancy of these spaces. We must be

considerate of why these spaces embrace or repel us. Lefebvre's analysis of space prioritized the social over the Euclidean reading that continues to dominate our perspective. As spaces that are constructed using engines that generate and maintain activity, games are particularly subject to this. In *The Production of Space,* Lefebvre posits his thesis that established the study of space as one that is primarily concerned not with the material conditions that delimit it but rather a conceptual triad composed of the *spatial practice, representations of space, and representational spaces* (33). In sum, these might respectively be interpreted as space as it is perceived and utilized, how space is objectively constructed, and how space is subjectively interpreted. Lefebvre's concept of spatial practice insists more than just a recognition of the social space as both product and production of social space. "If space is a product," he argues, "our knowledge of it must be expected to reproduce and expound the process of production" (36)

Michel Foucault and Jay Miskowiec would expound on the ensuing "epoch of space" and the emergence of anxiety-engendering heterotopias of deviation (25). As they describe, these spaces are those into which the Other is place: the queer, the destitute, the dead all sequestered to their spaces apart from the rest of society. Paul Virilio, in describing "cryptic architecture," alludes to the vulgar spaces whose diminishing presences only strengthen their impact upon their occupiers (18). In his beguiling (if not baffling) "Aesthetics of Disappearance," Virilio ruminates on the acceleration of modernity and its compression of space and time. With the spatial and temporal reduced to the indifference of light, the frantic pace incapacitates those within it (58). Part of Virilio's model of perception in the digital age, the "picnoleptic" is his neologism for describing the fractured speed at which we are bombarded by imagery, which he equated to a sort of media-induced vision. Although at times sounding like a sort of perceptual psychosis, Virilio actually regarded picnoleptic vision as a way of identifying new forms that would merge

from the combinations of stimuli, “the interstices between things, between people” (51). This process-oriented perception of the world helps consider sense of place as a process guided by perception but pushed through by performance within place.

The visual perception of place is further complicated by thinkers who pushed even harder against the lingering Aristotelian definition. Anticipating the emergence of sophisticated virtual worlds, the likes of Jean Baudrillard pushed concepts of place to address the artificiality of representation. Throughout the works of Jean Baudrillard, spaces were distinguished yet only in their referencing to other spaces. In his order of simulation, Baudrillard accounted for the phases an image would pass through—as a reflection of reality, a perversion of reality, and as a disguise of reality’s absence—before attaining the “pure simulacrum” of self-referentiality (11). According to Paul Rodaway, in Baudrillard's account, “this order of simulation, the reference to an original becomes increasingly irrelevant as the mediated forms refer to themselves and science seeks to make ever more realistic simulations” (176). Vulgar spaces, in other words, were ersatz conglomerations of signs that, while visible, were vapid in their insignificance. Yet these representations have become significant in their own right, especially when considering virtual spaces. Though a “picnoleptic” vision, for instance, the relations between these representations produce new images, new essences and places, from which the player draws meaning. According to Ted Friedman, this speaks to the internalization of the code by the player who identifies with the processes of the game rather than with a role (9). These processes are, as we have seen fundamental to sense of place. Although our identities are certainly reinforced through place, in other words, it is attention to those processes of place—which are pronounced in computer games—that drive sense of place.

A focus on the connections between entities was reiterated by Deleuze and Guattari, who

dispensed geographical metaphors with aplomb. Representation, for them, was extended to the human "body without organs" that, they argued, was "defined only by a longitude and a latitude...Nothing but affects and local movements, differential speeds" (260). So while the maps and other representations of space, for Baudrillard, supplanted place, Deleuze and Guattari argued that the whole of reality—*all places*—are representation. Furthermore, orientation is critical to their Marxist critique, with the hypermobile and networked nomad serving as a poster-child for overcoming oppressive forces. The ability to empathize with one another, by occupying each other's places, was an act of compassionate intervention. "Make maps," they beckoned, "not photos or drawings" (25). By the end of the twentieth century, postmodernist concerns had proved incapable of deterring the neoliberalism's encroaching electrostatic fog. Even as the epoch's thinkers continued to be evoked, their voices did little to quell the oppression of a globalized economy or placate those impacted by the disintegration of the family and the middle-class. Nevertheless, the thinkers and theories of postmodernism continue to resonate with many, including those investigating digital spaces.

For as long as there have been computer game scholars, spatial metaphors have been used to articulate computer game phenomena. The labyrinth, for example, has been a particularly rich metaphor for game scholars (Aarseth 1997, Montfort 2003). Lev Manovich adds to this by describing how the attraction of computer games comes from "uncovering the algorithm that maintains and creates the game space" (222). In computer games, he continues, "[Space] becomes a media type" (253). In *Play Matters,* games scholar Miguel Sicart describes the relationship between play and space, noting how "play takes place in the context of things, cultures, and people. In time and in space" (50–1). A game space, he notes, is one that is designed for the sole purpose of housing game activities and is the domain of computer games

(51). For Sicart, understanding space is vital to understanding how games are designed as a "political, aesthetic, and moral activity" (88). Considering this, he argues, game "architects" should reject the temptation to create for any purpose other than creating environments and context in which players can freely explore and experiment.

Sicart's advocacy for a return to the primacy of play, as well as his appropriation of architectural discourse, is echoed throughout much of game scholarship. Raph Koster's *Theory of Fun,* a standard of the game design classroom, extolls how games, "teach us how to examine the environment, or space, around us," and how, "much effort is spent in teaching us about territory" (54). According to designer Jesse Schell, space is a functional mechanic of games (130). "The primary purpose of architecture," he points out, "is to control a person's experience" (330). This position is strengthened by Christopher Totten who argues for designs that are inspired by architectural methods (2014).

As will be further discussed in the following chapter, one of the more significant reasons for the spatial focus of critical discourse about computer games is simply because the earliest games were born from aerospace and engineering labs. The language and logics used to describe *Tennis For Two* (1958) and *Spacewar!* (1962) are those of technoscientists.

Theories of Place

If space is supposedly the central concern of architects, engineers, and scientists then place might be said to align with the outlook of artists, philosophers, and geographers. One of the reasons for this is that place is experienced subjectively and resists quantitative evaluation. Place is not entirely resistant to examination but is identified by the parts that comprise it and the actors that perceive it. Edward Casey confirms the subjectivity of place because it "...has its own

'operative intentionality' that elicits and responds to the corporeal intentionality of the perceiving subject" ("From Space to Place" 22). Advocating for "ecocentrism" over egocentrism, Casey argued for greater attention to the places in our lives to reconcile the collective sense of displacement and desolation (*Getting Back Into Place* 260). These ecological concerns have translated into environmental questions regarding the ever-changing landscape. How does the fluidity of landscape—once considered impervious to change—impact our relationship to place? This concern has at times situated place at the forefront of popular debate. The popular behavioral science writer Winifred Gallagher, for example, describes why one of the reasons we work so hard to preserve and maintain places is that they help situate us in the roles we play throughout the day (129). We need place, in other words, to provide us with a chance to perform, make meaning through these performances, which in turn inform our identity. That being said, it is easier to understand the veracity of place preservation performed by environmentalists, nationalists, as well as the rest of us along the spectrum, who carry a strong sense of connection for someplace.

Postmodern critiques of space had elaborated on the disorientation and depression that had left their marks on the 20th century. Postcolonial theories, a strand of postmodern thinking, had been articulating the condition of those displaced by oppressive powers (Bertens 160). Thinkers in this vein have elaborated at length on the blurring of cultural boundaries (Bhabha 1994), diasporic identity (Hall 1990), and further explained the emerging threat perceived as coming from the destitute (Fanon 2007). Alongside this critique, theories of place that had been drowned out by those of space began to be reinvestigated. In turn, approaches of the last two decades have since taken great pains to untangle place from space. In doing so, many contemporary thinkers have gone back and retraced our understanding of place back to the early

phenomenologists.

In doing so, many have turned to Heidegger in arguing for the primacy of place (Relph 1976, Tuan 1979, Norberg-Schulz 1979, Malpas 2012). “Spaces,” he claimed, “receive their being from places and not from ‘the space’... Man's essential relationship to places, and through them to space, consists in dwelling... the essential property of human existence” (“Building, Dwelling, Thinking” 356). As established in *Being and Time,* our “Being-in-the-world” entailed a mindful relationship with the everyday (94). Heidegger’s conceptualization of the *Kehre,* or the “turn” that represents the bond between *Sein* (“being”) and *Dasein* (“being there”) (Sheehan, 82; Malpas 25). “Place,” describes Heidegger, “places man in such a way that it reveals the external bonds of his existence and at the same time the depths of his freedom and reality” (*The Question of Being* 19). The evolution of Heidegger’s thinking about place is now seen as foundational to understanding place and its preeminence to human experience.

Because place is difficult to quantify, a definition has been elusive (Low 1995). Part of problem, says geographer Tim Cresswell, is that, “place stands for both an object...and a way of looking (*Place* 23). Objectively speaking, place is often exemplified in the landscape or the home. Setting informs a place through boundaries, distinctive landscapes, rich imagery, and a sense of scale and proportion to these qualities. The size relationship reinforces, says Steele, “people's sense of smallness and powerlessness without offering much hope (as did with the great cathedrals) as to what they can identify with on order to reduce their insignificance” (59).

In one of his earliest writings on place, “Space and Time: Humanistic Perspective,” Yi-Fu Tuan began working to discern some of the misconceptions that were perhaps inspired by Heidegger’s obscure writing. “In ordinary usage,” he says, “place means primarily two things: one’s position in society and spatial location” (408) before later clarifying that place, “is more

than location and more than the spatial index of socio-economic status" (409). Tuan expanded on his rationale in *Space and Place,* further describing space as assemblages of places (as objects within space) and our relationships to them (12). It is therefore, according to Tuan, places and the values they contain that shape and define space.

This is not to say that space and place aren't both necessary for human survival. (Tuan 57). Tuan argues for the necessity of both space and place but ascribes place with the impetus necessary for the conditions of spatial development to be met. The tangibility of place, for Tuan, was crucial to the human experience. While space implies freedom, Tuan says, it also leaves one "exposed and vulnerable" (*Space and Place* 54). Place, on the other hand, comes with a feeling of security and stability experienced in working within one's cultural norms. "Compared to space," Tuan continues, "place is a calm center of established values."

The affective power of these places is experienced, Tuan would argue, as a form of "topophilia." (*Topophilia* 93). Tuan's theory of topophilia can help explain the dedication of many who strongly identify with place. Places rooted in the material - such as a favorite park - can inspire the same devotion as that felt by a patriot devoted to a more idealized place like one's homeland. These value networks are capable of creating various forms of what Setha Low categorizes as "place attachments" (3). In addition to topophilia, for example, people and their communities can develop identity through sentimental connections to place (Hummon 1992). These connections can also be informed by cultural perceptions. Claudio Minca, for example, describes how Bellagio, an unremarkable small Italian town has been increasingly popular with American tourists as it embodies a romantic vision of Italy popularized by American movies, television, and novels (2005).

In Relph's interpretation of geography, we see the ongoing struggle to wrest place from

Aristotelian traditions (24). If places are value-positive objects, our relationships to those objects indicate a marriage of values and our desire to internalize those values as Being-in-the-world. These values emerge through various aspects of place. “By taking place as a multifaceted phenomenon of experience and examining the various properties of place, such as location, landscape, and personal involvement, some assessment can be made to the degree to which these are essential to our experience and sense of place” (Relph 29). For Relph, the essence of place is produced not only through geographical location but also by landscape, community, and our personal involvement with all three (30–32).

For Relph, place was anchored in its physical from. “In short, the spirit of a place lies in its landscape,” he argued (30). Casey has since also emphasized the importance of landscape as a crucial site where “places gather (24). As seen in the case of Bellagio, however, landscapes and vistas are often manufactured, what’s more, environmental changes of any sort can render a landscape unrecognizable. Malpas argues that the term “landscape” fails to adequately represent place (*The Place of Landscape* 21). In light of ecological instability and urban development, Malpas posits that an uncertain landscape can no longer be relied upon as a way to reconcile our relationship to a world that is increasingly hostile to us (6). John Jackson, for example, looks at the development of parceled-out land and the impact roads and the American road system had on landscape. The introduction of the cardinal points (space) introduced a new schema for dividing land. “During the Renaissance,” Jackson describes, “the Western world learned how to organize the spaces we lived and worked in so that they would achieve what appeared to be the most efficient, the most enduring, the most beautiful design” (6). The “new landscape” that Jackson is looking at, however, is built on shared routines rather than shared spaces.

Lefebvre describes how social space ultimately works to meet the, “demands of a body

'transported' outside itself in space, a body which by putting up resistance inaugurates the project of a different space (either the space of a counter-culture, or a counter-space in the sense of an initially utopian alternative to actually existing 'real' space" (*The Production of Space* 349). Considering some contemporary thinking (see Merrifield 1993 for example), we can interpret this spatial practice as an act of placemaking. This "utopian alternative," that usurps the needs of the "'real' space," is the intentional making of a place that, as will be described in the following chapter, is intimate with various forms of imaginative play.

It is the community, Relph argued, that ultimately has the power to make place. Although Lefebvre's spatial theory was largely concerned with the social, more recent theories of place have taken up this mantle. According to Erik Champion, place requires roots in the social sphere ("Norberg-Schulz" 145). While this certainly implies a community at hand, place is also found in the isolated actions of individuals. In his reading of Tuan, Fritz Steele describes how "place people are sensitive to their own situation in and orientation to a setting, being aware of things, people, and events there that are not directly related to their own activity" (45). Considering a phenomenological view, we might say that our Being-in-the-world realizes a relationship even with others not at-hand.

By etching my initials into a tree, for example, I create a place that incorporates the social in my anticipation of someone else seeing my act of natural vandalism. The social sphere is also where the normative behaviors that reinforce the everyday are introduced, responded to and, if accepted, become practice. Through socialization and acculturation, places reinforce themselves and hold through configuration, containment and exclusion, the landscape's contours, and the sustenance of corporeal and incorporeal qualities. An organization and design of form as well as the nurturing of memory and sentiment are found in places.

Place is, as Casey described, the gathering up, embracing, and holding onto the objects and moments that occur in place. Yet our experience of place is ultimately subjective. While landscape may attract us to certain geographical locales, we may not be easily convinced of its significance as a place. Our social circles may create place wherever we might gather, but a newcomer to this clique may feel displaced. Ultimately our sense of place is one that is subjectively felt and empowered through a certain orientation within the world around us.

Discussions about computer games in terms of place are few but increasing in number as the medium shirks the language of the laboratory. When "place" has been explicitly brought up, it has at times been conflated with space. In *Designing Virtual Worlds*, for example, Richard Bartle argued that virtual worlds amount to "just a set of locations. Places" (475). Champion and Dave have suggested that this is partially due to the technological limitations which inhibited real-time interactions and stable navigation through virtual spaces (2). With near-instantaneous social interactions and graphics rendering of virtual spaces, they state, computer games have been hothouses for placemaking. As will be discussed, however, neither immediate presence of others nor realistic visuals are necessary for place.

Erik Champion, as one of the most ardent advocates for understanding virtual places, has written extensively on the subject. In "Virtual Places," for example, he has argued that, "a sense of presence in virtual environments and real experiences is not just a consequence of being surrounded by a spatial setting, but of being engaged in another place" (58). Champion and Dave argue that a sense of place will be more engaging if digital environments are designed to be recordable, evocative, referential, and hybrid (13). This ignores the fact that most games—if not all games—possess these qualities and can potentially evoke a sense of place.

Sense of Place

In *Genius Loci*, Norberg-Schulz expounds on the relationship between man and the spirit of place. Predicating the approach later adopted by humanist geographers, Norberg-Schulz demonstrated how place defied definition, resisted positivist reductions, and provided the bedrock for self-identification. "The identity of a person," he suggested, "is defined in terms of the schemata developed because they determine the 'world' which is accessible" (21). Orientation within the network of relationships that make up space, Norberg-Schulz argues, fosters one's identity in this way and serve as the "primary aspects of man's being-in-the-world" (22). This is predicated by Relph who, also citing Heidegger, noted that, "...to be human is to have and know *your* place" (*Place and Placelessness* 1).

Reflecting on Norberg-Schulz's landmark work, Erik Champion notes how the former overlooked the significance of one's culture in the process of orientation-identification. Champion notes how, "...place can not only be a clearing in nature but also a cultural *setting* providing cultural interaction a time and a location (150). Though problematic, Norberg-Schulz's advocacy for place would herald a new trajectory for place studies. Some of the more inchoate ideas offered in *Genius Loci* continue to be considered and expanded upon four decades after publication. As with space, ancient Greek conceptualizations and philosophies of place can be traced to contemporary Western thinking. The concept of *genius loci* is among the most pronounced yet fraught ideal pertaining to place. The transition from place to space is linguistically embodied in the translation of genius loci which, for the ancient world, was used to describe the divine spirit that inhabited a place. According to John Jackson, a sense of place was derived from a collective communion with the spiritual and was celebrated by rituals (158). With the 18th century and the New World embrace of Enlightenment thinking, however, the phrase

took on a specificity that, instead of the natural "genius" of a space, shifted towards an identifiable "locus" that could be measured. With the increased reverence towards schedules and timekeeping, which supplanted regard for spontaneity and happenstance, place diminished in importance.

Despite the enormity of scholarship dedicated to the explication of space and place, very little of this is understood more than one's own sense of place. Our sense of place, muses Fritz Steele, is a "sixth sense for bones" (105). This internal force is difficult to describe yet numerous scholars of various disciplines have endeavored to discern what external qualities foster a sense of place. Kathleen Stewart describes the sense of place that emerges from impoverished areas of West Virginia through conflict and struggle. According to Stewart, it is the collective attempt to situate these struggles within a meaningful narrative that provides the community with a sense of place. This effort demands the negotiation of place within a community. This alludes to the intersubjectivity of place and how a collective sense of place can be consciously developed.

For Jackson, "sense of place" is the closest phrase used that approximates the original, metaphysical definition of genius loci. No notes, however, that due to the commodification of space, sense of place has become impotent, little more than an advertising catchphrase (157). "The very effort to imagine culture, then," says Stewart, "is itself a continuous effort to reopen a space attentive to the forms and mores of cultural production" (139). Individually or collectively felt, our sense of place informs our perception of the world as well as the ways we derive meaning from it. Unlike the rigidity and homogeneity of space, place is fluid, overlapping, and at times colliding. Doreen Massey pointed out that navigating this "throwntogetherness" of place demands one be "open to the challenge of negotiating a here-and-now" (140). Placemaking, according to Massey, is therefore a radical and conscious act (185).

From a phenomenological perspective, the eyes might be said to be the point at which the screen "disappears" (Idhe 19) into the experience of being. This is certainly the case with computer games despite audio and haptic inputs also being stimulated by play. But it is vision that primarily orients the player within the space of the game, allowing her to navigate around the spaces on screen. With few exceptions, however, it is vision that is required to fulfill the experience of the computer game. Game design has had a hand in this privileging of sight. Developer Jesse Schell, for example, refers to his categories of design considerations as "lenses" through which developers must perceive various aspects of the game experience (21). "Vision" is also reinforced as a concept in the initial phase of designing a game. Raph Koster, describes how "vision document" as the collaboratively created set of guidelines, audiences, and principles for what the game will be (380). While vision in the latter case is a metaphor for the design team's expectations, this illustrates how pervasive the visual is in the game design process. Yet the player uses many more senses: her hands manipulate the peripherals (mouse, keyboard, console controller, etc.) which may, on occasion, vibrate with haptic feedback. The sounds of footsteps indicate an enemy is around the corner. But it is the visual cues that direct those manipulations and subsequently perceive whether or not those actions were successful or not. Auditory and haptic elements add to the immersive ambiance and can aid in orientation but are not as crucial as sight.

Our sense of place is closely related to our perceptions of the everyday. While singular events and experiences certainly evoke feelings of attachment to certain spaces, it is our encounter with the everyday that serves as the threshold to obtaining a sense of place. To examine this, I must first discuss what happens before a sense of place. In other words, before we acquire a sense of place, what else do we have a sense of? If, according to Barthes, the everyday

produces a metalanguage that is intertwined with those surface level meanings (*Mythologies* 109), what is the distinction between the surface level and those metalanguages within them? The following section articulates a conceptual model for unpacking the player's sense of place. As I will illustrate, this model helps trace the development of sense of place through attention to the processes that connect setting, community, and happenings. These elements, perceived as a gestalt of place, are perceived by the player and, through performance are taken in as meaningful or discarded as insignificant, a process that in turn informs identification with place in a recursive, and ongoing process of meaning-making.

A Framework for Identifying a Player's Sense of Place

Space, place, and sense of place are vital concepts in game studies. As has been discussed, the primacy of space has been at the forefront of game development as well as the discourse surrounding games. As detailed in the second chapter, some of the earliest developers of digital spaces have been advocates for computer games as more than just the spaces created. Contemporary games scholarship has also been attentive to the values imbued in games (Shaffer 2006, Sicart 2013), the rhetorics used to attract and motivate players (Bogost 2007), and the effect of game play on players as individuals (Yee 2014), and on their communities (Pearce 2011). But discussions about games and digital environments as places of significance is only recently being unpacked and even then, this discussion tends to be packaged as a complement to a focus on computer games as spaces. A review of this literature is but a minor aim of this chapter and will thus be subordinate to my larger ambition which is to account for the subjective sense of place which, when discussed, has thus far been circumstantial.

Michael Nitsche's *Video Game Spaces* (2008) remains—a decade after publication—the

most explicit attempt to account for place in the medium. Echoing Lefebvre's deconstruction of space, Nitsche's framework is conceived of five scaffolded planes of space that comprise the computer game play experience. In addition to the mediated plane which includes the technology required to interface with the game, there exists the narrative-derived fictional plane, a plane of play, the social plane, and the plane of rules and algorithms which saturates them all. Nitsche's five planes are a convincing method of breaking down the spaces wherein experience occurs.

Comparing them to Lefebvre's model, the mediated space aligns with spatial practices while the fictional plane is couched within the representational space of theory and the imagination. The rule-based plane, to which Nitsche assigns not only the rules of the game but the programmatic code that enforces those rules, falls into Lefebvre's category of representation of space.

At any given time, he argues, a player is tasked with navigating each of these planes to some degree. Each of these planes also accrue their fair share of contention and debate but one omission I'm most concerned with here is the plane(s) of the player. Beyond the terminal point where the mediated plane encounters the player we find the perceptual, emotional, ethical, philosophical, psychological, cultural, social, political planes as well as the ego and performative impulses that are omitted from Nitsche's model. All of these are rich areas of study have been taken up by scholars and researchers In addition to those mentioned in this work, Noah Warpdrip-Fruin's book *Expressive Processing*, for example, focuses on the engaging with the complex emotive processes and systems of games (2009).Ken McAllister's has looked at power and the political influence of games in both *Game Work* as well as his in *Gaming Matters* which he co-authored with Judd Ruggill (2004).In *Games of Empire,* Nick Dyer-Witheford and Greig de Peuter implicate computer games and the military-entertainment industry (2009). Regarding

the psychology of games, Jamie Madigan has been among the most vocal observers of player behavior particularly that of deindividuation, a state where players become more susceptible to cues and suggestions made by other players and the game environment (6). This persuasive power of place will be revisited in the conclusion of this work.

Sense of Place in Computer Games and Digitally Mediated Spaces

To help in reflecting on sense of place within virtual spaces, the following framework is comprised of the elements and qualities fundamental to sense of place. Because the phenomenological method is one of bracketing off experience into discernible components, the framework offers a strategy for parsing out these fundamentals. It's important to keep in mind that the purpose for this reduction is to set aside agendas and preconceptions of the object or happening being analyzed. Once the network of elements has been taken apart, each part can

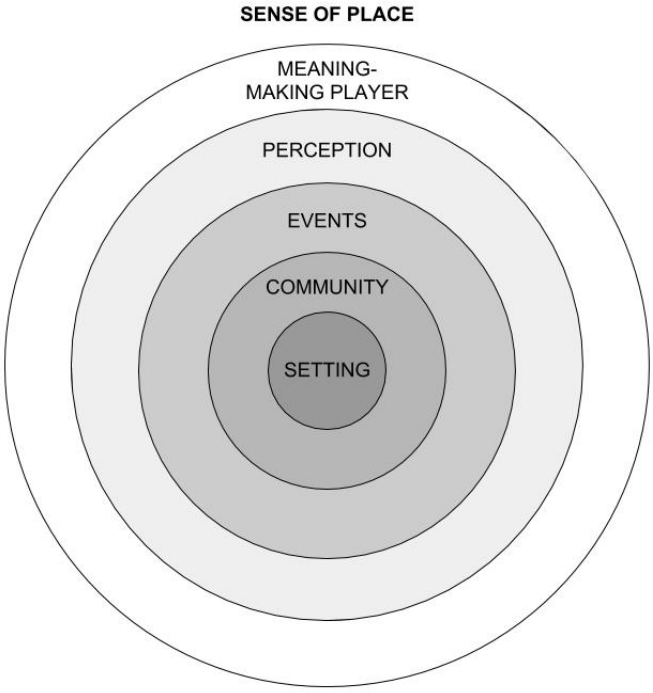

Figure 1: Model for Sense of Place

then be reflected upon before reattaching each part to one another. The recombined elements can, in turn, be considered and evaluated. The categorical descriptions below are followed by a brief description of where each might be found within computer games.

The simple illustration above visualizes the overlapping layers of experience that constitute a sense of place. Each concentric circle indicates those experiences and relationships that are fundamental to a sense of place. In conceptualizing this graph, it occasionally seemed that these layers are interchangeable and the relationships between them can waver and strengthen. While this is true, this observation also indicated a premature concern with the relationships and that a proper "bracketing off" of the elements had not yet occurred.

Setting: As described by Relph, the "spirit of place in its landscape" (30). As I will argue in the next chapter, play is a form of conscious place-making that can conform to the setting or subvert it entirely. Unlike freeform imaginative play, however, computer game play is typically confined not only by the environment but by its underlying structures in both computer code and rules. Forms of emergent play where the player pushes against the affordances of these structures are still confined within the game space.

According to Gordon Calleja, players internalize cognitive maps and develop their ability to navigate the familiar space, transforming it from conceptual to inhabited space (*In-Game* 86–7). Stronger sense of inhabitation of the spaces lead to the space becoming part of the player's immediate surroundings (87). "Cognitive maps of the area (unfamiliar) are built on the basis of chains of landmarks and recognizable routes" (87). This is similar to how, according to a Tuanian approach, "space becomes place." Players are able to compromise the setting by superimposing their own surfaces and behaviors onto these codes and rules by implementing modifications. Tactical media activists, for example, use modifications to subvert the game

setting as a way of intervening in place. These modifications are typically user-created and are discussed in the conclusion of this project.

While landscape is important for most contemporary open-world games, not all games rely on landscape to convey scale, orientation, or a sense of place. Those with vast virtual settings like those found in the fantasy game *Skyrim* (Bethesda Softworks 2011) for example, ask that players spend time to appreciate their surroundings. Thick forests of evergreens invite exploration and efforts are often rewarded with a cave to explore or a shrine to pillage. Interactive objects are placed all about this environment to simulate the player's ability to leave a mark on the space. In *Minecraft*, for example, nearly every object in the gamespace can be deconstructed into its components - trees can made into wood planks, which can be turned into a door, which can be returned to its initial tree state. In this dominionist utopia, every "unit of setting" is a resource to be exploited. Placemaking in *Minecraft* is intimately tied up with the setting and one's ability to transform the world's infinite supply of resources into place.

Objects*:* In open-world games, the ability to manipulate and create objects within the game are important elements. Nick Yee describes how these actions help foster "collaboration scenarios of an entirely entrepreneurial nature" with "all non-basic goods in the environment (clothing, pharmaceuticals, etc.) being created by players (190). Although there are numerous definitions of sense of place, location is among the most consistently included facet of place and is also fundamental to a sense of place. Although a locale can be reduced to its formal qualities - a set of coordinates or a physical structure - this is unlikely to be the information that is recalled when thinking about place. When we recall place, our sense of place helps compose the setting, an arrangement of objects perhaps, a happening within that setting, and others into a theater of meaning. While place is rooted in experience, sense of place is only loosely tethered to the real.

Community: Community in this framework is constituted by the social and cultural worlds that affect perception. These social spaces, according to Lefebvre, are where communities act out culture in a process that reconstitutes and reaffirms spatialized practices (117). In the formation of the habitus, a community of practice informs the setting with meaning. Others may or may not develop a sense of place depending on their attitudes towards the setting, practices, and others. The point should be made that the "others" of this community can be at-hand, distant, and even imaginary. It is through and for others that events are organized and made real.

A stage without actors is simply a setting and a house without inhabitants is not a home. In addition to setting, a community of others is important to a sense of place. Unconscious objects cannot contribute or derive meaning from a setting. The laptop on which this is written has no conscious relationship to desk nor to the signs appearing on the screen. Computer games involve a community of players. Multiplayer games without players are uncanny ghost towns that hint at past activities taking place. These players may interact or play in isolation but there is always a community involved or anticipated. In a single-player open world game such as *Skyrim,* the player is implicitly involved in a network of other *Skyrim* players that may only be revealed by looking up playthroughs, watching videos, discussing the game in forums, or sharing screen captures from the game. Popularity of the game, which is indicative of the community's expectations, hopes, and ambivalences, can be seen in advertising and social media. This includes alpha and beta-stage testing where small sets of players are given early access to a game to help locate bugs, test hardware configurations. These pre-release stages are crucial for forming a subset of players who are perceived to have authority and an expertise that privileges them to early access rights.

Events: These are the temporally grounded actions and happenings that not only

construct a game's narrative sense but also punctuate place with significance (Juul, 2001). "Happenings," described Allan Kaprow, "are events that, put simply, happen…They exist for a single performance, or only a few, and are gone forever as new ones take their place" (85). Happenings can be experienced individually or with others. In either case, an act of emplacement incorporates one into the setting and the community if either or both are at-hand. When solitary, the happening involves the player imparting values into the space to make place. This results in an event that, for the player, is significant enough to be shared with others, thus incorporating the social sphere into the happening. In computer games, these moments might be insignificant and short-lived. These happenings, as will be detailed in the third chapter, are momentous only when captured as evidence that that moment did indeed occur. Happenings occur within places, gathering people who are familiar to one another and others who are attracted to the place. These newcomers may not yet have a sense of place. In being drawn to the happening, they are actively emplacing themselves to procure a sense of place. Happenings occur often in play and quite frequently in computer games. In play, a happening can be rolling down a hill or chasing others around the playground.

For Lefebvre, play was a crucial part of spatial practice. "Release of [playful] energy always gives rise to an effect," he argued, "to damage, to a change in reality. It modifies space or generates a new space" (177). These changes are the actions and happenings that create place. The following chapter further elaborates on playful events and how computer games, as objects of play, foster a sense of place.

Perception*:* Our perceptions are those channels through which sensory information is conveyed to the perceiver. Sensitive to the slightest micromovements of the human face, our vision can nonetheless fail to see the most prominent features of the lifeworld if not relevant to

our experience (Penton-Voak, et al. 2006). Generally speaking, the phenomenological approach countermands the positivist position which views perception as the threshold to universal truths. More specifically, a media geography of computer game experience finds Merleau-Ponty's positioning of the body as medium to be most compelling. For Merleau-Ponty, the embodied experience was one made up of sensations so intimately entwined, that it is impossible to discern one individual sense from another (137).

Rather than imparting the objective truths of the world, perception enables the perceiver to make meaning of it instead. Humanistic psychologist Charles P. Chen notes that the pursuit of meaning is fundamental to the human experience and, as such, we are uniquely capable of producing meaning from experience (321). Our perceptions—indeed our very reality, according to Chen—are constructed through these experiences with the world. This recursive relationship between meaning, perception, and subjective reality, is the heart of the phenomenological perspective and the heart of this project.

Regarding computer games, Timothy Crick has likewise positioned the player's body as the primary interface, arguing that, "roaming a virtual game world is a fully embodied, sensuous, carnal activity" (267). This is not to say that game players experience these worlds in a whitewash of bodily sensations. Results from an experimental psychology study out of Duke University indicates that game players with substantial experience with fast-paced, action-oriented games have been found to be better capable of multisensory cognition and integration (Donohue, et al. 2010). Yet computer games don't stimulate the entire sensorium. Taste and smell are (at least at the time of this writing) still missing from the gamut of sensations stoked by computer game play. While Crick's analysis draws from Merleau-Ponty, his argument still privileges the image and how various forms of information made visual through the interface

inform the embodied experience (264). Can the embodied experience be fully claimed without the full employment of the sense? This project does not aim to answer that question. But this valuation of imagery and the visual is critical for how computer games inspire meaning from players and users, as will be seen in the third chapter.

Meaning-Making Player: Ultimately, it is the player who experiences a sense of place in the computer game. Translated through the body, the player's perceptions of events and happenings that occur within the gamespace are engaged in a processual feedback loop of action and reaction. In this way, the game primes the interested but unengaged "user" to become an intentional player. As an intentional being, the typical player will direct her energies to the needs of the gamespace. Rescue the princess. Escape the island. Defeat the boss. This engaged and intentional player may not necessarily acquire a sense of place, however. What is required is the sharing of intents, anticipations, successes and failures with a larger community. Events of the game become significant and meaningful as the player performs in ways that are acceptable or disapproved by others. Affirmed by the community, the player continues to pursue those activities and behaviors that are culturally reaffirmed. Sense of place therefore is nurtured along with the identity of the player, both developing together through experience and memory. "Places," according to Janet Donohoe, "inform a kind of body memory that can be reawakened if we return to those places, or that characterize our interactions within other places" (vii). Anyone who has returned to play a favorite game after some time away knows the sensation of "body memory" and how our dormant anticipations, intentions, and connections with the game are reawakened as if we had played it only last week.

As with all places, setting is important to the game place. In open-world games like the ones discussed throughout this project, setting is often more interesting than the game itself! But

what about a game like *Dwarf Fortress* (Bay 12 Games 2006) where the birds-eye view landscapes are represented by ASCII characters? The expansive world of this game offers exploration and all the other trappings of more visually realistic virtual spaces. What about *Tetris* and its never-ending cascade of puzzle pieces? For many, a sense of place is just as authentic as those conquering the lands of *Legend of Zelda: Breath of the Wild* or *Witcher 3: The Wild Hunt* (CD Projekt Red 2015). How about a text-based multi-user dungeon (MUD), where the game might be devoid of both narrative and graphics? The landscape and objects within a gamespace are, in other words, nice accoutrements but are not necessary for games in general.

Omissions: Before concluding this chapter, a few words should be said regarding several concepts omitted from this model. While not introduced as explicit categories, *identity*, *performance*, and *time* are all significant in this project and will emerge through the interchanges between the explicit categories. It should immediately be evident that these concepts are incorporated in the above categories or emerge from the point of convergence between them.

Identity is not only an indicator of the biological, psychological, and social imperatives one possesses, but also embodies the values that are important to Being. Identification with certain outlooks, behaviors, and ideals is crucial to finding one's way to a larger community of practice. With regard to games, it has been argued that identity formation within digital spaces is complex and is more influenced by our real-world experiences rather than those we have online (see also Yee 2014). Identity is exemplified by how one acts within a larger social context. It is our sense of place, in other words, that resonates throughout the entire meaning-making process, ultimately informing our identification with all of its components.

On the other hand, games engineered to promote communal identity are defined to such a degree that communities behave in ways unanticipated by developers (as also noted by

Steinkuehler and Williams 2006). These identity-based communities, argued Judith Butler, create "limits that identity-based groups shape for themselves; taking up a space is an act of empowerment but immediately becomes a limit" (2013). David Myers had said as much in his formal analysis of social play. "The primary function of computer game social play," he argues, "is to control and deny the experience of the self. That is, social play tends to require, as does the simulation, a common set of rules and, correspondingly, a predetermined and fixed set of object value relationships" (126). In this way, identity strengthens our bond with the landscape, others, and the everyday. Because identify is the site of overlap with all the categories, it would not make for a suitable category in and of itself. Instead, identity will be discussed as proof positive of one's intentional pursuit of sense of place.

Performance: It is through performance that one reveals a sense of place or lack thereof. Dramaturgically speaking, the performer engages with or disengages from the actions and happenings within a setting. Other performers occupy the setting. Referring to the space where the social performer acts, Goffman described this public place as the "front region" (107). This region is where roles are externalized and played out both in roleplaying as well as real life.

An audience of Others observe and assess the events unfold before them. Although performance is not a distinct category, it is crucial to reveal the intentionality of the player. "When an individual plays a part," states Goffman, "he implicitly requests his observers to take seriously the impression that is fostered before them" (17). In a computer game, my confidence and acumen are made manifest in my performance. My inability to adequately play most games, for example, is demonstrated in a "poor performance." On the other hand, a good performance is more likely to be proudly shared with others that may not have been present to witness the performance first-hand. High score rankings are examples of how some games

measure performance.

Performance complicates the model in that it is unreliable as a means to uncover authentic experience. In the "back regions" described by Goffman's theory for example, the performer may return to a space off stage, "where the impression fostered by the performance is knowingly contradicted as a matter of course" (112). In these back regions, the player's motivations are reflexively monitored and checked against the setting. Performance, then, is a quality of meaning making in response to community, events, and the setting. Because of the numerous "regions" of performativity, considering performance as a distinct category makes the bracketing-off of experience more cumbersome.

Time: As I've discussed, a communally held sense of place emerges over the course of time as events become ingrained into the everyday. Memory is how one orients themselves within historical contexts of which the social and cultural are recalled and assembled into a cohesive narrative. In this way, memory—as the manifestation of time in place—is crucial to the sense of place but vulnerable to translation by both the beholder and others who share those memories. An intersubjective sense of place is one where these memories are unique to each individual yet share common qualities rooted in a specific time and setting.

With regard to computer games, time is especially complicated by the performative as well as how time is represented within the setting. Michael Nitsche's spatialized model of game experience, for example, incorporates "traces of memory" as a component of place-making (198). In Nitsche's summation, these memories are limited to the performed, recorded moments that are shared with others. For Nitsche, machinima (the use of video games to create short films), was one way to make place. With the development of live-streaming, performance is preserved and distributed to an even wider audience (Anderson 2017). Time is further

complicated in computer games where the clock is especially unreliable and, according to Manovich, is subordinate to the space of the game (213). Day/night cycles are the most common method of simulating time within open-world games, for example, but are significantly truncated compared to those of a world orchestrated around a 24-hour cycle. As I describe in the third chapter, time is also a component of the event captured by the in-game photographer as an act of performing Being-in-the-world.

In this chapter, I have attempted to survey a corpus of theory of space and place, as well as sense of place, to produce a model that can be used for the remainder of the project. Reviewing how space and place have been handled over the last century helps to explain how difficult the concepts are to define. The foundation set by Lefebvre, Heidegger, and De Certeau has since been scrutinized, with claims that what they were *truly* discussing was place rather than space (Merrifield 1993; Cresswell 2002; Malpas 2012). The additional benefit is that, in better understanding place and space, we can better understand why game studies has reflected this difficulty. One of the more prominent constants throughout has been a favoring of the phenomenological method to help articulate space and place. This has presented an equally arduous task for this project. Phenomenology is not an exact science, as Heidegger once hoped it would be, but a metaphysical approach to better understanding the nuances and affects that permeate human experience. Despite these ambiguities, place continues to be an ongoing interdisciplinary concern, especially given the attention given to geospatial data of late. The final chapter will discuss this phenomenon in greater detail.

The next chapter, however, takes a more materially-grounded route. Looking at toys and games, I examine how the phenomenon of place and placemaking has been evidenced throughout the history of play. As illustrated throughout this history, a player's sense of place is

evidence of the player's desire to impart her will onto her surroundings. In playing with toys and games, this world becomes miniaturized, accessible, and vulnerable to our manipulation. For the player, every game is a chance to discover the genius loci that exists only in the imagination of the child, made manifest through the toy. Computer games are only the latest iteration of this phenomenon, one that I will now speak to.

Chapter 2: Dollhouses and Wargames: Play as Placemaking and Toys

Entering the public sphere as a pop-culture phenomenon, video game arcades would become distinct places of socialization, competition, and exploration. Blanketed in a bludgeoning din of flashing lights and cascading sounds, players were drawn into these cavernous arenas to conquer games both familiar and unknown. Everywhere one turned, exciting things were *happening.* While the crackling aesthetics of the arcade certainly made the games within more enticing, a venture within promised the chance to position oneself within a community of other players. High score lists included on the screens of many games were the measure by which competitive players eked out a reputation amongst peers known and unknown. A two-player matchup on games like *Pac-Man* (Namco 1980) would carry all the tension of a Western gunfight as players watched opponents make their way around the neon maze. Surrounding a nearby *Frogger* (Konami 1981) cabinet, a wall of onlookers might have been found watching a neighborhood kid take down the reigning champion. Within the place of the arcade, more places. Meanwhile, living room televisions were being supplanted by strange boxes tethered to joystick controllers. Videogame consoles like the Atari 2600 and the Odyssey, crouched beneath the family television, would become thresholds into new realms for millions of American families over the course of the 1980s. The arena had entered the domestic sphere, bringing with it all the noise, tension, and raucous activity that was taking place at the arcade. "As with conventional television," describe Bolter and Grusin, "the home video game becomes the focus of the room's attention and redefines the social space" (102). There, in the crucible of the American family, was the machine that would transform the site of respite into one of danger and challenge. With each cartridge inserted into this machine, a new place emerged to carry players off.

Following the previous chapter's theoretical framework of sense of place in computer games, this chapter reaches back through time to reveal a history of placemaking through play and toys. Many historical accounts of computer games have focused on the technological evolution of the medium, various platforms that have spurred these developments, as well as the individuals and corporations behind them (Donovan 2010; King 2002; Wolf 2008; Wolf 2012). These accounts typically focus on advances in technology, prominent figures whose contributions propelled the industry, and the landmark works that have proven to be significant. At times the history I offer here will echo these accounts. With all the drama found in the arcade, these histories describe the unprecedented ascendance of and subsequent fall of the industry. The focus of this version, however, is to highlight the motivations of developers, how their work demonstrates their desire for a sense of place, and how these works have collectively established the computer game medium as one that has thrived on its ability to provide players with a sense of place. A theoretical framework of how these works compel players through their sense of place will be discussed throughout subsequent chapters. This chapter traces these histories but focuses on that sense of fellowship and discovery felt in those arcades and living rooms. Although computer games are certainly the most culturally significant and lucrative form of digital entertainment, I instead discuss the medium as only the latest in a long lineage of toys.

As I'll describe, toys have historically channeled anatopistic places of play. A sense of place, as we recall, is fashioned through a relationship with one's setting and community, as well as the activities shared between them. For children, these relationships not only develop with parents but with objects of enjoyment such as toys (Proshansky et al. 57) and secret places (Sobel 8). Computer games, as toys that transport players into place, are especially powerful in the way they manage play through various mechanics, rhetorics, and programmatic codes. To

adequately address computer games as toys, I must therefore first consider the role of play and the imagination as it relates to the development of the player's sense of place. Grounding my theory of digital place in this way is necessary for maintaining a focus on the subjectivity of emergent play. As I will discuss, the imperative to play is one that has traditionally usurped prescribed social norms. Nowhere is this more evident than in the history of toy and game development.

This chapter will demonstrate how the history of computer games is one of people and communities seeking a sense of place from the digital spaces they participate with. Computer games are inherently social places and through the communities formed around computer games, anatopistic places are formed. To demonstrate this, I'll survey a well-tracked tradition of wargames and table-top role-playing games. As I'll describe, these works channeled the imaginations of early hackers which, in turn, developed computer games as places that were not found elsewhere. These earliest computer game designers disregarded the austere purposes of early mainframe computers much in the same way ancient Grecian children absconded religious totems for playful purposes. With limited access and shared resources, the designer-player community that developed around games did so imbued with the sense of place that comes from a community that is actively fostering an emergent subculture. Through these subcultures, anatopistic places emerge as (relatively) safe havens.

Play and place are closely related, folding over one another constantly as the player—particularly one beholden to a strong imagination—constantly tears down and rebuilds the place in which she plays. A taxonomy of game pleasures constructed by Robin Hunicke, Marc LeBlan, and Robert Zubek categorizes eight ways that games compel players ("MDA"). Each of these categories—sensation, fantasy, narrative, challenge, fellowship, discovery, expression, and

submission—contributes to a sense of place. So how do games accomplish this? Looking at the above taxonomy, the majority of the categories are subjective or only external to the player in a small measure. While fantasy and narrative can be composed through setting and story, it is much more difficult to anticipate a player's desire to subject herself to the game's parameters or pursue comradery. In this chapter, I demonstrate that toys and games stoke the placemaking power of play. It isn't the dollhouse, nor the basketball, nor the PlayStation that produces a sense of place but the player herself. Therefore, Greg Costikyan argues, game pleasures such as those listed are so subjective that focusing on them too much during the creation of a game makes the design impossible (32).

To better understand the phenomenon of computer game experience as a conscious act of placemaking, we need to first consider imaginative play and how toys act as a channel for these activities. Using the example of the urban playground, I will demonstrate how play invokes setting, community, and meaning from within the player who in turn projects this sense of place onto the world through performance. After this, I will then back in time to show how play with objects has been a performative activity driven by the child's sense of place. Moving through the lineage of toys, I will then describe how this sense of place was articulated through the playful subversion of practical, utilitarian objects like the dollhouse and wargame. From here, it's an easy step sideways to tabletop role playing games, the immediate predecessor to the computer game. So as not to belabor the historical aspect of this project, this timeline will intentionally be cordoned off with the works of id Software. Not only do their offerings *Wolfenstein* and *DOOM* posit landmark in the technological development of computer games, they pronounce a shift in the player's ability to articulate a sense of place through the very creation of place. Before appreciating this in digital spaces, however, we must first look at imagined places.

To fully understand how computer games evoke a sense of place, I argue that it's important to perceive them along a lineage of toys, games, and other playful activities. This chapter focuses on those forms of play where the sense of place is derived from within and performed in the world. This helps highlight the ways games intentionally evoke sense of place – a phenomenon details in the remainder of the project. It may be helpful here to remind the reader that, according to Tuan, place proceeds space. What's more, place is powerful enough to impose upon even the most stalwart of spaces. As we'll see, toys have channeled the child's sense of place for much longer than toys have been produced.

Imaginative Play and the Transformation of Space

From an early age, the imagination shapes and motivates fantasy. The imaginary play of children highlights the intensity with which players are transported to other lands, transforming themselves into characters born of these fantastic worlds. While there, the physical, material concerns of her "real" world recede into the background. While the environment in which one plays may be an important component of play, it is not crucial to our sense of place. According to David Sobel, the setting of place is helpful for recall of special places as adults (8). Given the power of play in a child's life, this is not surprising. Play historian Howard Chudakoff (2008) describes how the setting and the site of play is one of the "most basic factors in children's abilities to assert their own culture" (4). As I'll describe later, this is evidenced in the way children in urban areas reveal playgrounds in the most inhospitable spaces like alleys and gutters. Instead, it is the imagination, instead, that children infuse their creative world into their physical environment. Citing noted psychologist L.S. Vygotsky, Signe Juhl Møller describes how the imagination is fueled by the social needs of the child (324). What's more, imaginative forms of

play allow the child to transgress the boundaries and limitations of their "existing play scenarios" (327). The playful acts of the child not only serve the purpose of remediating the world but also as a way of imprinting here presence upon a strange and often hostile environment.

Transforming the real world, the child reconfigures her surroundings into a form that conforms to her needs and is more comprehensible. As early play scholar Roger Caillois described, "play tends to remove the very nature of the mysterious" (4). According to Caillois, play is an inherent method of conforming chaos and uncertainty into a more manageable structure (13). His theory of play positioned *paidia*, the carefree, impulsive, and sometimes destructive form of play on the end of a spectrum that moved towards more ludic forms of play that incorporated rules and structures most often emerging in adolescence.

Given that children's play often mimics the behaviors and activities of adults, it is easy to assume that our prehistoric ancestors likewise played in this way. This is a dangerous assumption as children are social entities, shaped and impacted by their environment and home spaces as well as the "imperial" order enforced by adults and the subcultures created with other children (Cahan et al. 194–202). To address the social contexts of children in full is well beyond the scope of this project but we must be mindful of the intensity of the player's social space form a very early age. Although often enjoyed as a solitary adventure, the imaginary journeys of children also involve others. Social forms of imaginative play typically would take place—as they do today—in areas devoid of the controlling adult presence. Without a watchful eye present, children are more empowered to image and create places distinct from the world inhabited by their parents.

To demonstrate, we can look at how children play in spaces not designed to be used in such a way. Transgressive play become more pronounced as the places in which children play

began to disintegrate through the late 19th century. As the population densities of urban areas exploded, the playground replaced the open field to become the designated zone for play. Any time spent at a playground will demonstrate, however, that these play places can hardly contain the imagination of the child. "A playground is a pure play context," describes Miguel Sicart, "a separated space devoid of any other functionality than being a context for playing" (7). This creative act of place-making, Møller describes, instills in the child a sense that, as "co-creator," she is not only contributing to her surrounding but controlling it as well (322). Play in this sense is the translation of the imagination performed through action. For the child, this entails the reconfiguration of an objective space that is posed to be stubbornly resistant to her desires. Chudakoff reminds us here that, for children eager to carve out their position, play can "take place anywhere" (4). This penchant for creating a subjectively meaningful place through play has been found to transgress the physical limitations of those spaces where play occurs. As we'll see, these places of play are increasingly anatopistic, or out of place, in the worlds of productive and "responsible" adults.

For children who were running out of places to play, this entailed the invention of new places. If one's sense of place emanates from a feeling of engaging with a location and the community therein, this took the form of emergent play in locations around the city. Carie Green ascribes this to the child's sense of place arising out of a sense of stewardship to places (9). Alleyways, streets, and sidewalks canvases upon which a dizzying array of games were invented, many of which survive to this day. The struggle to maintain colonization of these parcels of asphalt became increasingly dangerous, however, as the world drew closer to war on a global scale and anxious parents corralled their children indoors or into yards and other sanctioned play spaces. While Green notes that these "over structured environments…may interfere with children

developing their own initiative and relationship with place" (27) we must also trust play to act as an agent of intervention with any given order. Just as the play of children often imitates the activity of the adults in their lives, so too would their struggle for a sense of place echo the emergence of the postmodern in Western society. The cross-pollination of cultures, while nurturing a sense of adventure in children, created no small measure of uncertainty among populations suddenly exposed to unprecedented violence and the unfamiliarity of other peoples.

As the 20th century lurched towards global war, the desire to make sense of a no longer certain existence on such an enormous scale was palpable and evidenced in all forms of creativity, including play. Johann Huizinga was among the first play theorists to argue that play was crucial for beings to make sense of the world arguing that "play creates order, is order" (10). Although anyone who has spent time with children might argue that a child's "order" smells an awful lot like chaos, the crucial point is that even disruption is necessary for organizing the world to the child. Play offers a safe place for the child to express herself, to disrupt the structure—the space—of a world that yet is not understood. Introducing his now famous model of the "magic circle," the Dutch scholar would argue that the most important characteristic of play is its spatial separation from ordinary life" (19). To inhabit this "hallowed spot" of play was increasingly becoming for difficult for the children of Huizinga's time, a trend that would escalate throughout the 20th century. The demand for living space and automobiles not only curbed demand for playground development, those that existed were slowly abandoned due to safety concerns. This migration indoors was met by an increased demand of toys that were small and portable. As I'll now describe, these toys embodied the subversion of children, acting as lightning rods for their capacity to make anatopistic places of play.

Dollhouses and Wargames

Up until the last hundred years or so, manufactured toys were a scarce luxury enjoyed primarily by the children of the affluent. Many of the toys we find today are in fact derived from objects of more practical purposes. Throughout the known history of toys, form follows function and play is typically preceded by more austere activities. Even those not overtly connected to military or religious life, such as tops, blocks, and balls, continue to be objects designed to promote desired attributes of the "proper" child. As would be expected, however, children have always been quick to transform these culturally significant objects through the imagination. This section focuses on the history of toys leading up to the mid-20th century. Admittedly, this short section is inadequate in discussing every individual toy and playful phenomenon that has fostered the development of place. Focusing on a few significant toys—dolls, dollhouses, and wargames—demonstrate how in play, place always precedes space. Furthermore, when space successfully delimits place and play, it is only for a short period (though it probably never truly overtakes place entirely).

The toys of prehistoric children were oftentimes objects liberated from religious traditions, physical activities derived from military training exercises, and other activities aligned with socially acceptable norms. Among these early toys, funereal totems and religious talismans are among the most ubiquitous with the earliest dating back to 2100–2000 B.C. Whether or not they were intended as playthings was once a matter of dispute, according to toy scholar Antonia Fraser (8). Fraser describes how, due to the destructive toll of time and wear-and-tear, it has been difficult to determine why and when children began using religious figures as playthings. What is more certain, however, is that the ritualizing significance of these objects is maintained even after being transformed from spiritual totem to plaything (11). As is often the case,

however, the play of children often usurps these aims. Watching a child transform any everyday object into a starship or creature is to witness their insatiable capacity for imaginary play. The object-as-toy becomes a device for teleporting the player into another realm almost entirely fabricated by the imagination. Even objects of social and cultural significance are not safe from the imaginations of children.

For children of limited fortune, dolls and totems were fashioned from corn cobs, sticks, and other objects of negligible value. Play with toys was not always limited to children either. In ancient Greece, for example, toy play as a rite of spring was enjoyed by adult and child alike. Together they would go door to door with small animal totems to call others to join in the welcoming of warmer months. In this and other ways, the youths of early Western civilization were very much a part of the religious life of the time (Ariès 68). These fanciful traditions required little skill or imagination, however, and it wasn't until the child grew older that riskier forms of play were embraced. Physical sports would demand the player take more risks as well as adopting a more competitive spirit both of which benefit the military of the time.

The early 17th century saw a dramatic shift in how the public viewed play and games. Children of affluence, whose forms of play were set apart from the more sophisticated leisurely activities enjoyed by the wealthy, also found ways to assert their sense of place through play. Described by play historian Phillipe Ariès, the well-recorded life of young Louis XIII illustrates how games were becoming morally suspect as the concern for childhood innocence increased (82). While still a young prince, Louis was told the same fairy stories exchanged by adults, as an adult he'd find that those same stories were too simple and crude for the tastes of his mature peers (Fraser 95). The need to preserve this morality of children was coupled with the need to educate them. As such, there developed a distinction between "good" and "bad" games that

would typically fall along distinctions of class. One of the elements of games that raised the ire of moral purists was that of chance, which became viewed as dangerous and sinful. This is confirmed by Antonia Fraser who, in *A History of Toys*, describes how the toys of the pure invited effort and learning (11). There also emerged the distinction between the play of affluent adults and that of their children. Up until the 18th century, play continued to be centered on toys and board games while sports offered more physically demanding forms of play.

Fraser's work, while dated, is important for understanding how significant certain toys were for evoking a sense of place. The 18th century marked a boom in the manufacturing of dollhouses, miniaturized replications of interior space that would compel children to play indoors in the imaginative ways they had done outside. As such they are among the first toys in recorded history that provided a physical space into which children could make place. Influenced by the popular curio cabinets and Nuremberg kitchens of Medieval Europe, the earliest dollhouses were not only pedagogical places but also another method of displaying the family's affluence. These elaborate structures reflected not only the architecture of the period but the aesthetics and bric-a-brac organization of the lavishly ornamented yet well-manicured home (Fraser 77).

According to Fraser, the Dutch and German dollhouses of the Renaissance were feasts for the eyes rather than the imagination (82). Popular in Germany and Holland for at least two centuries prior, the dollhouse was popularized in Europe as a method of instructing young girls in methods of proper housekeeping (Fraser 82). Dollhouses provided parents, teachers, and tutors with models to train girls in the expectations associated with their gender. Instead of a vessel into which young girls could pour their imaginations, these spaces therefore reinforced the roles and responsibilities of the housekeeper. Within these opulent places, young girls practiced orchestrating the household activities with as much care and attention detail as was expected of

them in adulthood. Minuscule silverware sets were to be appropriately set on tables draped in fine linen, laden with meals nesting on finely crafted platters and trays. Crafters of fine furniture such as Chippendale and Sheraton found new markets in the creation of smaller version of their full-sized pieces (96). Because the value of these diminutive objects was treated with as much care as their properly sized counterparts, the child was expected to handle them with just as much care and trepidation.

Perhaps it was because of this familiarity, the simulation of banal workaday obligations already born by the child, that these miniature houses proved to be inadequate in resisting the power of play. As these "baby houses" became more popular throughout Europe in the 18th century and crafters of less renown entered the market, the child's sense of responsibility began to be subverted by their imagination. Instead of entire houses, single rooms were also created. Like the Nuremberg kitchens, these mimicked the spaces familiar to children but began to shed the practical applications of their predecessors. In France, for example, "little cardboard cabinets" were being advertised as toys where "veritable history takes place" (qtd. in Fraser 99). While maintaining a semblance of the refined tasted of the well off, these tiny places became settings for imaginary dramas and outlets for imaginary lifestyles. As the imaginations of players began to take over, however, the walls of these tiny places began to falter in containing them.

As Europe began to populate the North American continent in the 17th and 18th century, the play of children also began to expand beyond the walls of the dollhouses that emigrated with them. Some of the earliest dollhouse appeared in the Dutch settlement of New Amsterdam in what would soon become the United States. If imaginations had only begun to seep into the walls of Europe at this time, it must certainly have saturated them in the New World. The coupled spirit of adventure with the struggle for survival impacted the child of the New World in

unprecedented ways. Always intimately connected to play, combat and military scenarios would continue to influence children in this exotic continent. Escalating tensions between colonists, an overreaching monarchy, and indigenous peoples would further expose children to the military lifestyle and the demands of communities struggling to survive.

Play forms that were brought to the colonies enabled children of the time to make sense of the New World. Dolls and dollhouses provide us with some of the earliest examples of toys being utilized by children in various forms of transgressive play. Mary Flanagan elaborates on this further in *Critical Play,* highlighting how play associated with girls was more often the subject of scorn and ridicule than activities more oriented towards males. Flanagan's theory of critical play focuses on female-oriented play, specifically on how dolls were used to assert the identity of young girls. Through these toys, girls could "unplay," "re-dress," and "rewrite" more subversive roles for themselves through their dolls (33). As Flanagan describes, these forms of subversive play often took the shape of "'forbidden' or secret scenes, unfortunate scenarios" that situated dolls in what would be expected to be otherwise undesirable situations. Although Flanagan briefly mentions dollhouses and scrapbook house crafting, wherein children created home spaces using paper collages (28), the author overlooks how girls' environments affected their critical play. Dollhouses and other toys that attuned the child to the spaces of activity brought comfort to children through play forms like those considered by Flanagan to be critical. Although dollhouses had initially been utilized to educate young girls or showcase the decadent tastes of affluent adults, these miniaturized assemblages no longer served those purposes as imaginations took over. Subversive, imaginative play would be amplified by the increasing popularity of fairy tales and other fantastic narratives.

Surprisingly, it wasn't until the late 19th century that fantasy found favor with the general

population. Game design theorist Michael Saler describes how social, economic, and cultural circumstances nurtured the imaginary, played out in the literature of the period. As he describes, many of these works center around a separate world connected to yet distinct from that of our own. Barrie's Never Never Land and Carroll's Wonderland are a couple of the more exemplary models of fantasy worlds happened upon by children. Brian Sutton-Smith describes how this coupling of romanticism and the imaginary offered adult audiences a respite from the increasingly oppressive forces of modernity (152). These stories, which would in turn be read to children, would become acted out in the world. For Sutton-Smith, this period also witnessed the creation of toys that incorporated the romantic fantasies of this literature. Throughout the ages, manmade toys for children mimicked the tools and activities of adults. While the commercialization of toys continued to carry on this tradition, they also channeled the fantasies popularized by literary fantasy. Curiously enough, Sutton-Smith points out, this sudden increase in the popularity of toys moved play from the realm of the community to a significantly more isolated activity (155). Much like the dollhouses of earlier times, toys isolated children. This is not to say that children don't play with toys together of course. But children were more likely to play by themselves when there was a bevy of toys to choose from.

The commercialization of toys also exacerbated the distinctions between the play of boys and girls. For girls, dolls and dollhouses maintained the traditional expectations of dress and housekeeping that they would encounter throughout their lives. With regards to their modes of play, the sense of place for young girls of this period were therefore steeped in these expectations. Boys on the other hand, were targeted by manufacturers of toys and games thematically organized around war and competition. Another German export, the wargame had long been a staple for military training. Towards the end of the 19th century, however, wargames

were being used for entertainment in the United Kingdom (Peterson 3). In short time, wargames were being simplified, mass produced, and marketed to young American males. If the dollhouse informed girls' senses of place through codes of conduct according to the homestead, the wargame served the same purpose within the simulated theater of war.

Although games approximating military conflict have been around since prehistoric times and flourished in the Paper Age (Smith 7), the wargame distinguished itself during the late 1700s. Two of the more significant qualities of the wargame were the representations of wartime scenarios and the incorporation of different terrain types. To create a more dynamic and less abstract form of chess, Johann Christian Ludwig Hellwig provided his "Kriegsspiel" with interchangeable tiles upon which different terrain types could be placed (Peterson 5). Furthermore, because these terrain types were not fixed to the tiles, players could interpret their own scenarios. The Kriegsspiel went on to become exceedingly popular and inspired others to create variants with different rule sets. One variant created by Georg Leopold von Reiswitz introduced an element of randomization by including dice rolls as a game mechanic (Ewalt 40). During the years following World War II, however, commercial wargames took on a new significance. With the release of Avalon Hill's *Gettysburg* in 1958, the wargame took on a new mantle of simulating real-world scenarios (Peterson 15). The increasing demand for wargames during this period instantiated the emergence of more sophisticated play spaces. From hexagonal maps and cardboard chits arose games that included miniaturized forts and soldiers. Organizations formed around the country where wargame enthusiasts could gather to reenact historical battles or conjure up new battles set in fantastic, magical realms.

Just as literature and games had bisected class, toys now became instruments of training gender through place. To engage in what was perceived as gender-appropriate activity was to

know one's place. Sense of place, now intimately connected to these gendered toys, took on similar qualities as the places prescribed. This would continue in how videogame consoles would be marketed. Nintendo Entertainment Systems, for example, were sold in the boys' sections of department stores. The effects of this gendering of computer games remains. Some male players, still believing that the computer game is their place, are hostile towards female players who they feel impinge on their sense of place. For some time, this type of behavior was also evident in tabletop games, though this has been gradually improving.

Tabletop Game Communities

Across all historical accounts of the computer game, the common denominator is the invention of the table top role-playing game. As wargaming societies and clubs sprung up around the nation, communities formed around large battlegrounds of molded plasticine adorned with miniaturized trees and boulders. Medieval wargame settings eventually gave rise to fantasy narratives inspired by the lavish worlds of J.R.R. Tolkien's *Lord of the Rings* and C.S. Lewis' Narnia series. This transition most famously occurred in the basement of one Gary Gygax, who hosted a regular wargaming organization to escape the blistering winters of Lake Geneva, Wisconsin. The most famous product of this community was undoubtedly *Dungeons & Dragons,* a collaboration between Jeff Perren, Gygax, and Dave Arneson, published in 1974. Because there are several worthwhile histories of *Dungeons & Dragons* and the subsequent boom in tabletop role-playing games (RPGs), this project will shy away from retelling the story in detail. What I will briefly review, instead, is how this game participated in a tradition of collaborative game development that inspired early computer game developers. Considering this, *Dungeons & Dragons* and other RPGs not only imparted a sense of place as it pertains to collaborative story-

telling but also the sense of place that emerges from belonging to a strong community.

Simply put, tabletop role playing games such as *Dungeons & Dragons* entail an array of chance-based elements that are mitigated through a set of structures or rules. Both of these fundamental components are in turn interpreted through the players themselves and integrated into a loose adventure narrative. This process is guided by a game overseer typically referred to as a "game master" or "dungeon master" (DM) in the case of *Dungeons & Dragons.* This figure is responsible for coaxing players along the prescribed narrative while employing a library of rules and numerical charts. During a hallway encounter with a wandering ogre, for example, a player rolls a twenty-sided die to determine if her attack is successful. After consulting the information pertaining to the ogre and making some simple calculations, the DM reports that the ogre has been defeated. From this point, the player could decide to check the ogre's belongings for anything valuable, continue down the hall, or decide the risks are to great and leave the adventuring life behind altogether (likely to the bewilderment of the DM and other players).

Typical of this and other roleplaying games, the overseer of the game has a limited capacity to intervene in the narrative transpiring amongst the players. While there are certainly those that consider the rules to be concrete, this inflexibility is an adverse quality in a gamemaster. Acting as the arbiter of the rules, the ideal gamemaster recognizes that the rules are malleable and must be contextualized among the actions of the players, the environment, and the story being created between them. This structural flexibility allows the players some room to test the limits of the rules and the gamemaster, imparting their wills and desires onto the game. The proliferation of roleplaying games since the publication of *Dungeons & Dragons* is due, in part, to how players were inspired to recreate rulesets they had encountered in this and other games. More often than not, the playful desire for story marries well with the established rules of the

game. As players develop a stronger understanding of the rules, however, they uncover loopholes and ways to bend the structures of the game to their desires. Additionally, players demand more complex scenarios than existing rules accommodate. In turn, the rules of *Dungeons & Dragons* would expand to eventually accommodate additional mythos such as those found outside of Europe and other epochs of the real world.

Key to this expansion was the malleability of role-playing games' rulesets. Although games such as *Dungeons & Dragons* are somewhat notorious for the significant investment that complete library entails, many of the rule books are extraneous and unnecessary to participate in the game. Despite the exhaustive rules, tabletop role-playing games typically pointed out that the rules should ultimately serve the game but not at the expense of the game's enjoyment. In 1975, TSR published a supplement to *Dungeons & Dragons* entitled *Greyhawk* that offered guidance on how players could create their own adventures (Ewalt 95). Based on his own homebrew gaming sessions, this collection of guidelines reified a philosophy that role-playing games should be adjusted and manipulated as the players saw fit. Other rulesets such as Steve Jackson's *Generic Universal RolePlaying System* (GURPS) would take this philosophy to the extreme by whittling away themes and superfluous rules, further promoting players to create their own play structures. By uncoupling the player from the rules, allowing her to pick and choose which would be adhered to, the creators of tabletop RPGs were unwittingly establishing a philosophical approach to game playing and development—one that would be embraced further by those experimenting with the earliest computer games.

With *Dungeons & Dragons* and other RPG systems, players had the tools to create new places for groups of players. Standardized rule sets allowed those familiar with them to convene and pick up a game without necessarily knowing other players. Again, we find that setting, while

an attractive part of place, is marginal in comparison to the social quality and the happenings that take place. Groups of players could share a sense of place within any number of settings—the important thing was that they were doing so together. Because of the significance of these experiences, the desire to share these places grew. With the personal computer offering an easier method for managing the extensive rulesets of RPGs, game masters discovered a new tool for developing these places without having to micromanage their simulation. More importantly, the developing network that would become the World Wide Web enabled people to share these rulesets and even play together in virtual spaces. What was once a sense of place confined to a small group of players assembled in physical space could now be created and shared with a much larger audience.

Text Adventures and Mainframe Communities

Just before computers crept into the periphery of the public sphere, electronic toys were being developed by computer scientists. The first most recognized examples, *Tennis for Two* (1958) and *Spacewar!* (1962), both emerged from the leisure time of those with access to university computer labs. Each work used the limited capacity of their phosphor screens to represent delimited spaces in ways that were abstract yet recognizable to the player. Created by physicist William Higinbotham, *Tennis for Two* utilized an oscilloscope monitor to simulate the wind force and trajectory of a tennis ball between two player-controlled pillars (Donovan 9). Born from MIT's basement lab, *Spacewar!* pitted two players in ships trying to shoot each other out of the void. A recreated star field (extracted from actual star maps housed on the university's servers) surrounded a black hole center which possessed simulated gravity that affected the navigation of the ships. These aesthetically simple games were in fact wonderfully sophisticated

in their deployment of computational capacity to simulate physical movement.

As has been discussed, movement and navigation are fundamental to any sense of place. But when one's body, as the interface with the environment, is reduced to a vectored graphic, our reception to that environment is also reduced. It is important, however, to keep in mind how place and these games' developers sense of place—as well as understanding of complex theories pertaining to physical movement within space—were vital to their creation. Consider, for example, that these games were both created for two players. Not only was playing *Spacewar!* an event in witnessing a technological feat, it was done within a social setting comprised of others gathered around the PDP-1 terminal. Furthermore, that commitment to collaboration and building from each other's projects that was crucial to the success of board games and *Dungeons & Dragons* was also evidenced in the creation and subsequent development of these simple games. Although immensely popular within their cliques, *Spacewar!* and other games coming from this period were few and far between. Due to limited resources and access to computers, *Spacewar!* and *Tennis for Two* would serve as benchmarks, graphically speaking, for some time. This hardly slowed down the desire for games. The sense of place that these works inspired would ignite a phenomenon and would become even more pronounced with the development of text-based, interactive fiction in the 1970s.

Around the time *Dungeons & Dragons* was finding its way into college dormitories across the United States and in the United Kingdom, universities were allowing access to campus mainframe computers. For those who prioritized the strata of rules over the emergent narrative, the computer offered a new and exciting way to organize and enforce the mitigating structures of the game. On college campuses with access to mainframe computers, tinkerers and hobbyists recognized the machine to be an ideal arbiter of the rules. Many of the philosophical elements of

tabletop games to be picked up by some of the early game developers coming of age at this time would recognize the strength of computers was not only to handle the rules but, once connected to the global network of computers, projects could be shared with others. This section describes how many of these earliest games were developed to produce a sense of place with the same capacity of games like *Dungeons & Dragons.* The sense of place generated around *D&D* sessions of amateur and professional programmers, artists, writers, and designers were using computers to create fascinating works of their own with little to no interest in creating a lucrative game. Instead, these hobbyists were creating digital versions of their favorite fantasy and science-fiction worlds on the computer to share with one another. This community building aspect of early game developing seems like a harsh contrast to the legal battles of Atari and others. This comparison is even blunter when we think about how many of these developers were freely offering their code for others to use to create their own electronic visions. Although the fantasy themes dominate the avant-garde of computer games, it is the desire of their creators to provide places to gather and establish community and connections with others that was the primary fuel for their creation.

Since even room-sized mainframe computers were only capable of handling crude graphics, many early games relied upon text-based interfaces. Instead of sprites and vectors, these games relied on ASCII graphics to represent spaces. One of the first was Mike Mayfield's 1971 text-based *Star Trek.* Evoking the television series that ended its mission two years prior (whose creator, Gene Roddenberry, also pioneered an open-access media philosophy), this game featured simple star charts that would be navigated using keyboard commands. Mayfield's *Star Trek* would prove to be not only popular but highly influential. The simplicity of *Star Trek*, which Mayfield created in the BASIC programming language, was precisely what contributed to its widespread popularity. BASIC was simple yet featured many of the structures found in more robust languages at the time. Available to play on any connected mainframe

computer, *Star Trek* was also open-access and could be manipulated by anyone who had obtained a copy. Because the game was programmed in a much simpler language than others being employed, the game was instrumental in generating interest in computer programming. Numerous BASIC programming "how-to" books - many aimed at a younger audience – that were published soon thereafter included instructions on how to create one's own version of the *Star Trek* game. David Ahl and Mary Cole, for example, published *Super Star Trek,* a version that was given *Star Trek* producer Paramount's permission to use their property's name. Although simple, its influence would be tremendous, inspiring Doug Neubauer to develop a graphics-oriented version called *Star Raiders* for his employer Atari in 1979.

Founded by Nolan Bushnell and Ted Dabney in 1972, the Atari Corporation would introduce its enormously successful Atari Video Computer System (VCS) five years later. While several previously released products such as the Magnavox Odyssey had brought computer games into the living room, the Atari line of consoles improved on this in several ways. Although often overlooked in most historical accounts of computer games, *Night Driver* (1976) and *Star Raiders* (1979) were significant in that they provided a sense of movement through the player's first-person perspective. The former would position the player in the driver's seat (other versions anchored the vehicle to the bottom of the screen), navigating between weaving pylons and oncoming traffic. Available on the Atari home console, the impact *Star Raiders* had on early game development is criminally understated. Warren Spector, one of Origin Systems' developers, would recall a night at fellow *D&D* player Bruce Sterling's house, where the game enraptured a filled living room (King and Borland 64). As described in Brad King and John Borland, computer games would be played socially among the same people who had gathered to play tabletops RPGs (63–4). Unlike the narrative driven experience of *D&D,* however, the first-person computer game offered "more of an adventure, in which the player had direct control of a far more visceral experience" (65). Featuring a simple, generic sci-fi plot of galaxy-cleansing, *Star Raiders* (like many Atari titles of the time) relied on paratextual components to ground the players' imaginations. In addition to the artwork and manuals that accompanied most titles, *Star Raiders* also came with an additional keypad that extended the simulation of flight further into the living room. Although *Star Raiders* was not much more sophisticated

graphically than its predecessors, the interface mirrored many of those found in movies and television which only reinforced the feeling of being there. As described by Spector, the computer game as a social event only reinforced the satisfaction of the play experience.

Several years after the release of *Star Trek,* accomplished cave explorer Will Crowther would publish *Colossal Cave Adventure*, one of the first works of interactive fiction. This genre of text adventure is recognized by its more linear, narrative form. Using simple two-word combinations written in English, players interact with the game world, gather items, and solve the various puzzles scattered throughout. In *Colossal Cave Adventure,* players are free to roam and lose themselves in the underground catacombs. An avid spelunker, Crowther created the game to not only capture the awe of exploring Mammoth Cave, but also his love of *Dungeons and Dragons*. Most importantly, he created the text-based adventure was a gift to his daughters during the aftermath of a recent divorce. Working with Crowther, Don Woods would expand *Colossal Cave Adventure* in 1977, adding more of the fantasy elements that made the game so captivating. The influence of Crowther and Woods' project cannot be overstated. Countless developers would claim the work of Crowther and Woods had influenced their own, including Ken and Roberta Williams, founders of Sierra Online.

The 1980's would witness the development of numerous outstanding text adventures including Beam Software's *The Hobbit,* which featured the groundbreaking addition of non-player characters that behaved independently of the player. Arguably, no developer would have a greater presence in the world of interactive fiction than Infocom. A prolific publisher of text adventures, Infocom was formed after founders Marc Blanc and Dave Liebling played *Colossal Cave Adventure* in the late 1970s. While students at MIT, they set out to expand on Crowther's game*,* which was bouncing around academic mainframes during the late 1970s. Named for the term used to describe uncompleted programs, *ZORK* was later renamed *Dungeon* until TSR, publisher of *Dungeons & Dragons,* threatened to sue. Under its original title, *ZORK* saw a successful commercial release in 1980. This success was partially due to the simplicity with which players could interact with a "simulated universe." In a special feature published in *Computer* (April 1979)*,* Liebling, Blank, and Timothy Anderson described the various rooms in the game

not in spatial terms but as "places to be" (52). Players were not only captivated by the expansive world, they also loved the sophisticated way the game used language. The sarcastic humor of the game ("It seems that the brick has other properties than weight, namely the ability to blow you to smithereens") and the command structures that flowed much more like conventional English made for a fun and linguistically rich experience.

As described by the creators, the development of *ZORK* was highly influenced by their desires to impart a sense of place on the player (58). For example, through the employment of vehicles, *ZORK* conveyed the belief that players could easily explore the digital landscape. Despite the game being rigorously controlled and impervious to player influence, the ability to manipulate items and interact with non-player characters offered an illusion of impact on the world. Considering the potentials of *ZORK* and other "Computer Fantasy Simulators" (CFS), Liebling, Blanc, and Anderson recognized the importance of multiplayer interaction. Interestingly, they saw this as an opportunity to create shared, cooperative narratives in the spirit of *Dungeons & Dragons.* Infocom would go on to release numerous highly successful games including *Planetfall* (1983), *Hitchhikers Guide to the Galaxy* (1984), and *A Mind Forever Voyaging* (1985). *ZORK* would prove to be Infocom's legacy, however, and continues to be a favorite of text-adventurers.

The history of these works is long and legendary. While none of them would transform popular culture to the degree of *Pac-Man* or *Donkey Kong* (Nintendo 1981), interactive fictions and text adventures would significantly impact not only how we relate to computers, but also how we view the acts of writing and reading in the advent of the digital age. With more personal computers finding their way into homes, these simple games would not only provide an easy access to wondrous worlds, they would also inspire a new generation of computer programmers and game developers. Although games such as *ZORK were* programmed in more sophisticated languages such as those found on the DEC PDP-10 computer, languages like BASIC were capable of creating simple text adventures and were available to anyone with access to a computer. In turn, interactive fictions would motivate an emergent generation of amateur coders to render their own places of significance into the digital realm. Among them would be

Richard Garriott, a young English-born American who would go on to create the *Ultima* series as well as Roy Trubshaw and Richard Bartle, creators of the first networked, digital space, *MUD1*.

Online Communities

ARPANET, the network of mainframes that is the predecessor to the internet, would have a profound influence on a new generation of game developers. Connected to these mainframes, games could not only be shared but developed collaboratively. As has been discussed, *Dungeons & Dragons* would not only impart thematic influences but also organize the growing rules tabletop games entailed. One of the components still missing from these experiences, however, was the player community itself. While the sense of community had been found as more amateur developers found their ways into university basement computer labs across the Western world, the *player* community was still absent. Now that the games had been set up, the adventure scripted, and the rules handed over to the computer, the player was left alone to enjoy exploring these wonderful digital worlds. The only thing left was to invite more to the table.

Multiplayer games had been around for some time by the mid-1970s. One of these, *Maze War* (1974), featured the first-person perspective and maze crawling action that would influence the aesthetics of countless games of the time including Andrew Greenberg and Robert Woodhead's long-running *Wizardry* series (Sir-Tech 1981). Like many other titles previously mentioned, *Maze War* was also distributed with a level editor. Even more compelling, however, was the ability to fight other players in a virtual arena. Once connected across the ARPANET, players could hunt down others lurking within the wireframe catacombs. Absent from *Maze War* was social interaction within the game itself. Players could be seen on the mini-map and encountered within the arena (represented as floating eyeballs) but the ability to interact with one another through the game itself was beyond the capacity of either the game or the hardware

available. *Maze War* would see many iterations over the years and enjoy a long life bouncing around the network, finding its way to MIT in the company of ARPANET founder J.C.R. Licklider and Dave Liebling, creator of *ZORK.* The game would continue reaping the rewards of being there in the earliest days of the modern internet, being playing on the same network where another project was being developed from across the Atlantic.

While students at the University of Essex, Roy Trubshaw and Richard Bartle created the first so-called "multi-user dungeon" (MUD). Released in 1978, *MUD1* would the first digital networked space capable of hosting several inhabitants at once. Unlike the graphically-rendered spaces of *Maze War* and others, *MUD1* took a page from text adventures and represented space verbally. Much like *Colossal Cave r yAdventure* and *ZORK,* these networked spaces compelled players with descriptive landscapes and catacombs but added the benefit of being able to explore while interacting with other players. Bartle and Trubshaw's innovative space would spawn numerous others, many taking on different themes while adding new capabilities. Due to limited access, MUD-space was a niche attraction. This factor coupled with the growing bevy of more visually-compelling games further slowed the technological evolution of MUD-space. Those that were involved in MUDs, however, formed communities devoted around the shared sense of place. For many MUD groups, socialization and fellowship became more attractive than dungeon crawling and combat. *TinyMUD* (1989), among the most (in)famous of these, was released in 1989 by James Aspnes while at Carnegie-Mellon (Haynes and Holmevik 2). *TinyMUD* focused more on social interactions and, in later iterations, players could build and furnish their own spaces. Pushing this capability further, Steven White and Pavel Curtis would develop *TinyMUD* into MOO (MUD Object Oriented). These so-called MOOs not only enabled players to communicate, but these exchanges could also be flavored with "poses" or flavor texts that

articulated postures, moods, and gestures. In addition to this more complex method of communicating, players were also privy to creating objects and spaces on MOO servers. Curtis would eventually take over the project and rename it *LambdaMOO* in the 1990s.

MUDs and MOOs provided environments for those seeking social and creative outlets. MOOs continued to proliferate and branch off to form different varieties, but most preserved the ability to connect with others and shape the virtual environment. As such, cliques were formed and, when allowed by administrators, localized governments and sophisticated social dynamics were developed. This was underscored in Julian Dibbell's *Village Voice* report, "A Rape in Cyberspace" which detailed the reaction of the *LambdaMOO* community to a player's (or multiple players') sexually-provocative abuses of others. Despite social infractions particular to any community, these online places continued to thrive (*LambdaMOO* is still running, in fact) and splinter off into different flavors, including the MUSH (multi-user shared hallucination) and MUCK (simply a different name for MUD).

Even compared to the far more graphically-compelling and popular genre of massive multiplayer online role-playing games (MMORPGs), these spaces possess more capacity for place-making. Considering that most lack graphics or any sort of promotion, MU* spaces still attract players, some of whom stay for extended times. More than any digital environment that had come before, these online worlds provided inhabitants with a sense of place. Social interactions in MU* space are complex and multifaceted with private conversations and public announcements overlapping one another. Using only text commands, players can communicate and convey any variety of expression or social cue which fosters community. This vibrant socialization through written text is closely married to the capacity for world-building and creative expression. Articulated by inhabitants using commands similar to those used to

communicate, the spaces of the world are the less-ephemeral testimonial to the sense of place that is intensely felt. As will be discussed in a later chapter, it is these capacities for fellowship, expression, and world-building that have continued to drive interest in MU* space. With more overtly structured "playgrounds" being developed and less opportunity for emplacement, MUDs continue to stand out as significant as exemplary forms of digital democracy. Although popular MMORPGs have drifted from free, open-access socialization and object creation, their lineage—which begins with *Ultima Online*—is enormously indebted to *MUD1* and its descendants.

Richard Garriott and the *Ultima* Series

Despite moving to America as an infant, Richard Garriott would grow up taking on the U.K.-English dialect and outlook of his parents. The work of Garriott's father, an astronaut stationed at the Lyndon B. Johnson Space Center, would have an understandably profound impact on his son's aptitudes towards computer science. While a freshman at the local high school, young Garriott would begin toying around with the available computers, tapping out simple BASIC programs whenever able. Supported by his parents, he convinced his school to allow him to teach himself programming as an independent study. One caveat to this was that he was to finish the school year with a completed program. The benefit of this arrangement was also that, if successful, Garriott's parents would purchase a computer for him.

Having succeeded in this project and now with a computer his own, Garriott would continue refining his computer skills. During a summer programming camp at the University of Oklahoma, Garriott would discover a sense of place. This camp not only reinforced his programming chops, it's where he was first introduced to *Dungeons & Dragons* (King and Borland 13). Like many others coming of age in the 1970's, the game would have a profound impact of the lives of Garriott and his new community of friends. After a summer of days learning FORTRAN and nights throwing dice, Garriott would return home with a new determination to focus on making computer games to recreate the imaginary experiences he had shared with his friends.

Garriott would spend his time working on various homebrew projects and working at a local computer store. The culmination of this period would be his first published game (and what is often considered the first published computer RPG), *Akalabeth.* Having played the game, Garriott's boss convinced him to distribute his game to the public which would prove to be a moderate success. *Akalabeth* was a simple, yet intriguing game that set the player in a three-dimensionally rendered dungeon inhabited by many of the same monsters Garriott had encountered at camp. After selling over 30,000 copies, Garriott started at the University of Texas at Austin in the fall, ready for the next adventure (King and Borland 43).

While at university, Garriott would publish the first title of the highly influential *Ultima* series in 1980. Influenced by the various communities he participated in, Garriott introduced various social mechanics into his game. In addition to fencing, Garriott spent a great deal of time with the Society for Social Anachronism, a campus group involved in live-action role playing (LARP). Participants in LARP events dress in attire appropriate to fantasy and medieval settings and conduct mock battles in open spaces. The community spirit and connection to the open-air arenas in which these battles took place would be recurring themes throughout the *Ultima* series. Friends would be rendered as epee-wielding non-player characters living under the wise counsel of Lord British. The world of Britannia was a sprawling world teeming with people living in towns scattered throughout the expansive continent. Unlike in any game prior to it, the landscape of *Ultima* (Garriott 1981) was a character in itself, imposing obstacles and harboring secret dungeons and lurking monsters. Traversing the terrain of Britannia was an effort for players, making the experience of discovery all the more rewarding.

One of the significant contributors to the *Ultima* player's sense of place is this encountering the unknown. Although players had very little impact on the somewhat static world of Britannia, this vast space was one that promised near-endless exploration. Players interacted with the world through a window couched within an interface brimming with menus, inventories, and statistics. To provide a greater sense of the world's size (while also deterring the emergent practice of software piracy), *Ultima* was published with a cloth map representing Britannia. Much like the peripherals that shipped with *Star*

Raiders, this map—along with a book of spells and a book of Britannia's history—extended the space the game occupied. If lost in the abstract representation of the world on screen, the player could consult the map to determine the better route. If attempting to solve the riddle to gain entrance into the catacombs below Castle Britain, the player had to refer to the clues embedded within the book of lore. *Ultima* was not contained within the computer nor the screen but encroached into spaces beyond, turning entire rooms into the headquarters of intrepid adventurers. With *Ultima,* the computer joined consoles in subverting the "real" places of work and life through a return to play and the imaginary.

Garriott and his company Origin Systems would release numerous titles in the *Ultima* series, each one increasingly taking advantage of the computer's capacity to display colorful graphics and offer more complex systems of interaction with the characters in Britannia. Featuring a social system that approximated karma, *Ultima IV: Quest of the Avatar* (1985) was arguably one of the most ambitious projects. In addition to the adventures that had now become familiar to *Ultima* players, this title required players to act magnanimously towards non-player characters and the occasional creature. Only through acts of proper behavior, such as not short-changing a blind merchant, could the player successfully complete *Ultima IV.*

Prescriptive ethics and behaviors had not yet been seen in a major computer game release. Using playful activity to reinforce social and cultural norms had, of course, existed for some time. As has been previously discussed, religious totems and lavish dollhouses were instrumental in the passing on of the social expectations associated with one's class, culture, and gender. In each instance, the intended purposes of these objects were eventually thwarted by the playful desires of imaginative children. Ostensibly an object born of fantasy and play already, it's worth considering that *Ultima IV* was likewise bucking the prevailing attitudes towards and computer games. Released at the height of the cold war, the latest in the series would prove to be a standout amongst a catalog of computer games that, at time was saturated in themes of conflict and combat. Although combat continued to be a component in this release, it was not the

dominant theme. Instead, story and character would be prioritized. Reaching back to his days at camp and the nights spent playing *Dungeons & Dragons,* Garriott sought out nothing less than the creation of an immersive, compelling world.

Proving to be one of the company's riskiest gambles, *Ultima IV* would also become the most successful release for Origin Systems up to that point. Despite some arguably heavy-handed treatments of ethics, the game would represent Garriott's vision for the positive potentials for computer games. Players were treated to a place beyond concerns looming from the burgeoning Cold War and the breakdown of social and cultural barriers, where "being good" was an attainable goal. One thing was missing from the world of Britannia, however, and that was interaction with real people. The internet was, at the time, still a murmur between a select few universities but would continue to flourish under the guidance of a disparate yet connected community of amateur programmers and tinkerers. Many of these communities had taken to the combat arenas developed by id Software (as described in the following section), attracted by the same multiplayer hunt-and-kill action of *Maze War.* After several titles failed to attain the same success of *Ultima IV,* Garriott needed something exceptional to save Origin Systems. What was decided on was the development of a persistent world, one that would go one whether the player was present or not.

Ultima Online (UO) was the culmination of Origin Systems vision (and resources), providing players to inhabit a world that provided the thrill of discovery with each visit. Steeped in the same narrative backdrop of the *Ultima* series, this release added social freedoms and enabled players to build houses much like as in MUDs and MOOs. Unlike UO's predecessors, however, items and dwellings could not be created without enough experience and wealth or the generosity of another player. As such, *UO* proved to be a largely inhospitable place to the

inexperienced. Thievery was rampant and the hard-earned rewards of exploring the vast digital world could be taken as quickly as a higher-level player could lure the unwary into a player-vs-player (PvP) zone. Even homes could be taken by taking the deed. Even Garriott himself was not impervious to criminal activity and was once assassinated by players after forgetting to switch on the appropriate settings.

For better or for worse, the release of *Ultima Online* ushered in a new era of digital gaming. More sensorially vivid than MU* space, UO offered a sense of place through many of the same qualities but visually captivated players in ways other social games had not. Here, you could actually *see* the crowds of players assembling in a roadside tavern. This instilled a vibrancy to multiplayer games comparable only to the frenzy experienced in games like *Quake* (id Software 1996) and other combat-oriented games. Because the world was always prone to change, each login offered the potential for discovery. With UO, providing a sense of place became part of successful business model. The lineage of MMORPGs has witnessed the establishment of an enormously lucrative business and social model and have been the subject of a growing body of interdisciplinary scholarship and research. Much of this work will be discussed in later chapters. For the time being, I want to take a step back to consider the other vein of digital place.

id Software

By the early 1990s, the computer game industry was preoccupied with the console wars between Nintendo and Sega. Computer games had become a niche hobby and the World Wide Web, while available, had yet to attract the attention of the general population. Yet developers of those titles aimed at audiences on personal computers were more than ready to take advantage of

the flexibility and strength of hardware that surpassed consoles. Console developers, who had witnessed the demise of Atari, now heavily scrutinized games. Nintendo Inc., was the most notorious for this practice, rejecting projects that failed to meet the company's high standards. Many of these standards ensured that games released by Nintendo would continue to be aimed at a younger audience. While characters like Mario and Donkey Kong proved to be lucrative ambassadors of the Nintendo brand, however, some developers understandably wanted to entice more mature players. Arguably the most renowned of these outfits, was id Software, creators of *Wolfenstein 3D* (1992) and *DOOM* (1993), two of the more infamous titles in all of gaming history.

Like many games that had been published before it, *Wolfenstein 3D* was spawned from *Castle Wolfenstein* (Muse Software, 1981), a stealth game released for the Apple II and developed by Silas Warner (Donovan 258). John Carmack and John Romero, two of id Software's founding members and lead developers. *Wolfenstein 3D* would borrow little more than the predecessor's theme. *Castle Wolfenstein*'s crude, overhead perspective, vector graphics, and stealth mechanics would be discarded for an intense experience featuring a first-person perspective, 3D graphics, and non-stop action. Fueled by the brutal, heavy-metal sights and sounds provided by id art director Adrian Carmack, *Wolfenstein 3D* would prove to be a gaming experience unlike any other. Even directed at Nazis, the garish violence combined with the first-person perspective, evoked a vitriolic response from critics. If a collective concern about games had only begun to simmer at that time, debates about violence inspired by computer games ignited in organizations across the globe, including the Jewish Anti-Defamation League. But players loved *Wolfenstein 3D*.

The success of these games no doubt owes a tremendous debt to their violence. It is

crucial to recognize, however, other factors involving the perspective and navigation of the player, the development and distribution of the games, as well as the connectivity and ability of those players to play against each other online. Violence may have garnered id Software a reputation, but these other attributes arguably were the factors that left the most significant and long-lasting impact on computer games and their players. Although we often refer to activity and interaction within the digital space as components of an immersive experience, I would argue that it is these non-action components that more strongly support the player's sense of place.

A notoriously focused and disciplined programmer, John Carmack engineered the game engine used throughout id's library of releases. The use of first-person perspective in three-dimensional spaces had been around for some time but most— including Garriott's *Akalabeth*— used wire-frame architecture to visually represent space and its inhabitants on screen. Carmack's engine was astonishingly fast and remarkable for the fluidity with which players could navigate the space. On top of the wireframe structures, simple graphical tiles were overlaid and ornamented with objects to break up the space. Taking advantage of more robust processing power, the graphics in id's games were sophisticated yet simple enough to ensure the experience was as fast-paced as possible. Instead of turn-based navigation where the screen would refresh with every step, players of *Wolfenstein 3D* flew through the castle with the sense of emergency appropriate to their task of Nazi-killing.

Regarding the player's sense of place, this approach to graphics had tremendous implications for players' abilities to engage the space. Exploration had been a signature component of adventure games and dungeon crawlers. Even the simple ASCII-rendered dungeons of *Rogue* (Toy and Wichman 1980) were compelling due to the ability to explore the randomly generated levels. In many ways, *Wolfenstein 3D* was not intended to be a game where

one takes time to explore the space, however. The game's intense pace instead prioritized speed and expedient navigation to the next level. To match this need, the graphics were crude and not designed to compel close examination. What was novel about id games, however, were the architectural structures and perspective afforded by the engine. Although players were limited to a fluid 360-degree rotation in a single plane, elevators and staircases opened the capacity for players to move laterally between split floors within the level. So, although there remained little depth to the surfaces within the gamespace, the game enabled the player to *navigate* in three dimensions.

Second, id Software promoted distribution models based on access. Having worked for software publishers prior to forming id Software, Carmack and Romero were well-versed in publishing models. At the time, computer industry magazines were often supplemented with a floppy disc containing several titles featured in the magazine. These demos allowed consumers to try out software prior to purchasing, a strategy that had thus far had limited success for games. With the release of *DOOM,* id Software provided players a handful of levels taken from the full release. Sample levels included in these "shareware" releases stoked the ravenous fanbase that had been coalescing for years since id Software's initial release *Commander Keen* (2001). Savvy promotion was not the only tactic id Software would employ, however. What would prove to be a major part of id Software's legacy was its release of John Carmack's signature engine to the public. Three-dimensional digital spaces had been around for some time, and access to the programmatic languages and tools to create them had existed for some time. id Software would refine this approach, packaging for players the company's proprietary assets along with an editor. These tools provided audiences the ability to create their own levels and share them with others, reinforcing an already strong and growing community of player-creators.

Conclusion

In *Designing Virtual Worlds* (2003), one of the more widely-used primers on the design of digital space, Richard Bartle advocated for virtual worlds as more than mere toys. Frustrated with the growing conflation of virtual spaces with computer games, Bartle extolled the virtue of recognizing that computer games were not simply virtual playgrounds but significant places in themselves. As one of the creators of the first successful digital places, MUD1, Bartle implored an early 21st-century cohort of game designers, programmers, and artists to recognize that these virtual, algorithmically-driven spaces were far more than the gestalt of code and imagination. Instead of constructing these spaces for simulation or as stages for entertainment, Bartle argued, engineers and architects of computer games should seek to design places that people could become attached to. The paradox in this is that once place becomes a priority for design, Bartle argued, one realizes that place will emerge regardless and despite anticipations and intents. "Virtual worlds are *places,*" he asserted. "Remember that, and many design issues cease to be issues at all" (474). From his experiences with *MUD1,* Bartle understood the power of games, not just as spaces, or even places, but as anatopistic places capable of evoking emergent practices and behaviors that were best left for the players to uncover and reveal.

To date, Bartle's discussion of virtual places and their significance is unrivaled in subsequent writing from both academia and industry. Bartle's impassioned argument, however, possessed an all too common weakness in his description of place. In reducing place to "just a set of locations" (475), the author shortchanges the multivalent implication of place in all its interpretations and meanings. As was discussed in the previous chapter, a definition of place is elusive and entails far more than points on a map or moments enshrined in the spaces of

memory. This weakness may be a residual effect of writing from the early years of the 21-st century, as Bartle and others sought to distinguish computer games as worthy of investigation as objects in and of themselves. As I've described, however, this is been an oversight seen throughout the discourse of games and virtual worlds. Even while privileging place as a concept, it is nevertheless reduced to virtual-geolocational coordinates. But games, as anatopistic places, resist being anchored to a static location. Even a semantic shift from location to setting, the term I've used here, only accomplishes so much. While the setting provides the accoutrements of place, it is in the potential intervention of setting that it becomes meaningful to the player. What's more, because games and play create places that are often anatopistic to the efficient, production-oriented purview, they also resist those empirically-derived aspects that constrain them to points on a map.

Whether inhabiting text-based MUDs or the graphically lavish worlds of many multiplayer games, one's sense of place is catalyzed by the innate desire to carve out a comfortable zone for oneself. Although a virtual space can certainly be designed to be inviting and compelling, the subjectivity of each visitor presents one of the more considerable impediments to their returning. This is further complicated by games' anatopistic qualities and capacity for undermining those places that are already emplaced. A phenomenon associated with social and cultural norms of modernism, particularly in America, play and games became cordoned off into parcels and zones that were designated for leisure activities. As will be seen throughout this project, however, play's transgressive power comes from the ability to emerge from within any place, to acknowledge and assert its out-of-placeness.

As is the case in the real world, a sense of place is produced within digital spaces through the non-trivial engagement of the player. Fundamental to game design, these engagements are

the acts that move the player in relation to a goal or end-state. Just like the Nuremberg kitchen inspired "proper" behaviors and attitudes towards household chores, *Ultima IV* was intended to encourage a set of ethics espoused by the game's designer, Richard Garriott. These and the other places of play described in this chapter – playgrounds, wargames, and role-playing games – were each aimed at providing an architecture of play for players. Their ambitions as spaces in which play can be *contained,* however, are evidenced in their arrangements and the values that are simulated through their design.

The abbreviated history of play and toys offered in this chapter has been limited to a handful of signposts in which this phenomenon has been most clearly manifested itself. Even some of the earliest computer games like *DOOM*, which came packaged with the tools for players to make their own places of play, were constrained by a set of rules and aesthetics that emplaced players in specific settings that reinforced certain values. It cannot be overstated how early computer games inspired subsequent projects, many of which were the result of manipulating the original code. *Adventure* and others would spawn numerous clones through the sharing of files on server networks. An impressive library of computer games could be found on almost any mainframe access terminal which were typically shared by multiple users. This approach to open sharing and manipulation of the code would foster some of the earliest game developer communities. Although dispersed, this group would intermingle and coalesce into a handful of the earliest game software development companies such as Infocom, Sierra Online, and Atari.

This burgeoning industry's connection to the military has not been overlooked. The U.S. military has been one of the primary investors in virtual world technologies (Taylor 181). Nick Dyer-Witheford and Greig de Peuter's account of computer games' early history begins with the

"mega-death scenarios of nuclear exchange" being simulated during the Cold War (7). Yet figures like Higinbotham are depicted as techno-mavericks who exploited their access to military technology, a practice that was common yet either ignored or dismissed as arcane. Is it conceivable that *Tennis for Two* and *Spacewar!* were designed to escape the anxiety of the heightened militarization of post-War America? Dyer-Witheford and de Peuter's interpretation highlights how at-odds the "freak" subculture of early game programmers was with the military organizations that housed them (8). Instead of disparaging computer games as products of the military, is it more appropriate to reframe them as anatopistic within the Pentagon?

With a better understanding of place and how play creates intention, places-out-of-place, we might better recognize how computer game developers (at least initially) attempted to eschew their military benefactors. To be certain, their origins as simulations of destruction and warfare are still echoed in most computer games. Military partnerships with the entertainment industry continue to produce training simulators thinly disguised as computer games (Raley 70). But games are maturing as are players. While guns and swords continue to be the interfaces of choice, players are laying down their weapons for more creative interactions with virtual spaces. The next chapter describes this phenomenon and players of open-world games. Like colonial girls with their dolls and Higinbotham and *Tennis for Two,* these players resist their "proper place" to create their own places-out-of-place.

Chapter Three: Tourists of Los Santos: Snapshotters and Perception in Grand Theft Auto V

As I have described, play not only emplaces the player but empowers the player to fabricate her own sense of place, usurping (at least temporarily) the demands of time, space, and tradition. Regarding computer games, this is complicated by the player having to mitigate dueling places, each with their own set of demands and affordances. In the world off-screen, time is a conductor of one's milieu, imposed through the clock as well as physical limits. Responsibilities and circumstances in this world are paid in sweat, labor, and blood. Compared to the stimulation of the game world, traditions and customs here in the world of flesh and blood can seem archaic but can nonetheless be traced through generations of forebears. Unlike Crowther's desires to create a world to share with his daughters with *Adventure*, most of us do not create entire virtual realms to bequeath to our descendants. In the world on-screen, consequences are negligible. Most games can be paused, restarted, and quit without much, if any impact, on the world off-screen. As we'll see in the following chapter, however, augmented reality games have challenged and to some extend changed these conditions.

For this chapter, however, I will now look at the player's sense of place as it is performed through the activity of in-game screen capture. Before proceeding further, it may be helpful to recall the model of sense of place I put forth in the first chapter. As I discussed, our sense of place in games is rooted in a setting that contains landscapes and objects that are significant to the game. Place, however, is not anchored to these settings but can be recalled from memory or transposed into other settings. For games, these settings include rules and physics. More significant are the happenings and actions that occur within these settings. At this point the player performs to adapt to the game settings. Missions and quests are strings of performances

that test the player's ability. Most importantly is the community with which one plays. Games are created by developer groups that are part of this but often reside behind the curtain. In multiplayer games, the social sphere of a game is more at-hand. In an individual game experience, like the one this chapter focuses on, the social must be more consciously pursued. Players perform through this tripartite scheme to develop a sense of place, which foster's meaning-making, and if the player so chooses, informs her identity as a player.

This chapter serves as the first half of a pair of case studies that look at place, the player's capacity to emplace herself into mediated spaces, and how those spaces resist her emplacement. My purpose in this first half is to discuss how the player's sense of place is similar to that of the tourist. As this chapter describes, certain activities and mechanics found in games seem to work towards an experience that is akin to of the experience of the tourist. The player's prerogative, as a visitor to a strange virtual domain, is to learn her way around and glean as much of that space's conventions as to aid navigation and abed a pleasurable experience. Recall that "space," for our purposes here, is the uncertain plane that is yet untouched by the values of the player. For Tuan, "space is given by the ability to move" (12). Although movement is a mechanic in many if not most computer games, navigation and orientation are particularly important to developers of open world games. Bethesda's *Skyrim* and *Fallout 4* (2015), for example, provide players with expansive, thematic regions to explore while completing various quests. Maps for other games such as *Just Cause 3* and Blizzard's multiplayer juggernaut *World of Warcraft* (2004) encompass hundreds of in-game kilometers. As discussed in the introduction, procedurally generated worlds found in *Minecraft* (Mojang 2009) and *No Man's Sky* (Hello Games 2016) tout landscapes and universes that are essentially impossible to traverse completely.

Game worlds of this scale are not entirely new. As was discussed in the previous chapter,

the lineage of computer games alludes to an inclination toward digital spaces that are as realized and inhabitable as spaces off-screen. In the tradition of *Colossal Cave Adventure*, game developers have likewise sought to design meaningful places for audiences. While these were also *manageable* spaces, massively multiplayer online (MMO) games such as *Ultima Online* and *World of Warcraft* helped demonstrate that they could also be inhabitable places that could compel audiences to come and play (and pay). Single-player games have been quick to follow suit, each one seemingly being released with a map larger than the major open-world release before it. Though not all these worlds offer active communities and socialization, they all invite the player to explore. The ability to set out into a foreign digital landscape and uncover oddities and encounter strange creatures and other players has become a hallmark of most top-shelf game franchises.

With this ability to explore comes the desire to preserve and share the experiences within these spaces. Unlike *Ultima Online,* for example, where players can own houses and operate storefronts, most games are restrictive about allowing players to alter the landscape, so players have had to devise alternatives. This chapter elaborates more on a collective sense of place but for the purposes here, it's worth mentioning some of the technologies used to disseminate experience. As has been discussed, fandoms have been part of geek subcultures for at least as far back as the origin of science-fiction conventions in the early twentieth century. Online networks enabled disparate fandoms to convene in forums and chat rooms to share experiences. Coupled with online games, these networked communities could flesh out and reify collective experiences and form organizations of players such as "clans" and "guilds." Social media, live-streaming, and external applications such as Discord that allow players to create private and public channels outside the game, have enabled organization members new means of communicating while

occupying digital space.

Solitary players, whether involved in player groups or not, are of course also capable of exploring these open worlds in much the same way. Uninhibited by the needs or desires of a group who are, for example, raiding a dungeon in *World of Warcraft,* the solitary player is able to engage the game world at her own pace as well as pursue her own agenda and goals. This activity can take the form of emergent play, or those in-game activities that are unanticipated by the game's designers. Oftentimes, these engagements push at the affordances of the game's mechanics and spaces. The so-called video game tourist, however, is more likely to celebrate the constraints of the game's mechanics and aesthetics. Consciously exploring the virtual landscape to capture aesthetically pleasing moments, this niche practitioner performs her sense of place within computer games. As in its counterpart off-screen, one of the conscious undertakings that constitute game tourism is the act of photography—or its virtual analog. Screen capture technology, which has been a utilitarian function for decades, has emerged as a subcultural art form. "Screenshot photography" as it is often called, has been embraced by hardware and game developers for its ability to showcase current technology. As these images make their ways into galleries, debates over their aesthetic value have emerged in artistic circles.

This chapter does not intend to engage debates about the aesthetic value or artistic merit of these images. Instead, I would like to focus on the phenomenon of in-game photography as an act that exemplifies the act of conscious placemaking. As I will demonstrate, video game tourism and screen capture photography encourage meaningful experiences through an attenuation to the game space, the instruments used to capture and manipulate images, and the means by which those images are shared. The virtual splendor of a village in *Skyrim,* or a journey through the cosmos in *No Man's Sky,* may inspire players to pause and articulate a sense of place but screen-

capture photography (like most forms of play) emerged from a stodgier, practical function that, at the time, was no less awe inspiring. A brief review of the history of screen capture technology with allow me to compare the practice with conventional photography. More specifically, the subjectivity of the photographer herself will be considered before discussing her counterpart.

With a better understanding of the in-game photographer, I will then examine her participation in the game space. For the purposes of this chapter, I have selected Rockstar Games' *Grand Theft Auto V* (2013) to elaborate on this practice. As a virtual arena designed to simulate a specific urban environment, *Grand Theft Auto V* (GTAV) exemplifies the ways games orchestrate behavior and activity through arrangements of space. Furthermore, it displays how screen capture photography simultaneously celebrates these spaces even while shirking those activities they promote. Although in-game tourism is not the overt intention of GTAV's designers, looking at this game's development will uncover how this practice was undoubtedly anticipated and encouraged by Rockstar Games. Ultimately, in-game photography, like many other forms of emergent play, has become incorporated into game publishers' strategies to market their worlds not just as spaces for play but as meaningful, even transcendent, experiences. As I will argue, open-world games are more akin to what the software industry calls *platforms* than they are to playgrounds, and the activity within them is mined to produce financial and informational riches for producers. The player's sense of place becomes a commodifiable resource, cultivated as fuel for the engines of capital.

***Grand Theft Auto*: A History**

Still drained after the morning's successful repo job and the ensuing pursuit by Los Santos' finest, I wake up from a nap eager to hit the grit. This feeling of exhaustion is "felt" in

the slogging pace with which I navigate around the taupe and umber décor of this tactfully cluttered house. Upon opening the front door, the sights and sounds of Los Santos cascade across the front hallway, spilling over Auntie's nagging from the adjacent living room. My haggard shuffle instantly quickens, adapting to the tempo of the city. The looming pastel hues of dusk make even the deteriorating storefront across the street seem inviting. The shouts of those strolling by merge with the drone of passing sedans whose rims reflect a stagnant city. Streetlights, reflected in the puddling afternoon rain, signal the threshold between the vulnerability of day and evening's promise of adventure. I shut the door behind me and join the meandering citizens of the city, who are already acclimated to the nighttime commotion. Paces quicken and reactions become charged with a calculated disdain for anyone who gets in my way. Although I have no immediate destination, I'm not fast enough to get anywhere on foot so I approach a sleek, lumbering sedan, open the door and catapult the driver out with a single tug. Judging by the nonchalant way they pick themselves off the asphalt one would think they care as little as I do about what just transpired.

Grand Theft Auto V's (2013) opening salvo of tutorials concludes by handing over direction to the player, who is now free to wander the streets of Los Santos. Stepping into the night, the player is almost immediately offered a mission that will earn him a few dollars and another notch along the central narrative of the game. Rockstar's flagship computer game is steeped in 1970's American pulp cinema, fueled by greed, speed, and the impulsive violence that highlights the narrative's insignificance. Like most of the releases in Rockstar's catalog, this single-player computer game tasks the player with a series of increasingly difficult missions that entail carjacking, robbery, murder, and other forms of criminal activity. As such, it has been the favorite target of politicians and parents in need of an easy target to demonstrate how games are

causing the fall of human culture. This reaction has had little impact on sales: GTAV stands out as not only being the most financially successful of the franchise, it also claims the crown of being the most commercially successful computer game in the medium's history. In April of 2018, entertainment journalism lit up after a financial journalist touted how the game had raked in over 6 billion dollars, "more than any other single media title in history" (Cherney). While the metrics employed in this claim may be scrutinized, it is hard to deny that GTAV has left an indelible crater on the entertainment landscape.

This has been primarily due to *Grand Theft Auto Online*, the multiplayer version of GTAV, which was released shortly after the single player version. *Grand Theft Auto Online* (GTAO) added another layer of chaos flavored with a competitive, social flair. GTAO is a mirrored iteration of Los Santos but with multiplayer quests replacing the single-player missions found in GTAV. Throughout the map of the city are various multiplayer challenges such as street races and bank heists. Additionally, players can join in officially recognized player groups and raise the collective reputation of the "crew." As in a turf war waged between Hollywood-bred mafiosos, players can take out and rob other players as well as enact revenge on other crews. Although playing on these chaotic playgrounds is free, to do so quickly (and in style) entails some investment. In-game items such as outfits and equipment, vehicles and virtual real estate are readily available for purchase. Short on cash? Additional funds can be purchased through the Rockstar online store. For extra expediency, prefab equipment packages are also available for purchase. Downloadable content has proven to be a lucrative model for Rockstar. In an earnings report published in November of 2018, Take Two Interactive, which owns Rockstar Games, revealed that GTAV had sold over 100 million units worldwide. In this same report, Take Two acknowledged that GTAO microtransactions (referred to as "recurrent consumer spending") have

been the primary contributor to what amounts to 300 billion dollars in revenue. This has propelled GTAO into unprecedented territory as a platform whose ecology demands enormous amounts of player time and money.

Common to all titles in the GTA series is the urban setting that serves as the central playground. The first four titles in the series, *Grand Theft Auto* (DMA Design, 1997), *Grand Theft Auto: London 1969* and its prequel *London 1961* (Rockstar 1999), and *Grand Theft Auto 2* (DMA Design, 1999), all featured a top-down perspective of the player as he moves about various cities, carjacking and murdering as dictated by the game. Although players can wander about a birds-eye view of the city, this perspective inhibited emergent play in the form of exploration and conscious wandering. In GTAV and GTAO, the setting of Los Santos is surrounded by a mountainous, oceanside landscape. This terrain offers a truncated simulation of the southern Californian coastline open for cruising and exploring. Much like the real-world referent, these open areas are populated by backpackers, tourist groups, and visitors who peer out over the landscape in simulated awe.

Figure 2: "Vista Snap" Screen capture taken by author from Grand Theft Auto V (Rockstar 2013)

With the release of 2001's *Grand Theft Auto III* (DMA Design), the franchise and player alike began to explore new, three-dimensionally rendered terrain. GTAIII situated players in the third-person perspective to follow the generic "Claude" as he steals and assaults his way up the ranks of Liberty City's criminal underworld. Liberty City, which would be revisited in GTAIV (2008), was the culmination of Rockstar founders Dan and Sam Houser's vision of recreating the semi-perpetual urban

gamespace where fantasy could be made reality. According to David Kushner, Rockstar developers had been eager to recreate the pulp-culture American megalopolises that had served as the stage for their favorite movies (52). The cleaned-up New York that they saw from their SoHo studio no longer resembled the crime ridden city made infamous in entertainment media prior to the 1990s. This "imperfect reality" could easily be replaced with a simulated version that could be designed to support this historical revision—one where New York City remained inundated by crime (83). Technological developments made this fantasy possible: with the release of the PlayStation 2 and other consoles that included DVD-ROM storage, Rockstar was able to construct the large-scale urban landscapes that could be distributed on a single disc. GTA III would prove to be significant not only for the controversial gameplay but the space of Liberty City and its recollection of an American city that no longer existed.

The success of *Grand Theft Auto III* would catapult Rockstar into (profitable) infamy and inspire their next two blockbusters. In *Grand Theft Auto: Vice City* (Rockstar North, 2002), the neon swank of Miami à la *Miami Vice* (1984–90) and *Scarface* (1983) was well received as another parodic yet palatable homage to 1980's pop culture. Rockstar's first foray to the American west coast in *Grand Theft Auto: San Andreas* (Rockstar North, 2004) would likewise be influenced by depictions of Los Angeles found in films and television. Like their predecessors', the spaces in these games are recognizable representations of the spaces that inspired them: In *Vice City,* players can cruise a simulated Collins Avenue at breakneck speeds alongside the art deco hotels and palm trees; the fictional city of San Andreas is an amalgamation of San Francisco, Los Angeles, and Las Vegas, though relies primarily on tropes found in media that glorifies west coast gang culture.

Space is a dominant factor of these games, and the ability to move freely from one end of

the map to the opposite end is the core mechanic in GTA games. For most any player, the sense of place that is conveyed is done so by means that complement the virtual surroundings. Rockstar's crime fantasies are reinforced through the environmental sounds as well. Ambient traffic noise reflects the franchise's reliance on vehicular movement. The other dialog of the streets, reflecting the dialects and conversations of media devoured by Rockstar developers, are caricatures of caricatures - comical renditions of the voices one might actually hear in Little Havana or Inglewood. Radio stations, another hallmark of Rockstar games, are populated by an array of real-world musicians invariably interrupted by obnoxious disk jockeys and satirical commercials. As one's sense of place is a social phenomenon, the player is positioned through radio and crowd noise situates the player within a larger community.

Another quality of these games that compels a sense of place is the player's desire to conquer the urban jungle. Unlike life in most cities, the occupant of Los Santos is welcome to explore neighborhoods outside her own. Described by Tuan in *Landscapes of Fear*, the contemporary city which was initially constructed to protect from outside forces is now a conglomeration of territories, each harboring their own set of fears and prejudices (173). In Los Santos, however, these obstacles can either be ignored or overcome. Whereas most games contain a sequence of spaces and stages to be overcome, the environments of *Grand Theft Auto* are designated by various criminal organizations that must be defeated. As the player grows in power, those organizations vanquished by the player become increasingly hostile. Too much aggression towards the Diaz cartel in *Vice City*, for instance, will incur retaliatory action from Diaz gang members within their dominion. Across these domains, however, is the rule of law whose attention is triggered once the player partakes in criminal activity within range of wandering police patrols. This metaphorized sphere of surveillance from rivals and police

ensures that players of *Grand Theft Auto* are perpetually motivated to maintain mobility in the space of the game.

Situated farther up the coast, *Grand Theft Auto IV* would place the player once again in Liberty City, now stunningly rendered. With GTAIV, the vacuous spaces and blank surfaces of urban environment would be replaced with realistically detailed facades and bustling city streets. Enhancements in computer graphics would push Liberty City closer to photorealism. If the taboo of *Grand Theft Auto* wasn't already enticing, the sensorial realism of GTAIV compelled many to explore the game space as virtual tourists. This laid a foundation for Rockstar to design their next world as a space where users were more than just players but inhabitants that would spend a great deal of time (and money). Although the familiar trappings and tropes of GTA are still abundant in GTAV, there seems to be less that motivates the player to continue playing along the central narrative and more incentive to ignore the missions.

Simulating the sprawl of Los Angeles and the San Fernando Valley, the city of Los Santos and its peripheral rural areas serve as GTAV's theater. In the financial district, skyscrapers loom. Plazas and parks are always occupied by loiterers who appear to otherwise have nowhere else to be. The streets and boulevards of Los Santos are forever busy, the drone of passing vehicles interrupted only by the occasional shouts of passers-by yelling into their cellphones. An implausibly short drive through the nest of highways ends at a facsimile of the Santa Monica Mountains, complete with picnicking tourists. To the west is a convincing rendition of the Pacific Ocean complete with rocky shoals, lazy beaches, carnival piers, and dockside communities. Back in the heart of the city, the alleyways and underpasses offer a less hospitable clime. Homeless non-player characters (NPCs) sleep in storefront nooks, partially concealed by impenetrable piles of garbage. Loose debris flutters in the building wind to mingle

with multicolor pennant banners strung over user car lots. As the west coast sun begins to dip behind the horizon, the cast of shadows inch along until the ignition of half-lit neon expels them completely.

This imagery helped GTAV become a compelling platform for in-game photographers. Karl Smith, for example, is an active "screenshotter" who focuses primarily on *Grand Theft Auto V* and Rockstar's recent wild-west-themed, open-world game, *Red Dead Redemption 2* (2018). His online gallery is a "celebration of the people, places and things illuminated by the virtual light of open worlds" ("About"). In seeking out images depicting conflict, Smith hints at how a player's sense of place within the game is informed by both spaces on and off-screen. "Loneliness, darkness, abandonment, despair—these are constructs in a game," he explains. "We project our understanding of our own world onto the screen. At what point is it OK for these feelings become real?" (Gilmour "The Art of Video Game Photography"). While the violent urbanity of GTA series is often cited as nurturing violent tendencies of real-world players, it is nonetheless a digital space devoid of risk. Not only are players able to engage "dangerous" spaces safely, they are also able to interact and even contribute to the virtual public sphere. So real is this counterfeit of the counterfeit city, that someone intimately familiar with Los Angeles could navigate areas of Los Santos from memory and identify various landmarks. All told, the map of Los Santos encompasses the geographical equivalent of 21 square miles, almost all of which are navigable by foot or wheel. As Timothy Welsh highlights, banal and mundane details are just as important to the world of *Grand Theft Auto* as is the action (127). The everyday serves as more than just a simple contrast or foil to the excessive activity of Los Santos. Weather is convincingly simulated but slightly strange in the way the rain, the only form of inclement weather in GTAV, comes in without warning. The day-night cycle is likewise realistic but

abbreviated - a full day in the game clocks in at 48 minutes. Peeling back this realistic surface, however, reveals a world that is contrived and shallow. Despite the sensory assault, it is not pleasing aesthetics that are the focus of GTAV but the ridiculous violence that has become the hallmark of Rockstar's library.

Like most open-world games, the accoutrements of *Grand Theft Auto V*'s arena are designed to promote emergent play, or those activities and behaviors that are unanticipated by developers. Slowly wandering around Los Santos, in this case, might seem to be contrary to the needs of GTAV but this activity is not only accepted but endorsed by Rockstar. Sculpted for the player's pleasure, the artifice of Los Santos is a conglomeration of objects and processes that converge in the illusory essence of the metropolis, it's dangers and anxieties, simulated in the shadows of the game. Hunting down and capturing these convergences, the virtual tourist temporarily sets aside the game's privileged modes of engagement (completing missions or otherwise proceeding through the narrative) to pursue a sense of place.

Recalling that our sense of place is developed through our conscious attention to setting, community, and events. explore moment when setting and sense of place, uncovered through the tourist gaze is one that has tantalized game developers for some time but has only recently become part of the industry's business model. Embodied in the screen-capture, this gaze has been employed to foster the player's sense of place. As I will now discuss, the act of in-game photography reveals one of many methods developers have used to keep players active within the game space. But videogame tourism also speaks to the desires of the player and the means they have had for finding a sense of place in digital worlds.

History of the Screen Capture.

Before I focus on the videogame tourist, an overview of screen-capture technology is

relevant to any discussion of in-game photography as an emergent practice. Although "screen-capture" and "in-game photography" are often used interchangeably, the distinction lies in the purposes of each. Winfried Gerling describes the more utilitarian use of the screen-capture as a method of documenting procedure, likening it closer to the photogram, an image created by placing an object directly onto a piece of light sensitive material (150). For as long as there have been computer monitors, screen-capture technology has existed as a practical method for documenting computer activity. This history has almost always been traced, if not outright motivated, by early digital technologists' desires to create and share compelling places. To accomplish this required the ability to not only capture but also preserve images on screen.

The first development that would enable users to preserve the image on screen was proposed by Wolff Irving for the RCA Corporation (1947). His patent for a "recorder for radio locators" illustrated a device that projected the radar screen onto a wall. A short three years later, Epstein would demonstrate how these, and other images could be stored on Williams-Kilburn tubes, cathode-ray storage devices which are regarded as the earliest forms of random-access memory (1951). The ability to record radar screens during this period was, of course, significant and its improvement would continue to occupy electrical engineers as computer technology further developed. In 1959, Digital Equipment Corporation produced the PDP-1, first commercial computer equipped with a monitor and designed to receive inputs from multiple peripherals. These early computers lacked the built-in ability to take screen captures, but numerical data could be saved and reread as a text file. To preserve what was visible on the screen, a film camera had to be aimed at the monitor. Eventually, computers loaded with BASIC software could take advantage of the BSAVE command which saved the screen image to a bitmap file.

One of the cold war applications of screen capture was to simulate and compare conflict scenarios, a specialty of IBM's Semi-Automatic Ground Environment (SAGE) supercomputer (Edwards 75). These early systems enabled users to draw directly onto the cathode ray tube screen using light pens. This capability was made most famous by Sutherland's Sketchpad system (1964) that, among other things, opened the door for direct transfer from screen to plotter (Manovich 102). Released in the wake of Higinbotham's *Tennis for Two* (1958) and Russell's *Spacewar!* (1962), Sketchpad demonstrated the capacity to create, store, and share images created through the user's interface with the screen. According to Matthew Allen, Sketchpad and computer aided design (CAD) were crucial in demonstrating how computational technology could be employed by engineers and architects to simulate structural integrity and sustainability ("Representing Computer-Aided Design"). Allen argues that one of the key factors in producing a seismic shift in perception towards computers was the screenshot, a "relatively informal photograph of the screen" (641). Screenshots not only exposed computational applications to practitioners unfamiliar with (or even hostile to) computers, but more importantly enabled works to be shared and utilized.

This mobility of information, according to Christopher Moore, has become vital to the development of research networks and, regarding social media, one's identity as it is constructed through performance and self-representation (141). In one of the rare pieces of scholarship on screen capture, Moore describes how such images "reveal important intersections in the relationships between the software and hardware of computers, screens, cinema and photography, linking the static image to the dynamic 'live' sensory experience" (145). This documentation of computational processes would catalyze a generation of hobbyists looking to recreate a sense of place in this strange new electronic world. Screen capture techniques certainly

contributed to attracting audiences outside of the research lab though these consisted primarily of economists and engineers. What Sketchpad and the invention of the light pen would demonstrate, however, was that computer operators recognized the machine's capacity to interface with users in more familiar ways.

Sketchpad and *Spacewar!* would indicate a trajectory for computing development, one that espoused a more visual mode of interfacing with the machine. Making the personal computer more accessible to a general population became a primary focus of computer developers. In 1973, for example, the graphical user interface (GUI) developed by Alan Kay was incorporated into the Xerox Alto computer, which helped introduce computing to portions of the public who were apprehensive about beige boxes and the cryptic command languages that had thus far been necessary to operate them. During the mid-1980s, computers began to come equipped with the capacity to preserve the image currently on screen. In Apple Macintosh computers, this was a set of keyed commands that would save the image onto readable media while computers using MS-DOS could make use of the PrintScreen command to print out a physical copy of what was displayed (Gerling 154). More importantly, screen captures would help acclimate a new generation of computer users who would need assistance in using these new tools. Games would also prove to be vital in this endeavor.

In-Game Photography

By the time computer users were navigating their virtual desktops, many had already been orienting themselves within game space. Vector graphics, which had been used by the military's SAGE systems as well as Sketchpad, proved to be useful for creating many of the earliest game spaces. Because vector graphics are derived from simple mathematical equations,

the elements drawn require very fewer computational resources, which were scare at the time. Although *Spacewar!* clones such as Larry Rosenthal's *Space Wars* (1977) as well as Atari's *Asteroids* (1979) recaptured the bird's-eye perspective of their predecessors, other games tackled different orientations. Prior to Atari's 1980 hit tank simulator *Battlezone,* games such as *Maze War*, *Spasim* (Bowery 1974), as well as Garriott's *Akalabeth* would demonstrate the computer's capacity for rendering three-dimensional space. These games used vector graphics but instead of the objectivized point of view found in earlier examples, they evoked the user's subjectivity in their representation of a first-person point of view.

Interplay's *Bard's Tale* (1985), which was among the first to use rasterized graphics to represent three-dimensional space, would signal a new age of computer imagery. This method of graphics rendering, still in heavy use today, displays images as compositions made up of pixels that are arranged across a rectangular matrix called a bitmap. But it wasn't until id Software's John Carmack devised his game engine for *Wolfenstein 3D* that navigation in these spaces would feel fluid and realistic. Up until this point, rasterized graphics had been used to draw, pixel by pixel, static scenes or crude animations. Carmack's engine also used rasterized graphics but did so to create graphical building blocks that could be rendered far more efficiently and quickly. Another revolutionary move by id Software was the sharing of Carmack's engine so that players could create and share their own maps and environments The following year, id would release *DOOM* to an already devoted fanbase. New-media researcher Winfried Gerling attributes this popularity to celebration of the medium's emerging photorealism (156). According to Gerling et al., high fidelity graphics are perceived by players as enhancing the game experience and, "can be leveraged to influence the way players interact with games" (237). For *DOOM,* players captured images not only displayed player acumen in the bloody, fast-paced, 3D arenas of the

game and in doing so situated players as part of a larger player community. According to Cindy Poremba, "[photography] here manifests itself in both cultural and technical modes: remediating the screenshot in cultural practice and playing out the technical role of photographic reproduction" (50). As a distributable artifact, in other words, the in-game photograph reinforced socialization. Outside of advertising, images taken from games served as visual complements to online discussions. Machinima, the use of video taken from gameplay and edited to create short films, also developed shortly after this time.

Combining "machine" and "cinema," machinima is the practice of using game-development technologies to produce short motion pictures. Developers like id Software, who had freely offered their engines, also provided player-creators with the ability to create short, non-playable works of animation set in the game's ecology (Lowood 26). With the powerful games engines and computer hardware that being made available, creators traversed conventional forms of media to develop a new genre of motion picture. Citing Henry Lowood, Martin Picard also adds that the performances of machinima creators displayed not only game skills, but production skills, as well as an attentiveness towards an audience (5). This practice has become quite sophisticated: director Neill Blomkamp's Oats Studios (*District 9, Chappie*) has partnered with Unity, the developer of one of the gaming industry's most used engines, to distribute assets from his short science-fiction films to users (Liptak). Using characters and scenery from these films, users can create their own works of machinima on the Unity platform.

At the turn of the millennium, a public not yet acclimated to online spaces were being introduced to them through screen captures. This imagery, which has always been used by game publishers for marketing and documentation, demonstrated the tourist experiences of early virtual worlds such as *The Palace* (Time Warner Interactive 1994) and contemporary

MMORPGs such as *Second Life* (Linden Lab 2003) and *Sims Online* (Maxis 2002). Screen captures taken from these spaces illustrated player interface and cohabitation within spaces that were at the time largely foreign to most. Particularly for those earlier spaces, many of which died in the dot-com bust of the early 21st century, these artifacts are all that testify to their existence (Book 2003). These documentarian uses of the screen capture are still very much in use and can often be found complementing developer and user created tutorials.

For example, players of the early console platformer *Gekibo: Gekisha Boy* or "Polaroid Pete" (Tomcat System 1992), controlled a photographer charged with capturing noteworthy events and happenings as they scrolled by. Outside of its bizarre gameplay, *Gekibo* is interesting because it allowed players to save the images they collected in a virtual photo album. It would be some time before photography would make another appearance as part of gameplay with Nintendo's *Pokémon Snap* (HAL Laboratory 1999). This was the first of many forays into image capture by the company. Released as a peripheral for the handheld Nintendo Game Boy in 1998, the Game Boy Camera combined the mobility of the platform with that of the snapshot. These peripherals allowed users to capture real-world images and edit them on the Game Boy. Though limited to the four-color palate of the Game Boy, the Game Boy Camera signaled Nintendo's interest in capturing and sharing images. For the Pokémon franchise, which will be discussed further in the next chapter, the camera would become an ongoing feature in many games.

Photographers would enjoy a more prominent status within games of the new millennium. In 2003, Ubisoft released *Beyond Good and Evil* (2003), a 3D action game where players again controlled a roaming photographer charged with collecting and cataloging creatures in the outside world. *Dead Rising* (Capcom 2006), *Bioshock* (2K Games 2007), and the *Fatal Frame* series (Tecmo 2001–2015) all incorporate photography as a minor action within the

game, typically as a means for gathering information on a target. While these games use the camera to aid combat, others replace the gun with the camera altogether. Like *Pokémon Snap, Afrika* (Rhino Studios 2008) tasks the player with "hunting" creatures through the camera's lens. Independent games such as *Kona* (Parabole 2016), *What Remains of Edith Finch* (Giant Sparrow 2017), and *Infra* (Loiste Interactive 2016) are primarily exploratory games where the in-game camera is one of the primary ways of interacting with the game. *Republique* (Camoflauj 2013) politicizes this by emplacing the player in the camera itself as a CCTV operator charged with guiding a renegade non-player character safely through a dystopian city.

For most games, however, in-game photography is typically accomplished in the traditional manner of capturing the image currently on screen. At the most basic level, the image is simply copied to a designated folder on the player's computer or console. The resulting file can be shared or used for private, non-commercial uses. Beyond the amateur, the more established in-game photographer is likely to take additional steps to create the best image possible before and after recording. Professional screenshotter Duncan Harris' portfolio of work, for example, reflects his background in art direction and game design. Coupling high-end computers, game engine skills, and access to the game's inner workings, Harris is able to capture and render the image on-screen at enormous scales. For the sake of comparison, an image captured from a typical widescreen monitor is approximately 1080 pixels high by 1920 pixels wide while one of Harris' captures may be ten times that size. After the image is taken, Harris subjects some of his images to a gauntlet of post-processing and editing procedures. Other screenshotters like Eron Rauch evoke the painterly spirit of the early impressionists. Rauch prints off his screen-captures then manipulates them by hand to capture the tangibility and aesthetic of Alfred Stieglitz and other Photo-Secessionists who applied brush strokes and other "flaws" to

their raw photographs (Gilmour 2015).

This level of access and production quality is mimicked to a limited degree by software platforms such as Ansel, named after Ansel Adams, the famed American landscape photographer. This dedicated image capturing and editing tool is currently provided by NVIDIA, a leading manufacturer of graphic processing units (GPUs). Replicating many of the same procedures employed by Harris, Rauch, and other impressionist in-game photographers, Ansel enables the user to pause the game and explore the area currently occupied from a free-floating perspective. In addition to the ability to find a compelling vantage point within the spaces of the game, Ansel also extends the native resolution of the image to enormous, high-definition scale. With this tool, NVIDIA provides users with many of the same tools used by professional screenshotters like Duncan Harris. Using Ansel, I can capture, edit, and share large-scale images. Using Ansel's standard library of effects and filters, for instance, I am able to make a rural landscape taken from *Witcher 3* (CD Projekt Red) look like a daguerreotype and share it

Figure 3: Image of Far Cry 4 using Ansel (Ubisoft Montreal 2014). Taken by author using Ansel application.

instantly to an online gallery hosted by NVIDIA. Users can then can save the image as a two-dimensional screen capture as well as a 360-degree or spherical image suitable for viewing in virtual reality. Ansel itself provides a library image editing features as well as several filters, some of which replicate early impressionist works. These images can then be instantly uploaded to NVIDIA websites through their proprietary interface or online gallery.

As I have described, *Grand Theft Auto V* and the open world of Los Santos have proven to be especially attractive to in-game photographers. In addition to the subject material that Karl Smith and others have found compelling, the game itself has provided numerous channels to take and share images. Conventional screen-captures and Ansel-assisted images continue to proliferate on Twitter and social media several years after the game's release. Also significant is the mobile phone used within the game. In addition to being used to receive requests for odd jobs, the phone also serves as an in-game camera capable of taking selfies. These images can be exported from the game to Rockstar's proprietary networking hub, the "Rockstar Social Club." This hub operates as a place for players of Rockstar's games to share experiences in GTAV, GTAO, and other Rockstar titles, and to learn about various events happening within them. Few approaches in-game photography with the aesthetic sensibility of screenshotters like Smith. As one might expect, the vast majority of images shared on the Social Club depict player avatars in cliché gun-wielding glamour poses, tricked out muscle cars, and sunsets descending behind the Los Santos skyline.

Photography captures the contingency of events that are increasingly found in game worlds of GTAV's scale. Simulated time and space, while contracted and compressed, still produces passing moments that seem significant at those moments of convergence that are perceived as pleasurable. Captured images, help to make real these illusions. As Susan Sontag

describes, “photographs give people an imaginary possession of a past that is unreal, they also help people take possession of space in which they are insecure” (9). Roland Barthes, in *Camera Lucida,* also described the photograph as, “literally an emanation of the referent” (81). If the conventional photograph exists as both as a referent and historical document (“this happened”) and as a testament to the presence of the photographer (“I was part of this happening”), how does the screenshot captured within these digital spaces compare? More importantly to this chapter, the question must be reframed to consider how significant that moment of convergence matter to the user capturing it? John Roberts describes the photograph as recording the “singular event” or that moment where the convergence of entities, acts, time, and space is captured by the camera and the photographer (281). It therefore also serves as a testament to the existence of the photographer and their relationship to that convergence. As a “truth telling medium,” the photo is both a witness to the convergence occurring before the lens but also the convergence of the photographer with that occurrence. How does screen-capture aid in the procurement of the player’s sense of place? This progeny of photography offers numerous insights into how the preserved image works to reify the experience for the in-game photographer.

NVIDIA’s growing list of games that support the Ansel application suggests that the industry is committed to providing tools for in-game photography. For the largest graphics chip manufacturer, this is nothing but a sound business practice. These images display the GPU’s capabilities, something NVIDIA has done extremely well in the company’s quarter century of existence. NVIDIA revolutionized computer graphics in the 1990s by making chips that were capable of rendering both 3D and 2D graphics and continues to dominate the market. While screen captures are a convenient form of user-created advertising, it is uncertain but doubtful that most screen capture artists are using Ansel (even if they are likely using NVIDIA GPUs). What’s

more, this doesn't speak to why screen capture has become such a prominent mechanic in computer games.

The addition of camera-like mechanics to many games and the penchant many players have found for taking and sharing screen captures also suggests that the act of photography complements the overall game experience. To be certain, the free promotional materials supplied and distributed by players is a small boon to game developers and hardware producers like NVIDIA. From the perspective of the player though, screenshotting and in-game photography speaks to a desire for a particular experience. As I will now discuss, the act of capturing images within games by whichever means are available reflects the relationship between the game space and the player. Whether voluntarily using an application like Ansel or being tasked to use the built-in mechanics of the game to proceed in the game, in-game photography is a proliferating activity. Outside of the needs of the hardware producers and the needs of the game, the player is engaging in this activity for other reasons that are subjective. These images are intentional, conscious acts of placemaking. As strange places, game environments are designed to be inflexible, cordoned off, and resistant to intervention. In lieu of any other means of acquiring a tangible connection with the game space, to make a sense of place in other words, the player must become a tourist of the world, a performative act to which I will now turn.

The Virtual Tourist and the Captured Experience

Entering Los Santos, the player may become inundated by the realism of the simulated city and its surrounding vistas. Residents of the virtual city meander about seemingly following some unknown agenda. Others simply linger and eye the player as she walks along the sidewalk. Cars contribute to the sense of activity far more than the citizenry. All makes and models buzz

by the silent skyscrapers that just as vacantly as those milling about on the streets below. Does this scene offer a sense of place? The existence of community (even a fake one), happenings, and landscape are not enough to obtain a sense of place. Relph argues that one's experiences with each of these facets of place must be *cultivated* for a sense of place to emerge (29). Although Relph points out that none of these qualities are required for place, he argues that the quality of one's sense of place is based on the quality of experience one has with these qualities. The solitary player in a virtual world is limited in how he or she experiences place: without community, there is little in the way of establishing agreed upon norms and traditions. This section looks at how the visual perception of the player, mediated through the apparatus of the screen, acts in ways that mirror the activities of the tourist.

Dropped into the game for the first time, the player is a tourist that must develop a better sense of her surroundings. It is likely that, if the game uses a standard controller, she has some understanding already about how to navigate the space. Other the actions that must be taken to perform in those surroundings must be learned and, if others are available, she can engage them to assist in these objectives. Yet game environments are engineered and contrived spaces that are likely to be highly resistant to direct action by the player. It is typically little more than window dressing to provide a setting for whatever happenings are expected to transpire. The relationship with virtual space, therefore, is limited to how the player perceives and responds to the visual and audio cues that environment provides. While these are the primary sense used to play games, they do not fully engage the full set of faculties we typically employ when feeling our way in a strange place. A player, like the tourist, is never entirely occupying the space. For the time being, she is distinctly out of place—a foreigner. So, she does what many tourists might do to acclimate herself. Explore the area, get a "feel" for the neighborhood and its inhabitants. How do the

controls of the game function? What are the boundaries? Once she starts to get a sense for the place, she may begin to start bumping up against the limits of the space—the boundaries of the setting or the rules establish by the code. Once the player starts *seeing* how the place acts, perhaps in response to her performance within it, there might be a need to preserve evidence of that performance. A snapshot that can be shared with others. Maybe the image captures provide a sense of ownership of that space, a testimonial that the player is no longer out of place.

For as long as first-person 3-D games have existed, so too has the ability to compose, edit, and share images captured from playing them. But with the unprecedented degree of realism in current games, sightseeing within these game worlds has become a pastime. But why do so? On the other hand, why have so many game developers incorporated camera-like mechanics into their products? Having already described how the apparatus of the computer screen acts as a proxy for the camera, I will now discuss how the player performs the role of the tourist either voluntarily, as an in-game photographer. This discussion will also look at how the player, performing in response to the game's demands, is also being positioned as a tourist, an outsider that must perform in certain ways to feel "in place."

Tourism has an extensive history, going back at least as far as the Roman Empire (Feifer). Archaeological findings depict the Augustan tourist as sharing many similar traits with contemporary descendants, including a penchant for capturing images from the journey (Lomine 74). According to Loykie Lomine, the Roman *peregrinator* made popular the world's first "formalized tourist itinerary" as well as a complementary souvenir trade (71–72). But it wasn't until the late 1800's and the modern age that tourism would take on the trappings of the codified industry we find today. As Dean MacCannell has argued, tourism is a form of mass leisure that is intimately tied to the West's campaign of colonization (3). According to MacCannell, the

exoticization of foreign peoples and places spurred tourism as a practice centered on sightseeing and viewing "differentiations" (13). This commodification of culture is accomplished primarily through image and the visual. The "tourist gaze," as John Urry has famously argued, is crucial to the "experience economy" that celebrates commercialism and being immersed in various thematically-driven worlds (120). Off screen, the amusement park comes to mind. At Orlando's Universal Studios theme park, for example, one can spend one day within the world of Harry Potter and the next surrounded by structures and creatures taken from the works of Dr. Seuss.

With regards to the computer game, one will not find any harm in inserting herself in an exotic locale and the residents (the "non-player characters). In GTAV, the residents of Los Santos are, like the building facades, lifeless and devoid of any importance to the actual game other than a source of quick cash perhaps. At Universal, props are designed to be consumed. So too are the people of Los Santos who will not be bothered by the player taking screen-captures. Without authentic interactions with the setting nor the residents, the player must be provided with alternatives to acquire a sense of place.

Driving it all, claims MacCannell, is a quest for authenticity. "In the establishment of modern society," he argues, "the individual act of sightseeing is probably less important that the ceremonial ratification of authentic attractions as objects of ultimate value, a ratification at once caused by and resulting in a gathering of tourists around an attraction and measurable to a certain degree by the time and distance the tourists travel to reach it" (14). In the world of *Grand Theft Auto V,* this ratification is assumed by the unprecedented popularity of the game and the amount of time and money spent within the crime-themed park of Los Santos. Ethnographer Helen Thornham details the ways in which computer games nurture the fetishization of active participation with others in a community (142). As players, screenshotters fetishize the virtual

space, promoting it as an inhabitable and dominated space, further fragmenting these emerging public spaces by presenting them as commodified "hypersalons" into which the real-world public sphere is expected to migrate. Much of this migration involves purchasing visually appealing in-game merchandise—clothes, vehicles, apartments, and weapons—that serve as performative cues to others. Living out the posh fantasy espoused by *Grand Theft Auto Online*, players participate in what MacCannell would argue is the "staged authenticity" of the tourist site, which pretends to reveal the secrets of a particular place ("Staged Authenticity" 596). Within the simulation of Los Santos, players participate in and contribute to the rags-to-riches myth of the American Dream as translated through 1970's pulp cinema. But in living out this fantasy, it is the American fantasies of Rockstar that players are help realizing—and paying for.

Within first-person computer games, interaction with the gamespace is accomplished through navigation guided primarily by visual cues. This is done through the interface with the screen, an apparatus that works as a substitute for the photographer's camera. Before discussing this substitution, our sense of vision must first be accounted for. In *Grand Theft Auto V,* the lack of social authentic interpersonal interaction within the game subjects our sense of place to the mercy of the spatial devices. Edward Casey suggests that we inhabit places through our perceptions of those places (22). "Bodies not only perceive but know places," he continues. "Perceiving bodies are knowing bodies" (34). Visually speaking, there is little differentiation between the tent cities under the Los Santos Freeway and the mansions of Rockford Hills. In open-world games, navigation is delimited by the borders installed by the developers and typically designed to blend in with the rest of the surroundings. Additions to the interface, such as maps, assist in orienting oneself within digital worlds. But it is the borders of what Rockstar considers to be an authentic experience that serve as parameters for *Grand Theft Auto.* Playing

the retired gangster Michael de Santa, for example, opens up a number of different entertainment options which are initially closed off to Franklin, an African-American character. Because the spaces of GTAV are overtly inauthentic, the videogame tourist must procure and mete out those experiences that satisfy the need for ratification.

Yet affirmation of any difference between the player-as-tourist and the digital space and its denizens is further crippled by the immediacy of the game world. According to nature photographer Jim Clark, one's sense of place comes from curiosity (196) and the patience to wait for a point of convergence - where a "special moment and place" is transformed into a celebration (50). Focusing on urban landscapes, photographer Joel Meyerowitz describes this sense of place as coming from being responsive to the place being photographed (5). To what is the screenshotter responding? In social games and MMOs, it might be a spontaneous happening, event, or occurrence. What is the conversation between the individual videogame tourist and the simulated, inauthentic space where differences between the "real" and the "digital" are renegotiable?

For the virtual photographer, we must renegotiate Barthes' contention in *Camera Lucida* that death is an inherent quality of all photography and that the moment of "that-has-been" (94) can never disappear if the technological components exist to replicate it. What is there in the way of "convergence" in GTAV, where very little is left to chance or circumstance? In a tightly contrived environment like those found in computer games, the experience of one player could potentially be repeated by many others ad infinitum. Barthes' "Monument" (93), replaced by the photo as the "natural witness of 'what has been'," has, in virtual photography, been restored. If virtual tourists are privileged in their disavowal of time to capture imagery, what is being preserved then, if the moment is replicable ad infinitum, rehearsed and configured to achieve the

photographer's ideal vision? For players of open world games, this consideration is not often, if ever, recognized. With such vast opportunities to capture unique moments, it is increasingly unlikely that similar moments with be captured. Several players in GTAO might be waiting for the sun to set over Los Santos, but their individual perspectives each offer unique angles and compositions.

Despite this technological predicament, the virtual photographer's captured image always represents a moment in the past. Even in the virtual sense, there exists an impulse to preserve the essence of a particular experience. "It is above all," said Sontag, "an affirmation of the subject's thereness…which is the equivalent of the collector's standard of genuineness" (77). For the virtual photographer, the image capture is a testament to an existence of the photographer within a place. In this way, the snapshotter contributes to the culture of the game. For those that spend a significant amount of time as transients in virtual spaces, the photo offers the means to substantiate the insubstantial. "What the photograph-record confirms is," explains Sontag, "simply that the subject exists" (165). [add] Imagery rendered on a computer monitor is not the same as a photograph. But for the player who is in pursuit of authentic experiences, the screen capture is a sustainable substitute. In a study of MMO players, Carman Neustaester and Elena Fedorovskaya discovered that "lifers," those players who were extremely committed to the game used in-game photography extensively to enhance their social experiences (1165). When so much of the work of the video game player is ambivalent, the image capture offers a way to legitimize this contested activity. Video game photographers not only seek out a validation of their work but that of the subject framed by the screen.

Mark J. P. Wolf describes how as "virtual worlds resemble the real world more and more, the real world [itself] is becoming more mediated" (222). This mediated experience, he

continues, “provides a greater consensus of the senses than previous mediated experiences.” Like the tourist, however, the camera asserts difference between the person capturing the image and the subject being captured. For the videogame tourist, this difference is simulated by the frame of the screen. "Photography brought to the forefront,” write James Steels and Martyn Jolly, “the frame’s capacity not only for gathering up, concentrating, and organizing the viewer's attention, but also for cutting what was inside the frame off from the reality that continued to extend beyond it” (462). In this “gathering up” of the place (to invoke Casey’s use of the phrase), the frame captures and organizes the qualities of the game world in a way that is perceivable by the player. Shared with others, the image becomes a commodity of social capital, a token of her performance in the game space. As our worlds on- and off-screen continue to blur, the in-game photographer is actually working to maintain those distinctions. If Sutherland’s “ultimate display” was a pure and total elimination of the interface, in-game photography celebrates the affordances of the screen and computer, rejecting the immediacy desired by much of digital media. While mobile devices have expedited the impulses of snapshotting and amplified the visual fetishization of tourism, then virtual photography’s promise is to further compress the subject space into the apparatus. Though the computer has eliminated or virtualized the camera, it does not also eliminate the photographer.

Yet it appears that, while the player is working to conquer and consume the game place it is that place that is exploring and consuming her. that is exploring us. In her work *Public Places, Private Journeys,* Ellen Strain discusses the tendency for even the most technical of works on VR tend to drift into maudlin metaphors for travel and the frontier (258). This tendency towards romanticizing the gamespace is seen in the works of screenshotters. As screenshotters and virtual photographers continue to produce works that tout the open vistas and seemingly endless

expanses of the digital, they unintentionally promote these spaces as safe zones to replace our eroding public sphere.

So while the virtual photographer is unable to disembark from the physical constraints of her apparatus, she is very much capable of covering a great deal of ground. Mike Robinson and David Picard connect this diminishment of the camera to the emergence of a "new visual economy" (4). This visual economy would trace the escalation of transportation technology, both converging in the rise of the tourist snapshot. "As photographs give people an imaginary possession of a past that is unreal," said Susan Sontag, "they also help people to take possession of space in which they are insecure. Thus, photography develops in tandem with one of the most characteristic of modern activities: tourism" (9). Pierre Bourdieu and Shaun Whiteside elaborated on these effects in his work on photography, referring to it as a "middle-brow art" that opened up aesthetic ventures to those who seek upward mobility (42). The petite bourgeoisie underpinnings of the medium lend themselves to the arrival of tourism and the snapshot. When the real-world anxieties of the upwardly-aspiring class become intolerable, it is ironically the departure from one's home space that offers an opportunity to regain control of one's territory.

For the screen-as-camera, however, the distinction between the apparatus and the process has become even less clear, nurturing the impulse to take snapshots without recourse to development times or costs. Not only has speed and efficiency become less taxing, a lifetime's library of work is containable on a single hard drive. Smartphones have further compacted photography while offering a streamlined way to distribute images. These digital set-ups may require the photographer to tether herself to her computer or network, but this compaction of process has only made more real the "image-world" suggested by Sontag (8). Armed with the ultra-portable apparatus, the tourist can seek out and capture the visually fetishized strange and

beautiful subject. In agreement with Bourdieu, Ellen Strain describes this traversal of subjective boundaries is conducted to procure and "bolster a sense of self" (17). Regarding virtual spaces, she continues, the pleasures of "control and the infinite renewability of gamespace contribute to the touristic pleasures with narratives of colonialist discovery, conquest, and acquisition while simultaneously allowing for an atonement, a sweeping away of the effects of colonialist exploitation" (249). With regards to the virtual photographer, the impulse to "own" these exotic locations and peoples are satiated without the ecological ravages and subjugation of peoples associated with tourism.

This section has considered the perception of the player, comparing the gaze of the tourist to the vision of the player. Recalling that the perception of the player is critical to sense of place, my positioning of the player as a tourist helps illustrate how both take in their surroundings visually through their respective devices in a performative act of identification and Othering. As I'll now discuss, this works towards the aims of the developer who needs to offer virtual worlds that are compelling to players.

Sense of Place as Commodity

Through incorporation of players into their social and rule-generated spaces, games commodify places both on-screen and off. To take ownership of a popular nightclub is out of the question for most of us, anyone with dedication to the endeavor can do so in *Grand Theft Auto Online.* In GTAO, working collaboratively is rewarded by wealth and respect among one's crew. Even within these absurdly violent multiplayer games, a sense of place comes through interaction with one's community and environment. Expansive single-player games such as *Grand Theft Auto V,* however, rely on slightly alternative methods to attract audiences to stay

and play. This chapter has elaborated on a niche practice that started out as an emergent practice but has since been embraced by game developers as a method for developing a sense of place. Not every player is likely to start taking up in-game photography yet the espousal of image capture by game developers, the heavy investment of image editing software and in-game image sharing services indicates that the industry sees the practice as contributing to its interests. Video game photographers, especially those that have been professionalized and embraced by the gaming industry, often present themselves as devotees of the developers that fabricate their digital subjects. Screenshotters like Harris, capable of using the developers' own tools, render the virtual landscape into a captivating space that is desirable in its saccharine sense of security and photographic spectacle. In this role, the screenshotter mimics the photographer in service of the tourism industry. Focusing on the pleasurable, the screenshotter promotes the signature aspects of the game experience. Should the virtual denizens of the gamespace not provide the desirable subject, they can—with a little manipulation—be composed into a more suitable position. If the snapshot manifests contingency and the fleeting occasion, the screenshot reveals the postured and contrived.

In the very real, public space, however, there is risk and accountability. Gathering in protest entails the risk of reprimand and rebuke. In the digital, perspectives that conflict with our own can be ignored. Video games offer players a sense of being and belonging in a space that is both familiar and foreign. Demonstrating not only their conquest of this terrain but an ability to amplify the fetishization of the visual, the snapshotter positions himself as one that can navigate the digital space. Rather than concerning ourselves with whether virtual photography should be considered an art form, our focus might be better met in the consideration of ourselves as virtual residents in a public sphere that is increasingly privatized, monitored, and regulated. While

Harris and his cohort of screenshotters could arguably be acknowledged as a new vein of artistry, we should recognize that the virtual space that is being represented is not as hospitable as it appears.

For many of us, our time spent in the digital is cherished for this very ability to exert control over our work, leisure, and social lives. Mistakes can be erased with a gesture, anxiety and embarrassment are avoidable. Screenshotters amplify this capability, rendering the stable digital encounter as being more desirable that the real-world face-to-face encounter and all its uncertainty. Although we occasionally hear of faltering attempts to renovate public spaces into more profitable endeavors, our public institutions are increasingly under siege by these same incessant forces. Is it implausible to believe that we might eventually choose to log in, exhaustedly pack our bags, and take flight to some lavish landscape where poverty is ignorable, pain is negligible, and the only contingency is that which has been programmed into the machine?

Left to her own devices, the virtual tourist obtains a sense of place through her conscious incorporation into the gamespace. These enormous open worlds underscore developers' desires to see players invest more in their experience within these spaces. Virtual photography, as a visual practice that disseminates experiences in strange yet safe spaces, echoes Crawford's optimism. Although game scholars like Celia Pearce optimistically describe online worlds as spatial, inhabitable spaces where occupants can actively participate in the culture (18), much of the current scholarship has tempered this enthusiasm. In theorizing the tourist space, for example, Strain emphasizes an interpretation of the gaze that aligns with Anne Friedberg's distinctive "mobilized virtual gaze" that is deeply rooted within neoliberal projects (15). This gaze, of course, is but another shade of Urry's tourist gaze. Although computer games are spaces

in which we may produce and maintain a sense of place, it has increasingly become apparent that we are compelled to do so by design.

Much like the most negative caricature of the tourist, the player is free to occupy an uninhibited space, consume its goods, and appropriate its customs. The game becomes part of the *ideal* everyday—one where risk, ambition, and subscribing to the dominant narrative is rewarded with the ability to proceed. As computer games have expanded in scope and capacity, players have been implicitly invited to wander and explore "authentic" open worlds. As these open worlds become platforms in and of themselves, however, the needs of the game insist that we stay longer and invest more time and money preserving our place. For games like GTAO and other MMORPGs, this project involves subscriptions and costly downloadable content. For single player games, however, other means are necessary to maintain player attention. Meanwhile, the increase in bandwidth and improvement of remote applications has fostered the development of online platforms such as Google Earth that can electronically transport the virtual tourist to almost any location on land, under sea, or in the air. These advances have brought about an interest in not only capturing but sharing virtual experiences. Gone are the days when we were asked to sit through a carousel loaded with slides from the host's last vacation however. Instead, we are inundated by vacation snapshots across social media channels. The way we travel and record our experience has likewise changed. The practice of capturing and collecting on-screen imagery, virtual photography harnesses computer and network power to embark upon and preserve digital safaris. Evoking Baudelaire's flaneur or the wanderlust of Thoreau, these virtual tourists observe unseen, quietly collecting screen-captured global vistas from the safety of the desktop computer.

This chapter has considered in-game photography as one activity that developers have

homed in on. *Grand Theft Auto V* is not unique in its photogenic qualities nor is it even the largest digital world available. It is, however, one of the more durable platforms for emergent play and the most commercially successful game ever produced. Players spend an extraordinary amount of time in the city of Los Santos, the city that serves as the game's arena as well as its central character. The success of GTAV, as well as other open-world games, is due to the methods it employs to keep players in these spaces. In-game photography, as but one of these methods, is among those forms of emergent play that the game encourages. Anticipated by most contemporary game developers, virtual tourism can no longer be considered a purely emergent or even niche practice.

Like the real-world tourist, the virtual tourist is a privileged entity that supports the establishment being toured. By uncoupling herself from the open-world games, the video game tourist is not acting in discordance with the publisher but by remaining in the game world, contributing the needs of the game as an instrument of platform capitalism. Her presence is data and data is profit. As an alluring, inhabitable space, the virtual supplants the real, and the tourist becomes capital. In capturing these spaces, rendering them to mimic snapshots from the real world, video game photographers offer proof that, despite the dangers on screen, the digital space is a safe space. While I don't content that the video game photographer is complicit in the erosion of the public sphere, their role must be acknowledged as participating in the promotion of a space that is encroaching on the open forum.

The video game photographer carries on the tradition of the Western photographer according to Sontag, "the art of affluent, wasteful, restless societies" (69). Although many may be quick to view the video game photographer with scorn, we might again go back to Sontag to offer some consolation. Condemned to the role of spectator, she states, the photographer is "a

spectator twice over, spectator of event already shaped, first by the participants and second by the image maker" (169). For the video game photographer, this assessment is all the more poignant. In his introduction to the edited collection *Variations on a Theme Park,* Michael Sorkin describes how public spaces are being left behind for the sanctuary of spaces perceived to be risk-free. The digital space has become, what Sorkin refers to as the "ageographical" theme park, a space that has stripped of any residual urban grit. "In the 'public' spaces of the theme park or the shopping mall," he states, "speech itself is restricted, there are no demonstrations in Disneyland" (xv). The genre of open-world games is driven by vast spaces that ostensibly offer the player with a digital dominion to master. Barring the parameters of the map and within the space (one can't walk into the vast majority of storefronts in Los Santos for instance), the open-world is packaged as a liberating experience. Mike Crang argues, that while the "electropolis" may, on first thought, offer an opportunity to realize the truly democratic space, the reality is that the converging social, political, and cultural realities form a dysfunctional public sphere (313). Sara Diamond reiterates this by describing how "the idea of online communities is so contested because there is the prevalent notion that this virtual environment is displacing the crisis laden physical spaces we inhabit" (Scholder and Zimmerman 252). Our sense of place, no longer affiliated with home or authenticity, is not only susceptible to manipulation, it becomes another commodity for the platform.

Examining the significance of the video game tourist alludes to a greater issue concerning the agency of the player. As we investigate the relationship between the photographer, the computer, and the software, greater concerns over the how much agency the player has come into focus. Whether it be a lushly rendered landscape or a chance encounter with a formalist pattern, the virtual environment is a recursively meditated structure composed through the labor

of many hands. For the highly produced games that are most often selected by photographers, it is common to expect hundreds of programmers, artists, and engineers to have had some input into creating the digital space. Aside from the occasional instance where the terrain is randomly generated (as with *Minecraft, No Man's Land*), many of the moments photographed are potentially encountered by anyone who has played the game. Although the video game tourist may detach herself from the trajectories prescribed by the game's objectives, the player still finds herself confined by the design choices of the publisher. Although the virtual tourist is able to transcend the physical limits of travel, the software is still suspect of providing the perspective privileged by the manufacturer of those images. Removed from both vantage points are the decay of the city and the rot that charges the growth of the natural landscape.

As has been discussed, spaces emanate from place. Computer games, as designed digital spaces, likewise emerge from their creators' senses of place. *Colossal Cave Adventure*, *Ultima Online,* and *Grand Theft Auto* are all designed to convey this sense of place. But as we have also seen, play has the power to emplace players. While players in *World of Warcraft* are restricted by the tightly orchestrated place, the rules of the game, and the social expectations of other players, one is ostensibly still able to make the world of Azeroth their own. With regards to computer games—perhaps the most regimented and contrived play spaces—players can opt to push against the game itself. Emergent play and "breaking the game" are ways of responding to a sense of feeling out of place. If I'm not compelled to submit to the needs of the game, in other words, I may opt instead to explicitly work against these needs and become what Maxine Feifer has described as the "post-tourist" who, "...knows that he is a tourist...Resolutely 'realistic,' he cannot evade his condition of an outsider" (271). The in-game photographer recognizes this position as a mediator between worlds on-screen and off but has been effectively co-opted by the

platform to promote the digital habitus.

Computer games, graphical user interfaces, and virtual reality have teasingly offered a future where human-computer interaction seamlessly occurs within a digitally mediated space for the purposes of keeping visitors in place. For now, there still exists a disparity between the world on-screen and off. The user, as McLuhan anticipated in *Medium is the Massage*, is silent and sequestered to the space of flesh and blood, outside that realm breached through the frame of the display. Despite advancements in graphics-rendering and networking, open-world computer games are still limited to the frame. Even the spaces displayed through contemporary VR technology, which portends immediacy in the digital experience, is restricted by cumbersome gear and the very real physical structures of space off screen. Motivated by finding meaningful experiences within these spaces, some players seem nonetheless determined to find ways of making real the virtual. For them, the game offers less of a commodifiable, tourist experience but one to which they are bound through a larger social structure. The next chapter considers this player, as a pilgrim of sorts, searching for transcendent play.

Chapter Four: Computer Games as Anatopistic Places: Pokémon Go *as Ludopilgrimage*

Many recall the July of 2016 as one of trepidation, tension, and exhilaration: terrorist attacks in Baghdad, Iraq and Nice, France, reignited concerns about international violence; high-profile political sea changes left parts of the world reeling in ideological questions and burgeoning polarization; an attempted coup in Turkey ravaged the nation while nationalist sentiments culminated in the British election of Conservative Theresa May; the American presidential election was becoming increasingly contentious. One of the many issues that would exacerbate the nation's already intense division would be gun violence, particularly between police and African-Americans. After a year that witnessed nearly thirty deaths of African-American men at the hands of police, smoldering tensions ignited: a sniper attack on police in Dallas; three more police homicides in Baton Rouge; in July alone, 72 people, an inordinate number of them Black, were killed by non-pursuant officers. In response, the #BlackLivesMatter movement held over one hundred protests during those first two weeks of July. In the city of Milwaukee, where racial issues are always at the forefront, these tensions were as palpable as the summer swelter.

Then the monsters appeared.

Released during one of the more turbulent socio-political climes, *Pokémon Go* (Niantic) gift-wrapped an excuse for members of the media to avert their gaze from the killings and protests. The augmented reality (AR) game quickly piqued our collective curiosities with reports of parks being overrun by digital creatures and their scrambling captors. At the time, very few had experienced these AR games, a genre that uses the smartphone as an interface to a virtual veneer superimposed on top of the physical world. All over the world, people wondered at the

people clustered in groups around landmarks, frantically flicking their phones before taking off elsewhere. Children, for whom the outdoors have increasingly become foreign terrain, took to the streets, plazas, and public spaces to catch "Pidgeys," "Eevees," and other Pokémon creatures. The adults were not far behind. Many relied on our children to assist us in understanding the lore of Pokémon, a global, pop-cultural phenomenon we had thus far ignored. Playful curiosity turned to concern among urban planners as long-forgotten public spaces teemed with a previously absent population. Shopkeepers in stores fortunate enough to be ordained Pokéstops quickly seized on the financial opportunity, offering Pokémon-themed discounts to capture the transient players before they were lured elsewhere.

The goal of *Pokémon Go* is simply to capture digital creatures found throughout the game space which is a digitally "augmented" representation of the real world. The game is typically played on higher end smartphones and tablets equipped with cameras and touchscreens as well as GPS and internet connectivity. The game opens to a third-person, bird's eye view of the player's avatar standing on a colorful map of the surrounding area. This map is a street-by-street representation of real-world geography. Scattered throughout this map are several objects: "Pokestops," Pokémon "gyms," and the Pokémon themselves. The first two of these are real world landmarks transformed by the interface into markers that attract Pokémon. The "gyms" are enhanced Pokéstops where players can deploy their Pokémon creatures to battle other Pokémon creatures, and by extension other players who own them. Some of the hundreds of types of Pokémon can be typically found clustered around these virtual landmarks.

Tapping on one of the Pokémon found on the map opens a new screen where the player attempts to capture the creature. With the augmented reality camera activated, the interface of the game displays the real-world environment immediately in front of the player. If this capability is

turned off, a static, cartoonish background is displayed instead. In either case, a single Pokémon sits in the center of the display. To capture it, the player "throws" a "Poké Ball" by dragging her finger across the screen. This launches the ball at the target and, if the ball hits, the Pokémon is vacuumed up. The creature, in turn, may escape and run away but is otherwise captured and added to the player's collection. Other elements and mechanics have been added with subsequent updates.

Like most fads, *Pokémon Go* seemed to dissipate into the haze of memory almost as quickly as it emerged. A series of technological setbacks and other circumstances frustrated and eventually repelled many players. The inaugural *Pokémon Go* Fest in 2017, for example, which attracted 20,000 players to downtown Chicago, was devastated by networking issues. The sold-out event, which was to celebrate the anniversary of the game's release, ended up being a costly fiasco for Niantic, which was pressured into refunding the admission costs to players. More significantly, the sudden explosion of activity at various locations caused no small measure of distress to the unwitting public. Media reports of people wandering into unsafe areas and injuring themselves were frequent. Others were likely introduced to the game through stories of players invading the Auschwitz memorial site (Friedman 2016) and other culturally sensitive places, were primed to condemn the game for promoting the desecration of sacred and otherwise significant public locales.

Public spaces in Milwaukee, Wisconsin, have always been a point of pride and contention for residents and legislators. One of several major green spaces in the city, Milwaukee's Lake Park is an especially popular destination to take in the precious summer days. At its busiest, various activities are found taking place in one of any number of designated areas and open spaces. A few runners, walkers, and cyclists are typically found on the path that runs

through the park. With the release of *Pokémon Go*, however, a surge of visitors went to Lake Park in crowds seen only during the summer holidays. Instead of the typical spattering of strollers, cyclists, and joggers, the park became crowded by walkers staring at their phones. Spurred by the release of *Pokémon Go,* this mass of people had taken to the length of parkway in search of digital creatures. What made this particular park so attractive to would-be Pokémon "trainers" was the volume of Pokéstops cached along one section of the path. Seemingly overnight, the normally docile area was transformed into a burgeoning space brimming with activity, its ravines and hollows blanketed in players seeking out "Pidgeys," "Charmanders," and other creatures associated with the Pokémon franchise.

Figure 4: Pokémon Go players at the bottom of the Lake Park ravine. Photo by author.

As was the case of many cities impacted by the release of *Pokémon Go*, the sudden explosion of activity was met with a mix of curiosity and consternation by residents. Neighbors of Lake Park seemed by and large to display a positive response, with some even joining the bustle of players. Barkers peddled wares and quartets practicing their concertos set up for a distracted but appreciative audience. Others put out chairs and picnicked among the crowd, eager to participate in the cajoling of several hundred strangers chasing after Pokémon. Other area residents, however, were not so welcoming and complained to local legislators about the public disruption as well as the destruction to the park area. The Lake Park Friends, a civic volunteer group dedicated to the park's maintenance and development, were among the most

vocal. This group soon enlisted a local legislator to spearhead a campaign to curb activity within Lake Park, which would culminate in a litigious debate over regulation of augmented reality game developers and licensing fees to use public space as virtual arenas for play.

Using the above scenario as a reference, this chapter touches upon the impact of *Pokémon Go* on public space to reflect on the player as she is embodied within remediated, virtually augmented space. First, I will examine the conflict that ensued between the communities that convened in an already politicized public space. More specifically, I will first describe in greater detail the friction between the Niantic Corporation and Milwaukee County. The portrait provided illustrates several issues at stake for the parties involved. Turning my attention to the group of players that coalesced that summer and continue to play the game, I focus on the *Pokémon Go* player's sense of place. Rather than describing the conflict between *Pokémon Go* and Lake Park as overlapping space, I argue that considering this debate in terms of overlapping *senses of place* helps articulate the phenomenon of the *anatopistic place*, or place-out-of-place.

Simply put, as anachronism is to time, anatopism is to place. In literature, anatopism is a device where an object, setting, or person is encountered in a setting where it would not normally be. Anatopism can be used to introduce a sense of foreboding, the uncanny, or to subtly make political arguments. This distancing effect, for instance, enabled Shakespeare and others to project their critique of Elizabethan culture from a rhetorically safe distance (Eskew 1). More contemporary productions also deploy anatopism as an especially powerful trope in films depicting war. Brian J. Williams elaborates on this trope of the unfamiliar landscape, arguing that the "landscape as an unknown entity has come to serve as *the* defining trope of the war, a space that holds no place for the familiar" (360).

Reviewing the discourse in this way hints at why so many players came to play *Pokémon Go* at Lake Park despite there being other areas to play in Milwaukee. More importantly to this chapter, I will be looking at this case in terms of place and the *genius loci* ("spirit of place") embodied by the park. Using my model for sense of place provided in the first chapter, we can analyze the friction between players and Lake Park area residents as a matter of emplacement and displacement. Using the model and theoretical framework articulated earlier in the project, I will discuss those aspects that contribute to the more critical consideration of the player as one who is self-emplaced within places that are resistant to occupation, a phenomenon that will be developed as we proceed. Situated as one undertaking a secular journey towards a personally significant destination, this player-pilgrim allows us to recognize how play constructs an anatopistic place-out-of-place. More specifically, I describe how this attenuation to internal and communally held needs countermands the desires that orchestrate and control the spaces to which the AR game is anchored. This player-pilgrim generates rhetorics that construe games as privileged locales, with boundaries that struggle to maintain the distinction between play and the everyday, producing conflict when those divisions begin to blur. This theory, which positions the player as a self-emplacing figure, opens up new perspectives about games and anticipates how augmented reality games might potentially work to intervene in prevailing power relations as embodied in designed spaces.

History of *Pokémon Go*

Before proceeding, it is worth reviewing the history of *Pokémon Go* and Niantic's previously produced game, *Ingress* (2012). In addition to providing data brokers like Google with information about individual trends in vehicular traffic, *Ingress* and *Pokémon Go* delivered

insights into individual tastes and trends. These and other AR games invoke a new sense of trust in their developers, ushering in an era built upon a crowd-sourced economy.

Cresting the dot-com boom, a little-known start-up called Keyhole promised to radically transform the way we would view the world and "deliver a 3D model of the entire earth via the Internet" ("About Keyhole"). The savviness of Keyhole founder and CEO John Hanke, a graduate of the Haas School of Business at the University of California-Berkeley, anticipated an increasingly accessible and potentially lucrative convergence of 3D graphics, geospatial computation, and broadband networking. This would prove to be the foundation for one of the most significant and wide-reaching developments for twenty-first century mobile technology.

Keyhole would become part of Google's growing enterprise in 2004, with Hanke transforming his spatial rendering project into Google Earth (Markowitz 2012). Until 2010, Hanke's Google Geo team directed the integration of Google Maps and Google Street View into the company's ecology. At that point, Hanke and some of his original Keyhole colleagues formed Niantic Incorporated within Google and, in 2012 published *Ingress.* In this augmented reality game released to Android devices in December 2013, players join the "Resistance" or the "Enlightened" to fight for control of networks of "portals." These portals are landmarks and points of interest in the physical world that are transformed by the game into virtual points. Players use their mobile devices to view a digitally rendered map of their real-world surroundings, establishing or taking control of portals and creating connections between them. One of the more significant qualities of *Ingress* was that it allowed players to propose new portals to Niantic for consideration. To submit a portal for review, users provided a photo of a storefront, monument, or an otherwise static, unique landmark for review. Other criteria listed on the *Ingress* website include, "A location with a cool story, a place in history or educational

value", "A cool piece of art or unique architecture," and "A hidden gem or hyper-local spot" ("Candidate portal criteria"). Players were asked to avoid areas unfriendly to pedestrians, private property, natural landscapes, and seasonal or temporary displays. After a lengthy period of waiting (this author waited nearly eight months), the submitter received a verdict on whether their portal candidate was accepted. In this way, *Ingress* used player-contributed data to crowdsource expansion of the Google Maps geolocational services.

Using the information contributed by players, the AR map of *Ingress* (as well as the developing database that would be used for Google Maps) rapidly filled up with points of interest that included everything from familiar, recognizable monuments (such as Big Ben in London, a portal "owned" by "cichy98z"), to shops that only locals would find interesting. Through *Ingress*, Google became privy to an unrivaled network of places and spaces that were important to area residents and visiting tourists alike. By the time Niantic separated from Google in 2015, *Ingress* had been downloaded over 12 million times. In 2016, the game's more than one million players were conquering portals in 4,000 global regions (Goel n.p.). But this was not the only thing Niantic had to brag about. In September of that year, Hanke would announce that they were partnering with the Pokémon Company to develop *Pokémon Go,* a new augmented reality game based on a 21-year-old pop culture icon (Hanke 2015).

Until this point, augmented reality games had been a niche form of play. For PlayStation's Vita device, *Table Ice Hockey* (Sony Computer Entertainment of America 2012) and the puzzle game *PulzAR* (Sony Computer Entertainment of America 2014), used table-top cards as markers to superimpose a game area where two players could compete. For smartphones, *Ingress* had accumulated a dedicated but limited player base. But there was still a dearth of notable additions to the location-based, AR game library. One of the more successful

games, Six to Run's running trainer *Zombies, Run!* (2012), used a serial zombie apocalypse narrative to add interest (and zombie chases) to one's jogging routine. Other popular titles included the mafia simulator *Turf Wars* (MeanFreePath, 2009), ghost hunter *SpecTrek* (Games4All, 2010), and first-person shooter *Paintball* (Mambo Studios 2011).

The cozy marriage of augmented reality and games had been anticipated nearly a decade prior. Experiments out of the Georgia Institute of Technology demonstrated how using games to interface with AR systems promoted experimentation and unforeseen forms of interaction (Starner, et al. 2000). The following year, the game "Can You See Me Now?" sent three chasers after twenty participants over a weekend throughout the streets of Sheffield in the United Kingdom (Flintham et al. 2003). This capacity for emergent interaction within real-world arenas enabled those forms of scholarship that had traditionally been constrained by spatial demands to connect participants beyond both laboratory and classroom. Karen Schrier's early work advocated for the use of AR games to impart much needed data management, media fluency, critical thinking, and collaboration skills to the millennial student (2006). By the end of the decade, medical (Burke et al. 2010), pedagogical (Dunleavy et al. 2009; Klopfer and Sheldon 2010; Squire 2010), and environmental (Klopfer and Squire 2008) applications for AR had been embraced by academics.

The popular press responded with as much anticipation as players. Eager to explore the impacts the game would have, journalists immediately speculated on *Pokémon Go*'s significance to augmented reality marketing (Hobbs 2016), technological access (Tassi 2016), and physical activity. Niantic's new project was expected to deliver an expansive interest in geolocational technology. On July 6, 2016, *Pokémon Go* was released in 37 countries to much anticipation. Many of the game mechanics found in *Ingress* could be recognized beneath the cartoon sheen of

the new game. Much as in *Ingress*, players navigated the landscapes of a physical world overlaid with a digital surface accessed through their smartphones and tablets. In *Pokémon Go,* the conspiratorial narrative of *Ingress* was replaced with the colorful patina of a global, pop-culture phenomenon. One of many of Nintendo's venerable game franchises, *Pokémon* has been a transmedia staple since 1996. Short for "pocket monsters," Pokémon are collectible creatures that are captured and trained to engage in battle with another Pokémon. Satoshi Tajiri was inspired by his exploits as a child in Kanto during the 1960s. Through his creation, he hoped that other children would find pleasure in the exploration and collecting of insects he himself had enjoyed. Over two decades later, the franchise has expanded to include video games, manga, cartoons, and feature films.

As to how *Pokémon Go* compares to *Ingress,* several distinctions stand out in how players can engage with each the game and with one another. First*, Ingress* players possess the ability to contribute to the game space (and Google's database). *Pokémon Go* players, however, are not able to contribute significant locations ("Pokéstops") and are limited to those culled from *Ingress* by Niantic. Second, *Ingress* players were few and therefore ignorable by the general public. Someone looking at their phone near the Auschwitz Museum might not draw attention, but when a horde of them showed up to play, there were understandable concerns. Third, players of *Pokémon Go* are unable to communicate through in-game channels, while *Ingress* players could communicate through chat. This may seem like a limitation, but this restriction requires players to communicate in the physical world, facilitating small cohorts that share information and coordinate tactics to maximize the effects of game features. Players of *Ingress* could coordinate sudden reclamations of territory across the in-game channel. Due to the smaller player base, this capability enabled immediate response to infractions on territory that could—like the

tactics of Electronic Disturbance Theater's SWARM—immediately disperse after successfully capturing enemy nodes (Raley). While most players of *Pokémon Go* are unlikely to use the game as a mode of activism, the game's potential for organizing and mobilizing small groups of individuals is significant for this project.

Finally, the portals of *Ingress* were replaced with Pokéstops which could be accessed for various items once the player moved within range. Some of these portals were selected to be Pokémon gyms. Similar to *Ingress* portals, these sporadically placed gyms are controllable by players. Also attracted to these Pokéstops are the Pokémon themselves, digital creatures who would appear on the map overlay that serves as the primary interface of the game. Once a player taps on the Pokémon on the map, the application shifts to a capture screen. The player can here opt to view the game in one mode, where the creature appears on a static, digitally-rendered grassy field, or in the default AR mode. In this mode, Pokémon and the game's interface are overlaid atop the device camera's input.

Despite some initial technological setbacks due to the enormous burdens on Niantic's servers, *Pokémon Go* quickly became the most downloaded application in history with an estimated daily take-in of $1.6-million from in-game purchases (Hobbs 2016). Fueled by a mix of nostalgia, curiosity, and simply having something to do while enjoying the summer months, players took to the outdoors in hopes of finding their favorite Pokémon. They did so in unprecedented numbers. Once players were able to get the game working, they flooded the spaces - mostly public, sometime private - of their respective cities. Those in rural areas or less popular urban spaces (such as more impoverished areas) where there was a dearth of Pokéstops, ventured to those spaces more densely populated with Pokémon.

Places of Play: Milwaukee County v. Niantic Inc.

Using their mobile devices, players located various real-world landmarks that had been transformed through the game's interface into Pokémon-attracting Pokéstops. Social media and other communications networks enabled players to convene in groups to take on more challenging battles at Gyms. More savvy players utilized browser-based applications to locate additional, perhaps more unfamiliar areas where sought-after Pokémon could be found. One of the most popular of these applications is the "Pokémon Go Map," a project unaffiliated with Niantic Inc. Built on OpenStreetMap, an open-source set of global mapping data, this overlays a map of a selected area with icons designating Pokéstops and Gyms in real-time.

In Milwaukee, Wisconsin, a mid-size city located on the western shore of Lake Michigan, one of the more popular areas to play *Pokémon Go* during that summer was Lake Park, a mile-and-a-half long parcel of public space. Covering over 138 acres of land, Lake Park is revered by Milwaukee residents as a place to escape the city. On the northern end, the park is capped by the intersection of Lake Drive and Kenwood Boulevard which continues west before south along Lake Michigan as Lincoln Memorial Drive. This eastern border continues below a steep bluff until reaching St. Mary's Hill, a popular sledding spot that is traced by the winding Water Tower Road that serves as the foot of Lake Park. Just north of the point where this road breaches the hill is the beginning of Wahl Avenue where some of the city's more valuable real estate marks the western border of the park. Bartolotta's Lake Park Bistro, a fine-dining restaurant that occupies what once was the fieldhouse, sits securely in the middle of the park which is accessed by Lake Park's main entrance located on the prestigious Newberry Boulevard.

Adorning two of the more affluent neighborhoods in Milwaukee, Lake Park is regarded as the flagship of the city's renowned array of green spaces. Lake Park was designed to mimic

the wilderness that was once found in the region. The chain of open parcels, each designated as open space or for a specific activity, is couched within lush groves and foliage strategically placed. Several landmarks including a Native American burial mound and commemorative Civil War statuary punctuate the park along the Oak Leaf Trail, an accessible, paved path that winds through the length of the park. Despite containing a large playground, courts for tennis and lawn bowling, a small stage, and par-three golf course, there is still plenty of space for more open activities throughout. Conceived by revered landscape artist Frederick Law Olmsted, Lake Park is remarkable for its capacity to emplace visitors in an environment seemingly removed from the city. Manufactured waterfalls and winding ravine paths, signatures of Olmstead's designs, simulate the natural world. Large swaths of open grassland, circumscribed by groves of towering oak, displace the city lurking the next block over. Other spaces such as a playground and tennis court are more explicitly designated for more structured activity. Creeks and paths that lead down to the road below course through more densely wooded areas to mimic nature's meander.

The Release of Pokémon Go

The generous amount of open space, combined with the number of landmarks that had been transformed into Pokéstops, contributed in no small measure to the popularity of Lake Park with the release of *Pokémon Go* on July 6, 2016. Although the release of the game was highly anticipated by fans, its enormous popularity was evidenced to others by the crowds that immediately descended upon public spaces across the city. Few places were more popular with players than Lake Park. Just south of the Bartolotta's parking lot, a once cloistered ravine suddenly became host to a crowd of idling players, its stone cut steps lined with the overflow of foot traffic from the path above. The usually serene Oak Leaf Trail itself was suddenly overwhelmed with the highest concentration of mobile players, most of whom staring intently at

their phones. For hours, the players roiled back-and-forth along a Pokémon-packed half-mile stretch that runs between a parking lot located at the end of Newberry Boulevard and the intersection of Belleview Place and Wahl Avenue. Skateboards, bicycles, and rollerblades were deployed by those hoping to migrate between Pokéstops with greater expediency. Occasionally, someone would cry out "*CHARIZARD!*" instigating a sprinting exodus towards a spot where a rare Pokémon had been spotted.

This frenzy of activity would frequently spill out into an open grassy area that exposes a large stretch of the path's southern end to the residents that live along Wahl Avenue, the two-lane street that borders the western edge of this stretch of Lake Park. From the vantage point of those living across the street from the park, the scene must have seemed extraordinary if not disconcerting. Neighbors and residents of the area were quick to point out the impacts. Within days, steps were taken to reduce the perceived chaos and deter after-hours visitors. Subtle measures were taken, and makeshift ashtrays were placed near Pokéstops as well as signs asking players to kindly watch out for the wildflowers.

Despite these gestures, the city of Milwaukee was urged to respond more formally to the situation. Meanwhile, complaints about litter and the seemingly wanton destruction to the foliage began trickling into the offices of local legislators. Minimum and medium-security prisoners were brought in to help clean up, exacerbating concerns by neighbors. Meanwhile, police on horseback loomed over the crowd as chaperones, surveilling the crowd from within. Lights along the path remained off long after dusk, making it difficult for those that would have remained into the night to do so. All of this did little to dissuade occupancy during the evening hours when the park is closed to the public and several hundred players who had made the mistake of lingering received citations. This confused situation within the park was echoed by proceedings in the

legislature.

On August 16th, John Dargle Jr., Milwaukee's Director of Parks, Recreation and Culture, sent a letter to John V. Hanke, CEO of Niantic, requesting restitution for the costs incurred by accommodating *Pokémon Go* players (Wild 2016). Although admitting that the augmented reality game promoted "many new positive recreation experiences," Dargle pointed out that impacts on Lake Park had been severe. More to the point, Dargle demanded that Niantic disable all *Pokémon Go* sites in Milwaukee County parks until they complied with the geocaching guidelines established by the county. These reportedly included regular monitoring and maintenance of the physical grounds on which those sites were located[1]. Many misinterpreted Dargle, believing that these new regulations required players to purchase a permit to play *Pokémon Go.* Attempting to clarify the confusion, an announcement entitled "We WANT You to Pika-choose Milwaukee County Parks" was released on behalf of County Executive Chris Abele on August 25, 2016, but only complicated matters. In this statement, "Exeggutor" Abele (awkwardly deploying the parlance of the game) declared that the county was thrilled about the increase in park activity (such as having a "Poke-nic") and that it would be "Tentacruel" to require permits of players.

This affable (yet cringeworthy) response contrasted sharply with that of County Supervisor Dr. Sheldon Wasserman, speaking on behalf of Lake Park and its neighbors. During a phone conversation in July of 2017, Wasserman's exasperation was evident in his description of how the game had "changed the neighborhood overnight." One source of this frustration, he told me, was how the media had painted the permit as a form of "class warfare" that pitted residents of Milwaukee's Lake Park neighborhood against those from the inner core of the city. Offering

[1] Although there is a link to a page on Milwaukee County's website that once detailed the permit process, at the time of this writing this link is inactive

an alternative culprit, Wasserman described Niantic as "taking advantage" of both the public park system and the players themselves, using the "atmosphere of wealthy versus poor" described by the media to turn a profit. Although not discussed in our conversation in July of 2017, another source of concern must surely have been the lawsuit initiated by another AR game developer, Candy Lab Inc., over the permit requirement ("Personal Interview" July 2017). In a lawsuit filed that same month (Candy Lab v. Milwaukee County), the developer sued the County and the departments involved in the implementation of the permit and the restrictions imposed on their game *Texas Rope 'Em.* The case was settled later that year with the County, who had since removed the permits, covering Candy Lab's legal fees in the amount of $83,000 ("Legislation Details"). This was not the first time the video game industry has sued a city. Just one month prior to Candy Lab v. Milwaukee County, the Entertainment Software Association filed suit against the city of Chicago over the expansion of the city's Amusement Tax to include video games (Entertainment Software Association v. The City of Chicago and Erin Keane). Although these litigious moves against a city government are rare, the precedent has been set.

Since the summer of 2016, the player base of *Pokémon Go* has subsided. Crowds the size of those seen at the game's release have been steered towards highly controlled events such as "*Pokémon Go* Day" which was held in Chicago over two days in July of 2018. In ensuing years, Niantic has quietly removed many of the original Pokéstops. In Lake Park, for example, the small cluster most visible to residents along Wahl Avenue has been removed. The park itself has also been modified, presumably in response: a small line of saplings, planted in the fall of 2016, now stand between the path and Wahl in the same area the Pokéstops were removed. This development suggests that the city manipulated physical space to accommodate the virtual. At this time, I have been unable to contact the Friends of Lake Park to determine why the trees were

placed in this location. If they were planted to obscure neighbors' views of players, there are no longer any crowds to obscure, however.

Although the game no longer compels most players to convene en masse on Pokémon-rich public places, a strong player base has been established. In a recent survey of one hundred active players, over 60% claimed to play several times a day. The clear majority of these respondents have been playing since release. The other significant change shared by respondents is that playing the game occurs during everyday moments to fill idle time. Wasserman's accusation of a "class war" underscores the concerns that city residents have had about issues of space and boundary. Milwaukee's long and tortured history of racial injustice is retold in the streets of the city. As seen in a map of Milwaukee drafted in 1939 by the Home Owners Loan Corporation (HOLC), the "redlining" of Milwaukee has had a disastrous effect on the city. The map recalls many of the common attitudes expressed nearly one hundred years later: neighborhoods along the northern shore are celebrated as "best" while those within the city's core are deemed to be "definitely declining" or even "hazardous" ("Mapping Inequality"). Although the red lines that once striated the city map may have shifted over time, they still impose the same prejudices in the way Milwaukee's citizens regard certain streets as borders designating neighborhood quality. Viewing the city on "The Racial Dot Map" (Demographics Research Group 2013), a color-coded presentation of 2010 census data, clearly illustrates the demarcation between communities that are drawn. In a city such as Milwaukee, where racial and class biases were instituted by early architects and urban planners, public places become smoldering fault lines between the privileged and discarded citizenries.

Despite the intentions of Olmstead (who as a journalist railed against slavery and racial injustice), Lake Park embodies Milwaukee's legacy and how the city privileges the wealthy. The

forms of leisure that are warranted in Lake Park, in other words, are not those typically enjoyed by those of little means. This bias is mirrored in *Pokémon Go* but is embodied in the disparity in distribution of Pokéstops and gyms throughout the city. *Pokémon Go*'s crowd sourced predecessor *Ingress*, which is built from player contributed data, reflects the technocratic essence of its player base. In the transfer of geolocational data from the niche *Ingress* to its vastly more popular spawn, the resulting map of Pokéstops in Milwaukee is almost identical to the Redline map.

Comparing Lake Park to Olmstead's other projects, Washington Park and Riverside Park, illustrates this reality. In Lake Park, there are currently twenty-three Pokéstops and five gyms (not including the two that were removed) within its 138 acres. Riverside Park, a small 15-acre parcel nestled between Riverside High School and the Milwaukee River, is a small wilderness containing nine Pokéstops and three Gyms. Washington Park, which is most comparable to Lake Park in size at 128 acres, has four Pokéstops and two Gyms within its borders. Reasons for this include a comparable lack of landmarks and thresholds approved by Niantic. Riverside Park, which has seen improvements and increased use after adoption by local non-profits, houses statuary, bridges, and structures that have been incorporated into *Pokémon Go.* Displaying a dearth of in-game representation, Lake Park's inner-city sister Washington Park is in an area with one of the highest crime rates in Milwaukee. The scarcity of Pokéstops and Gyms in this space, which are limited to a few major built structures, a small plaque, and the sign at the park's entrance, presents in stark contrast to the number found in Lake Park.

This resplendent entrance and well-maintained landscaping make for an inviting space which certainly contributed to the crowd of players that beset Lake Park that summer of 2016. Despite a lack of convenient parking and nearby public transit, people travelled to this space

specifically to play *Pokémon Go,* not to refine their golf game or admire the landscaping. This disparity of intentions is an undercurrent of the arguments attempting to justify actions taken by the city to curtail playing the game. It has been the position that Lake Park simply isn't designed to handle such enormous amounts of activity concentrated in a single area. While I don't disagree with position, it begs the question, what activity is the park then designed for? It is clear the park privileges those activities that aren't likely to draw crowds. More critical to this chapter, how did *Pokémon Go* overcome the existing senses of place embedded within this space to attract players in such large numbers? In other words, how did this simple, buggy, and somewhat crude game displace the sociocultural expectation of this venerable park, disrupting the conventions of such a thoroughly engineered space? To answer this, I suggest that we must prioritize the player's sense of place and consider how this can subvert even the most stalwart of spaces. Given that there are so few opportunities to play *Pokémon Go* in Milwaukee's inner city, it's unsurprising that people from those regions replete of in-game representation would travel to those areas that had far more opportunities to join the world in an event so extraordinarily significant within pop-culture. Niantic was not only successful in tapping into the collective nostalgia and appeal of the Pokémon franchise, they did so in such way that those who had been historically disenfranchised by public spaces were compelled to subvert the structures that had inhibited occupation. All this to play a simple game?

The remainder of this chapter argues that *Pokémon Go* exploits a deeply ingrained sentiment that is far older than the venerable franchise. Games and play enable us to escape the everyday, but we typically do so in spaces that are approved for these activities: playgrounds, arenas, MMORPGs, etc. In the case of *Pokémon Go* and augmented reality games, the space of the game usurps that of the world of flesh and blood. Phenomenologically speaking, players and

player groups create places that are out-of-place. These *anatopistic* places of play are disruptive to space and the activities and behaviors that are allowed within them. When play is motivated by a subjective or intersubjective sense of place, it generates a potentially meaningful space that is part of—but apart from—occupied spaces. As I will demonstrate, the *Pokémon Go* player (like many if not most players) is one who transgresses the conscription of space in pursuit of a goal. Despite any inconvenience or hardship, the sloughing-off of the humdrum to pursue this transcendent experience likens the game to a sort of pilgrimage, and the player to a pilgrim.

***Pokémon Go* as Pilgrimage**

To cast the player as a figure typically perceived to be following a religious or spiritual directive requires some explication. To be certain, the pilgrimage is still considered to be of importance to the world's religions. According to the Kingdom of Saudi Arabia's General Authority of Statistics (2018), approximately two and a half million pilgrims travelled to Mecca in 2018, three-quarters of them arriving from regions outside Saudi Arabia (8). Although the number of pilgrims to Mecca have declined over the decade, there has been a sharp increase in Christian pilgrimages over the same time period. Data provided by the Oficina de Acogida de Pergrinos (2018), which maintains records pertaining to many of the major Christian pilgrimages, show that American completion of pilgrimages has jumped from one to seven thousand over the last decade. Interpreting these statistics is well beyond the scope of this chapter but they help illustrate how the act of pilgrimage continues to be a popular rite among the world's religious and spiritual communities.

Reasons for pursuing pilgrimage are as varied as forms of pilgrimage. What unifies them is a sense of being that is acquired through the conscious progress along a path to a

predetermined destination that is distinguished from the everyday. On the Camino Portugués, for example, pilgrims take on the 600-kilometer journey for spiritual reasons but also for health or the unique tourist experience. Although lacking in an overtly religious purpose, *Pokémon Go* offers players an otherwise almost identical set of reasons for playing. Players responding to a brief survey attributed a myriad of reasons for playing, the most prominent of them being a sense of accomplishment acquired through collecting and evolving Pokémon. Accomplishment through competition and was also cited but to a far lesser degree. Equally important to players are the socialization that is promoted through the game, either with family members or with a larger community of those familiar and strange. These are all qualities that have been incorporated into the franchise since its inception and might be considered the "tradition" of Pokémon.

Pilgrims are typically motivated by a desire for personal change and connection with a larger community of interest. As Nancy Frey describes, "pilgrims are often attracted to the metaphorical pilgrimage as an inner journey and want to actualize the physical journey to help them access those inner 'destinations' that are distant in everyday life" (91). Pilgrims, in other words, translate the internal desires, ideals, and goals that formulate place onto the spaces of the material word, transforming those spaces into facets of a meaningful experience. The intentions of the pilgrim—the voluntary and conscious process of proceeding towards a destination of personal or collective significance—is very much like the motivations of the player. So how is the ludopilgrim distinct from her more conventional counterpart? While both take on the pilgrimage voluntarily and both are attentive to the journey's process as well as the impending goal, they differ with regards to how they anticipate the pilgrimage to affect them.

The routes that comprise the Camino de Santiago, for example, are taken by people of

Christian persuasion as well as those whose spiritual identities may or may not include a religious affiliation. But it is also taken by those who take the journey as a tourist experience, to participate in a social occasion that is open to people of various backgrounds and intentions. Others view the Camino as a test of endurance. Historically, the Christian pilgrimage is undertaken in pursuit of blessings, which was most often that of good health (Davies 6). Exercise enthusiasts, compelled by the extreme conditions and fitness level required to complete longer, more physically exhaustive pilgrimages, are more likely to be testing their stamina rather than praying for it.

The pilgrim's intentions can also shift and change during the course of the journey. In her account of the pilgrimage to Chimayo, for example, Paula Elizabeth Holmes Rodman recalls how the physical duress leads to a focus on the journey rather than the shrine that waited at the end of the journey (45). The endurance required to complete this pilgrimage inevitably attracts those who are interested in testing their physical endurance more than their spiritual devotion. These athletes, in essence, renegotiate the place of the pilgrimage, adapting the route and its culture to their own needs. Rather than a sacred obligation of repentance, the struggle and pain imposed by the space and terrain becomes an obstacle to be conquered and even a point of pride.

At this point, the pilgrimage bleeds into the realm of tourism, a matter which was discussed in the previous chapter. This intervention in the sacrosanct nature of pilgrimage is part of what has historically made the rite so compelling to participants. According to Victor and Edith Turner, the "sacred journey" is a rite that has been reified by the world's religions (25). Although Turner and Turner focus on the pilgrimage as a Christian ritual, they point out that, as a tradition, pilgrimage provides an escape from the strict regimen of religious expectation adding that "there is something inveterately populist, anarchical, even anticlerical about pilgrimages in

their very essence" (32). These "anti-structures" of tradition can enable participants to emplace themselves, renegotiating the demands of time and space—at least temporarily. As seen in every Christian Sunday service, liturgical structures orchestrate a tradition that is tightly regulated but in such a way that it distinguishes itself from those that manage life beyond the chapel. As distinct from the everyday, tradition has the potential to emplace the practitioner in a place beyond time and space that is typically designated by those in power.

More important to my argument, however, is that the scope of our current understanding of pilgrimages has expanded to include participants of non-religious motivation as well as destinations that are secular in quality. Music festivals such as Milwaukee's Summerfest, for example, draw close to a million fans each year, many of whom travel from out of state for the entire ten-day event. Pop-culture conventions ("cons") have not only thrived but have become vital, even crucial, components to the experience of communities interested in gaming, science fiction, and other "geek" activities. Not only have these gatherings proven to be lucrative ventures, participants consider them to be cornerstones of their fandom. Jennifer E. Porter, for example, focuses on *Star Trek* convention attendees when considering how pop-cultural destinations offer the same significant meaning for pilgrims (161). Explicitly describing *Star Trek* conventions and other sites (such as Vulcan, Alberta) as pilgrimage destinations, Michael Jindra describes how these "pilgrims" are cognizant of the social imperative and are compelled to participate "not for a kind of personal salvation, but for the future of the [*Star Trek*] collective 'we'" (40).

Contemporary anthropological and sociological research has increasingly considered journeys to non-religious destinations as conveying a sense of meaning similar to that bestowed by their more traditional kin. Elvis Presley's estate Graceland is likewise considered a "mecca"

for fans whose faith and devotion is displayed through ritualistic visitation to the musician's grave (King 101). For game enthusiasts, the gaming convention has become an annual event for devoted players to not only discover new products but also play favorite games with others familiar and strange. For table-top game players, there are numerous gatherings dedicated to those interested in finding new titles as well as the chance to play industry stalwarts like *Dungeons and Dragons* with others. Since its inception over fifty years ago, GenCon has become the culminating pilgrimage of the year for players of board and pencil-and-paper role-playing games, drawing crowds of over 60,000 to Indianapolis for the four-day convention.

Whether secular or spiritual in nature, pilgrimages share a set of qualities. For the purposes of this chapter, I focus on those that are significant to the player-pilgrim: their motivation for embarking on the journey, the relationship they have to the spaces they traverse, and the effect this rite has upon the player-pilgrim. I don't want to pretend that *Pokémon Go* players consciously possess religious or spiritual aspirations in mind while chasing after Pokémon. As the discussion that follows will show, however, the qualities shared between the pilgrim of religious traditions and the player of this game allude to similar motivations. This section focuses on those that pertain to the player's sense of place. By focusing on the perspective of the player rather than game or the space in which it's played allows me the luxury of sidestepping the distinctions between the "virtual" and the "real." From the vantage point of the player, claims Thomas Malaby, meaningful experiences procured from both spaces are equally viable (97). This is especially true for places of play and for players who seek meaningful, even transcendent, experiences from play.

This player, who I will at times refer to as a *ludopilgrim,* is one who consciously views games and play as a vital connection to social, cultural, and even spiritual communities. The

ludopilgrimage is, therefore, a secular ritual wherein the player is emplaced through the game - whether solitarily or with a group - in a place. Using the case of players of Lake Park as a tuning fork for this theory, I can demonstrate how the sense of place generated by players conflicts with the sense of place experienced by Lake Park neighbors. As previously discussed in the chapter on toys and spaces of play, play is a transcendent but transient phenomenon but one that companies like Niantic hope to extend by compelling players to play constantly. Like most neologisms, *ludopilgrim* and *ludopilgrimage* serve as clumsy asphalt to fill in the potholes of existent discourse. My aim here is to tease out the relationship between a specific form of digitally mediated play, the non-digital spaces in which they are played, and the perspective of the player that navigates them both.

Places of Pilgrimage

As I've discussed, players of *Pokémon Go* were initially compelled to travel to Lake Park due to a lack of places to play in areas that, while being more proximate, harbored few places to play the game. As a primary form of entertainment, games are among our first methods for escaping the everyday. When the spaces of the game so closely reflect those of the everyday, the game is stripped of its capacity to transport players in a satisfactory way. How does the space of *Pokémon Go,* which is a hybridized liminal space between the digital and the "real," inform the player's sense of place? To answer these questions, we must first identify and consider the area of overlap between these *liminal* spaces. Although game and play scholars have expanded upon (Salen and Zimmerman 2004) or even argued against Huizinga's "magic circle" (Calleja 2012, Consalvo 2007, Malaby 2009), his concept of play as one that creates place is one that is fundamental. Although I agree that the magic circle is an outmoded model, it is useful to

envision the ways play is intimate with concepts associated with space and place.

To discuss the secular pilgrimage as a model for looking at *Pokémon Go* play as an anatopistic place, we need to first recognize that places in which they occur are critical components of the *ritual*, perhaps even more vital than the destination shrine, a discussion that will be detailed below. This is not to say that these places are always sacred. Much of the scholarship cited herein view pilgrimage as an act that blurs divisions between the secular and religious, the sacred and the profane. This is a relatively recent interpretation, however, and one whose development should be briefly reviewed. Writing from the mid-20th century, Mircea Eliade attempted to determine what the sacred *was* by first establishing what it was *not.* Following what he referred to as "hierophanies," or those acts or events where "something sacred shows itself to us" (11), Eliade described sacred spaces as those that are built to distinguish that from other spaces (26). These profane spaces are neutral and homogenous that, Eliade argues, lack the distinguishing marks that help one to orient herself in the world (26). Orientation is thus a technique used to conceptualize and organize spaces and those within in around a sacred tentpole, an act that mimics "the paradigmatic work of the gods" (32). In other words, to fabricate or occupy a place is to engage the cosmic narrative of deriving order from chaos, place from space, the sacred from the profane.

Although Eliade's model is limited, it helps articulate the significance of the threshold between sacred places and profane spaces. Arnold van Gennep's *Rites of Passage* discussed the dynamics of social groups and the change in status that comes an individual or collective transition through portal rituals. This threshold is often a literal passageway that serves as a symbolic transition between the sacred and the profane. But this threshold is significantly extended, both spatially and temporally, in the case of the pilgrimage. Victor and Edith Turner

appropriated van Gennep's concept of the liminal stage for their landmark work *Image and Pilgrimage in Christian Culture*. The liminal, or "threshold" stage exists between a point of origin and a destination. The rite of pilgrimage, according to Turner and Turner, was established specifically to bring about this transcendent state of being. "All sites of pilgrimage have this in common," described the Turners, "they are believed to be places where miracles once happened, still happen, and may happen again" (4).

Is creating or playing a computer game a transcendent act? Such a heady claim could easily be dismissed but recall the motivations many early game developers had for their projects as detailed in the second chapter: Will Crowther wanted to build a play space for his children where they could occupy a space molded from his love for them, spelunking, and fantasy lore. The worlds of the Ultima series are born of Richard Garriott's desire for a world that embodied his own value system and the people in his life that had influenced it. The value systems that are created in these games are epistemologically powerful (Gee 2008) and most resemble the binary quality of Eliade's reductive model. These common value systems help blue the line between the sacred and the profane.

In their introduction to *Sacred Sites, Sacred Places,* Carmichael, Hubert, and Reeves describe the sacred site as a location that is designed to orchestrate behavior. These places often present a representational claim to the metaphysical plane that lies beyond the humdrum of the everyday (3). Neighbors to Lake Park, a simulation of nature designed to provide escape from the grit of city life, are likely to view the park as sacred, though in a sense that Eliade would consider to be profane. When contested by outsiders, these "owners" of the Park not only see it as an infringement but as a "spiritual deprivation" of their sacred place (5). Like the athletes on the pilgrimage to Chimayo, players of Pokémon Go demonstrated how these traditional, sacral

places can be intervened in to implant new places.

New Traditions for the Ludopilgrim

The summer of 2016 had been particularly harsh to Milwaukee, Wisconsin. The city's legislative attempts to curtail AR encroachments into already contested public spaces had garnered a considerable amount of attention from the national press and would continue until the settlement with Candy Labs. The same summer of Pokémon Go's release, the killing of Sylville Smith by the Milwaukee police sparked a brief period of civil unrest which upended the city, again casting Milwaukee in the harshest of media spotlights. While I would never casually compare Pokémon Go and police killing in terms of significance, both situations expose the thresholds between sacred places (Lake Park, law and order) and profane spaces (protesting, play). Public spaces in the city of Milwaukee have been zones of contention for some time. Like many metropolitan areas enjoying a rejuvenation, there have been numerous attempts to usurp and capitalize on the many open plazas and parkways, turning them into areas for private development. The release of *Pokémon Go* appears to signal a peculiar opportunity for urban planners and civic leaders to compel the return of a citizenry that has largely vacated public spaces. As seen in the conflict between Lake Park preservationists and *Pokémon Go* players - as well as #BlackLivesMatter protesters and rioters in Sherman Park - the powerful are quick to return other publics endangering the borders back into their proper place.

Among the most powerful strategies to decimate occupying forces is to force them to disperse. This has been the case of *Pokémon Go* players: the larger crowds no longer gather in Lake Park or other public spaces. Smaller groups of a dozen or so can frequently be seen huddling around major landmarks, indicating that a "raid" on a Gym must be underway.

Occasionally, the solitary player can be found, designated by a certain flick of the thumb and an intensity of stride. These players and player groups are forming new meaningful places - places that embody a new sense of the sacred that seem spontaneous, transient, and collaborative. These new traditions produce a sense of place in players that compels them to return again and again to places claimed by the powerful to assert their own place. But is this place, these new traditions, their own or Niantic's?

Pokémon Go isn't significant for any groundbreaking mechanical or aesthetic quality. Even the game's nostalgic appeal, along with the game's overall popularity, has diminished since July of 2016. Augmented reality games such as *Pokémon Go* take advantage of behaviors and inclinations that have been characteristic of humans for millennia. Games in general and augmented reality games, in particular, evoke a sense of place within the player. This sense of place is significant in that it is neither familiar nor strange but a liminal, place-out-of-place. Looking at *Pokémon Go* from this perspective will reorient the player not as a tourist, as some scholars have considered her, but as a *pilgrim* engaged in pursuit—not of digital creatures—but of the sacrosanct. This theory, which draws from games studies, anthropology, and subcultural rhetorics, positions the generalized player as one who is a pursuer of meaningful experiences. This ludopilgrim, I argue, inhabits a space that exists between the worlds on- and off-screen.

By considering the player in this way—as someone who consciously creates a liminal place-out-of-place through play—we can also see why perspectives of players can be negative or derisive. They are invaders of order and of the productive spaces necessary for progress and productivity. Viewed this way, we can better understand why Lake Park neighbors might have been disturbed by the sudden popularity of this this sacred place. While distinguishing perspectives as "sides" in this case is reductive, it offers a model for posing several questions

unique to those situations where the desires of player communities conflict with those outside of the game. Anticipating contentions between players of augmented reality games and those concerned with the physical spaces upon which those remediated places are constructed, I focus on this friction to help articulate a theory for understanding games and the prerogatives of player and player groups.

The powerful have always held a penchant for undermining countercultures through displacement. Consider the holidays and days of celebration on the American calendar. To assimilate the wave of immigrants entering the United States at the turn of the twentieth century, traditional patriotic holidays associated with the founding of the nation like Independence Day and Thanksgiving were promoted to new levels of importance. Meanwhile, other holidays that arrived from other parts of the world such as St. Patrick's Day given observational status (Hobshaw 280). This "formalization" of tradition, according to Catherine Bell, involves the accommodation of past identities and their incorporation into the milieu of the integrating culture (122). In this way, traditions and ritual act as tools of those in power with participants essentially exchanging one structural system for another.

In the case of *Pokémon Go,* one must acknowledge the fact that the game is a merely an instrument used to extract valuable data for Niantic. As part of the Google ecology, *Pokémon Go* therefore deploys various rhetorics that foster continuous play and the ongoing formation of player groups. The player's sense of place, then, is embracing what is actually a "non-place." Citing Augé, Bolter and Grusin argue that cyberspace is a "non-place" that hypermediates the world rather than offering a place of respite from it (179).

Pilgrimages are, of course, also saturated in a sense of tradition. In many ways, pilgrimage resembles the expectations and performative demands of the traditional but there are

vital distinctions that empower the practitioner. Tracing the route of the prophet Muhammad, pilgrims on the way to Mecca are participating in a rite of passage required by Islamic tenets. Within the more secular realm of gaming communities, traditions are also vital to participation in the culture. In loosely organized tabletop gaming groups, for example, there's the traditional "game day" where players are expected to set time aside to gather and play. For players of tabletop roleplaying games such as *Dungeons & Dragons*, the ritual of character creation initiates a campaign that can span months or years, played out in individual sessions of several hours each. Huizinga most famously pointed out play's ritualistic quality in *Homo Ludens* in which he describes the global penchant for play as historically emerging through rituals of contest and combat (106). This formalization of play through structures of game has been examined by David Myers who describes games that simultaneously reflect and reinforce values already in place (112). In the play and replayability of games, Myers argues, players act out a form of recursivity that is potentially transformative (99) and empowering (103).

In Lake Park, the game supplants existing, "traditional" uses with those ascribed by Niantic and acted upon by players. To use the park, tradition states, one should be participating in those activities that the space has been designed. These designations are reinforced by the spatial configurations of open areas, buildings, paths, and landmarks as well as the practices of those that, over generations, have accommodated those designs through activities deemed appropriate. *Pokémon Go* players discard these traditions by accepting the new meanings and intentions of these structures. The statue of Brigadier General Erastus B. Wolcott, erected in 1920, no longer commemorated his service during the Civil War. New conquests between color-coded *Pokémon Go* teams were being lived out in the Gym that lay at his feet. Ritualized dog-walking had become impossible due to the sheer volume of pedestrians wandering the pathway

ignoring public decorum while in pursuit of Pokémon. Yes, Lake Park had been the traditional space to escape from the everyday, but in ways always permitted.

The ludopilgrimage is a collaborative, digitally-mediated place that is subjectively significant but ambivalent within a socio-cultural context. Within Lake Park, a remediated version of the natural wilderness, the non-place of cyberspace supplants the historical and intersubjective significance of the space with place-ness. The place intervenes in this non-place is one that is constructed socially and collaboratively through the use of the game's interface. The ludopilgrimage that took place that summer presented players with the opportunity to enact a new tradition of play. Traditions of play that Lake Park supported had not been sufficient and had traditionally been discarded - typically by those who had themselves felt discarded. New ways of playing created by *Pokémon Go* promised the means to ascribe new meanings to meaningless traditions. "Where pilgrimage is turned into a kind of 'play' in many cases," describe Simon Coleman and John Elsner, "casual tourists as well as pilgrims may also come to see themselves as engaging in activities that transcend purely self-indulgent leisure" (48). In defiance of those traditional forms of leisure, ludopilgrims voluntarily participate in the process of generating a new, intersubjectively motivated sense of place.

According to Nancy Frey, pilgrims return from their journeys feeling positive about the experience. These positive feelings are so significant that many undertake the arduous journey repeatedly, sometimes several times a year (104). These "serial pilgrims" are no longer satiated by the home they return to. Contrary to the humbling outcomes that many pilgrims report, these repeat pilgrims often boast about their experience. These serial pilgrims are often viewed as being addicted to the pilgrimage. What's more, the commonly described aspects of pilgrimage—increased humility, contemplation, mindfulness, and reflection—take a back seat to confidence

and heightened feelings of authenticity and self-worth.

Whether travelling to Mecca or Indianapolis, pilgrimages usually involve the traversal of a distance significant to the pilgrim. It is highly unlikely, however, that most players of *Pokémon Go* had travelled distances comparable to those who visit Mecca or the Ganges. For many of the visitors, the trip to Lake Park meant walking several blocks or at most driving across the city to a public space that was also attractive to Pokémon. But the lack of grueling physical demands does not determine whether an activity qualifies as a pilgrimage or not. Not even the secular nature of playing *Pokémon Go* can immediately discredit the experience as one that is wholesale removed from that of the pilgrim to the Western Wall.

Despite a lack of convenient parking and nearby public transit, people travelled to this space specifically to play *Pokémon Go,* not to refine their golf game or admire the landscaping. The argument that Lake Park was not designed to endure the amount of pedestrian traffic seen with the release of *Pokémon Go* is clumsy but is not altogether untrue. Like most parks and public spaces, Lake Park was engineered to privilege certain activities and inhibit others. Open fields large enough to accommodate the capacity demanded during the release of *Pokémon Go* are few and are largely replete of landmarks that would suitably serve as Pokéstops. The concern, then, isn't that the park wasn't designed for such activities. It's that that particular parcel is not a space that is expected to be used for large, swiftly moving crowds.

I would also agree that the conflict in Lake Park wasn't the result of an *explicit* "class war." What the situation does illuminate, however, are the structures and means by which power is enacted through space and the new ways by which technocracies have incorporated publics and public spaces into their machinations. In the case of Milwaukee, these powers are very much about class and even more so about race. Even though Olmstead and his collaborators may not

have designed Lake Park to inhibit use by those outside the white and middle-class, the park has nonetheless been shaped over time to reflect the demands of those most interested in seeing it thrive. The activities that are privileged by the space of Lake Park, and those who are implicitly permitted to *make place* within it through their leisurely participation in these activities were and continue to be of white, middle class backgrounds.

This is complicated by the relationship with outside powers like Niantic who are able to profit off of these pilgrimages without worrying about impinging on privileged places. Players, as eager data miners, have proven to be ready and willing providers of "immaterial labor" (Dyer-Witheford and de Peuter 2009) that has become the engine of platform capitalism (Srnicek 2017). Drawing from the lineage of social games made popular on Facebook, players play *Pokémon Go* by exploiting their social network. To the data pertaining to these relationships is another dimension of location—the two ingredients for one's sense of place. Though it wasn't seen this way, the occupation of Lake Park wasn't a conflict of class. It wasn't a war between the haves and the have-nots, but one where the displaced are threatened by entities without presence, without place, emerging from the chaos of spaces as yet unknown. Once we realize that multinational corporations like Google are easily able to occupy places once thought a part of the sacred, it's not long before we realize how they've already displaced our more intimate places and that it is we who are out of place.

Conclusion: Home and Implications of Place for Computer Game Design and Play

To conclude this project, I would like to share some interpretations on placemaking through games accompanied by some reflection on what this implies. More importantly, I would like to offer a critique of computer game design and the industry's pursuit of placemaking. Since games entered the mass marketing, there has been a significant interest in exploiting the player's sense of place. "Since the 1980s," describes Mary Flanagan, "there has been a growing U.S. trend to move to controllable spaces. The house has shifted from being a place of comfort to a site for defense" (53). This trend has motivated contemporary game developers to focus on building the sort of relationships necessary to sustain several of the business models currently in use. My parting thoughts will engage some of these questions and offer some hope that the disruptive power of play will always prove insurmountable to industrial profits. To get to these conclusions, I have argued several points, each perhaps warranting further analysis and reflection:

In the first chapter, I surveyed the landscape of space and place theory. In hindsight, an attempt to summarize two millennia of thinking about place is well beyond the pale of a single chapter. To apply this history of thought to the existing body of game scholarship may have been a bit presumptuous. Nevertheless, the takeaway is that game studies has thus far focused primarily on space as a core concept for both design and experience. Echoing designers like Bartle and Koster who argue for a greater understanding of place—and have often confused space with place—scholars have discussed games in ways that prioritize space, reducing place to a footnote. This project, first and foremost, is to serve as a toehold in the discourse to rectify this oversight. Admittedly, the notional model described in the first chapter is, at least in its current

state, limited. Although successfully illustrating how sense of place is established, the model as provided falters in two ways. As it is here provided, the model fails to account for performance and identity in a sufficient manner. Although each have been described, their relationship to the model may still be unclear. The second concern I have is simply the conception of sense of place as a set of concentric circles. In truth, each of these components overlap in porous, amoebic fashion, a concept I have not yet been able to fully construct.

A historical look at games and play, the second chapter was initially conceived as two. Because I felt it more important to situate computer games as another toy in a lineage of toys, I reserved my discussion of computer games after the 1990s for the third and fourth chapters. As it stands, chapter two looks at play with toys, focusing on a few singular objects that embody the toy's capacity for placemaking. Dollhouses and wargames were significant to this project in ways that were not anticipated yet fruitful. Both exemplify the force with which play usurps materiality and physical space through the assertion of place by the player. It is with this force, which paradoxically seems to strengthen with youth, that anatopistic places emerge. In part because of this, their connections to computer games are so abundant (such as dollhouses' connections to Electronic Arts' virtual dollhouse *The Sims*), it was difficult to contain the discussion to a few pages. Fortunately, other scholars have already picked up on this and have contributed extraordinary work on these matters (see Mary Flanagan's *Critical Play* for example). The other, more idealistic priority of this chapter, however, was to articulate how play works as a form of emplacement. This has been something I've been mulling over since watching how my children could transform any space into a place of play. On the other hand, I have also watched this power to make place become appropriated by videogames over the years. The second chapter therefore concludes with an attempt to peel back this cynicism to uncover the

joy those early developers found in making such strange new places. Truth be told, through this work I have concluded that computer games are simply the latest in a long lineage of toys and as such they are still potent conduits of placemaking energy.

The third and fourth chapters represent a pair of case studies looking at two games which, at least on the surface, are very different. A closer examination, however, reveals similar agendas in how each exploits the player's sense of place to their own needs. In these chapters, we find anatopism and the power of place being assimilated by the demands of platform capitalism as channeled through computer games. While *Grand Theft Auto V* actively nurtures the impulse to make subversive, out-of-place places, *Pokémon Go* harnesses this powerful force of intersubjective placemaking to transform the physical landscape.

In chapter three, I illustrate how *Grand Theft Auto V* takes up what was once thought of as emergent play to maintain player engagement. Open-world games and MMORPGs are proliferating across the entertainment market due to their unprecedented profit potential. Players of online role-playing games have demonstrated their willingness to pay monthly subscription fees for access to these virtual worlds. Although not typically considered open-world, other game genres such as the last-man-standing "battle royale" have employed Rockstar Games' tactics to attract players through a sense of place. Seduced into the place of a game like *Fortnite* (Unreal 2016) or *Apex Legends* (Respawn 2019), players are compelled to repeatedly pay small amounts of money to stay in such places. Much as with *Grand Theft Auto Online,* players of these games also pay for customization as a form of performance in lieu of subscription fees—a trend that is unlikely to abate any time soon. Maintaining player commitment to these models is done by exploiting the player's sense of place. But these are not open worlds where the player is predisposed to explore like in *Grand Theft Auto V.* GTAV and GTAO demonstrate games'

capacities for making money through microtransactions. Yet they also allow for players to experience a simulated banality. This suggests that players are turning to these worlds as humdrum places that make up for a lacking in the world off screen. A lack of stable housing, satisfying occupations, and face-to-face interactions—once the places we relied upon—are no longer found in the world of flesh and blood. Open-world games have become the embodiment of place, in other words, while we increasingly find we occupy anatopistic places off-screen.

This model is also employed by *Pokémon Go,* the subject of the final chapter of this project. This phenomenal success of this augmented reality game was, without a doubt, the primary source of inspiration for this dissertation. It is one thing to watch a throng of dues-paying players on a game like *World of Warcraft;* it is another to witness a similar convention of players in a public place. Although focusing on my hometown of Milwaukee presented concerns about objectivity, it also offered a familiarity with the history of Lake Park and the perception of it as a place cherished by the city's affluent. All this aside, the success of *Pokémon Go* demonstrates the potential of digital interfaces and augmented reality applications as a tool for public mobilization. Anticipating a "*Pokémon Go* for activists" is beyond the scope of this project yet it is invigorating to see a public energized in this way to peaceably make place.

In using the phenomenological methods of analysis, I have attempted to keep personal bias, subjective interpretation, and critique at a distance from this work. Through these methods, To summarize the model provided in the first chapter, the player is first engaged in place through the setting of the game. Within this setting are various actions and events that occur which the player, through performance, must adequately overcome. This performance is done within a larger social group that me be present (as in a multiplayer game) or exist implicitly and at a distance. Through interactions with this social sphere, various aspects of the game experience are

mitigated by the player as meaningful or insignificant. This set of expectations informs the experience of the game and the identity of the player. Identity was not dwelled upon at length in this work for a variety of reasons. I see identity as very much grounded in the spatial. Just as space is mobile, fluid, and shifting, so too is identity. In parsing out place from space, it appeared necessary to keep identification at a distance. I would like to address identity through the very place many of us identify with—the home.

Reflections on the Place of Games

The place of h*ome* is a trope that has repeatedly cropped up in computer games. For many, home is among the most significant if not most important place—it is the very embodiment of sense of place. For many (but not all), home is the absolute manifestation of anatopistic place. Separate from the uncertain world, the home is typically conceived of as a stable, comfortable, and safe place. With its familiar dressings, inhabitants, and routines, the anatopism in the home-place is most overt in the contrast with the whorls of space found outside the front door. This is not the case for everyone however. For others, home is significant as an aspiration. Children of military families who move quite frequently, for example, may identify home as being more oriented towards the immediate family and less attached to a house or location. Families that have broken up, on the other hand, may find that those social connections are more unstable than a more familiar domicile. For some, unfortunately, home is also a place of oppression and even violence. Doreen Massey and other feminist thinkers have reminded us that we would be wise not to overly romanticize the home as a stable and safe place.

Despite the variety of interpretations, computer game developers have displayed an affinity for evoking a sense of place that is most commonly attributed to home. In the pages that

follow, I want to briefly look at how home has been manifested as an ambiguous place but also as a social hub or even as a virtual dwelling. As a site of both comfort and conflict, home takes on an uncanny tone in the big-budget *Castle Wolfenstein 2: The New Colossus* as well as the independent game *Gone Home* that has implications for identity. Looking at Sony's virtual community space *Home* and multiplayer game *Star Wars Galaxies,* we can see an overt attempt to replicate the domestic experience as a virtual platform. While the former examples are familiar mechanisms used by developers to evoke sense of place, it is the latter I believe embodies the ultimate goal of game publishers—a virtual place where users are compelled to work, play, and coexist.

PlayStation Home and Multiplayer Games. Computer game manufacturers have not been reticent in their displacement of traditional understandings of *home* with their own proprietary platforms. *PlayStation Home* (2008-2015) was an early attempt at online placemaking that provided users with a virtual customizable apartment. Within this space, users could invite friends to watch movies and play games together (Calleja 94). A player's achievement badges and trophies as well as personal photos could also be displayed along the walls. These apartments opened to an outer environment that included separate zones for shopping, playing games, and other activities all of which surrounded a tightly regulated plaza called The Hub. Advertising for real-world products and games was prominent in this open area and communication within was carried over multiple channels. In late 2008, Sony received harsh criticism for censoring certain words associated with hate-speech from these channels. Unfortunately, the terms they censored included "Jew," "gay," "bisexual," and "Christ" even when used in casual conversation (Kim n.p.). Subversive activity in this space was largely limited to the in-game graffiti application that allowed users to temporarily deface a wall

background that could be captured as an image and shared with friends. Confined as such, the 40 million subscribers to *Home* were not sufficient to prevent the service from shuttering it in 2015.

Nearly a decade before *Home* was released, massively multiplayer online role-playing games had emerged on the market. Origin Systems' *Ultima Online* and *Everquest* (Sony Online Entertainment) were among the avant-garde of this genre. Although these and other early MMORPGs no longer command the attention they once did, the genre reified the social vitality of digital play and computer games. Many MMORPGs were eliminated from the market after the release of *World of Warcraft.* Although publisher Blizzard Entertainment has not reported subscription statistics for its flagship MMO since 2015, the game remains one of the most successful online games to date with an estimated 2 million active players. Like many MMORPGs, the game is built around task sequences and mini-games that motivate players to constantly move about the immense, colorful environment. Players are free to interact with one another but are unable to interact with the persistent environment as in *Ultima Online.*

MMORPGs have approached placemaking in a variety of ways. This project focuses primarily on those that offered players an opportunity to create, manipulate, and maintain a space within the game. *World of Warcraft,* for example, does not provide unique "apartments" for socializing and displaying evidence of one's achievements. Instead, players socialize across various chat channels that are offered inside the game and on external communications services. The open plazas of most cities in *World of Warcraft* are where one finds the most concentrated forms of activity and socialization. Typically found near the auction houses where goods are traded and purchased, these spaces are tightly packed with social activity, often to the extent that low-end computers are crippled due to the processing power needed to render the number of avatars and their exchanges.

The failed MMORPG *Star Wars Galaxies* (Sony Online Entertainment), by comparison, was largely unregulated. Players of SWG had at their disposal an enormous library of emotive movements and could communicate across numerous in-game channels. Unlike in the plazas of PlayStation's *Home* platform, there was no encroachment on communication. Like those of *Ultima Online,* players of SWG could build houses in any unoccupied location and customize them to taste. Unique to SWG, however, was the ability to develop and maintain small self-governed cities complete with civic organizations, amenities, and services. These cities provided communities with stable, persistent places to gather socially and exchange goods with one another. The main cities, many of which were featured in the *Star Wars* films, were also where one would find the densest activity. The most activity could be found in the cantina areas. Like bars in the physical world, these "third spaces" provided a platform for public performance as well as discreet, private socializing. Although not explicitly sequestered to these areas, the mechanics of SWG entailed bonuses and rewards for congregating there.

Despite *Star Wars Galaxies* enabling players with the most "freedom" that has been allowed by game developers to this day, it turned out that publishers were uninterested in appealing to those niche players who were seeking a virtual place. To attract a greater player base, Sony demanded a simplified, combat-oriented system that ultimately drove away most of the established players. In short time, the multiplayer game was shuttered by Sony. More significantly, SWG has recently been resurrected by players themselves. By reverse engineering the MMO from its initial state, players were able to recreate the original place of the game. *SWGEmu* ("*Star Wars Galaxies* Emulator") has been a thriving game place for several years. Player-created cities are once again scattered throughout the virtual galaxy and the residents continue to organize civic organizations and socialize in the game. Because this galaxy is much

less occupied than its predecessor, *SWGEmu* is an exceptional case, but it demonstrates the power of place and how spaces, even those apparently destroyed, can be rebuilt to house a collective sense of place.

Evidenced by the failure of games like *Ultima Online* and *Star Wars Galaxies*, it is not a given that sense of place is driven by the ability to create a virtual home that resembles an idealized real-world place. While many players certainly enjoy these games because of the sense of place they offer, these players are in the minority and are not likely to be courted by publishers of big-budget games. Perhaps this was the lesson learned by Sony, whose *Home* platform failed to attract the player base necessary to remain profitable. The failures of these and many other socially-driven virtual spaces, tell us that having multiple players in the same location does not mean that they necessarily occupy the same place. The capacity of games to create a home place seems elusive – at least to the extent that these spaces prove to be profitable. Single player games, in fact, may have an even greater capacity for generating a sense of place through home.

Wolfenstein* and *Gone Home. When used in single player games, the home is typically used in the opposite fashion – as a place of origin that a player must move *away* from. The home in these cases are a source of labor at best (such as in *The Sims*) and inhospitable at worst. Home, in most cases, is a metaphor for the humdrum and dull, a source of insecurity rather than comfort. In *Grand Theft Auto V,* this was represented through Franklin's aunt's house. At home in GTAV*,* the player is always a guest and never comfortable. The immediate quest is to *leave.* Like in GTAV*,* these games demonstrate how a powerful sense of place can not only be generated in single-player games, they can be utilized as a source of a negative or uncanny sense of place. The examples that follow remind us that a sense of place is not always connected to a pleasant

place.

As discussed in the second chapter, *Castle Wolfenstein*'s legacy is one that is not only rooted in technical innovation but also by the extremity of violence gleefully doled out when destroying Nazis. MachineGames' recent addition to this line, *Wolfenstein 2*: *The New Colossus*, maintains this tradition while also taking opposition to white supremacy who has been emboldened in the world off-screen. One development in *The New Colossus* is that the Nazis have now taken over the American homeland. What's more, they are now joined by white-robed Klansmen, who also being used as a willing defensive line against the multiracial invasion. White nationalists, who publicly sympathized with Nazism, denounced *The New Colossus* as supporting multiculturalism and painting an unfair portrait of their agenda (Moosa n.p.). This reaction also stems from the backstory of protagonist B.J. Blazkowicz's which reveals him to be of Jewish heritage.

This is introduced in the lengthy cutscene from *The New Colossus,* in which the player flashes between scenes of the present and past from the point of view of the main character. After thwarting yet another Nazi scheme, the player as Blazkowicz is currently being treated within the open belly of a cargo plane. He falls unconscious just after witnessing the receding Nazi fortress explode, the blast propelling him into a dreamlike state. In the dream, a young Blazkowicz is recovering from a recent beating by his father, lying in bed flanked by the family dog and his mother, Zofia. From his bedside, Zofia quietly utters the "birkat hagomel," the Jewish prayer of thanksgiving recited after a long and dangerous process or journey:

> *Blessed are you, Lord our God, King of the Universe,*
> *who bestows good things upon the unworthy*
> *and has bestowed upon me every goodness.*

Her prayer complete, Zofia opens an apparently empty jewelry box and procures a family heirloom from a secret compartment. This moment of comfort is interrupted by the tension that emerges along with the father who is seen coming up from the stair. After flashing forward again long enough to see a surgeon attempting to remove shrapnel from Blazkowicz's abdomen, the player returns to the past. The tension is now present, the father looming in the background as young Blazkowicz is rushed into the closet by his mother. From between the slats of the closet door, the player witnesses Zofia being struck by the father, angered because of his son's friendship with a Black girl.

Zofia's prayer of homecoming, which is typically said after a long journey, is one that implies that the risks taken were willingly undertaken. The birkat hagomel is therefore an interesting (and understated) inclusion into this controversial franchise. Despite being a thanksgiving prayer, to recite it after a *significantly* dangerous situations such as wartime is in fact somewhat controversial. (Tabory 22). Games offer representations of risk and danger but, of course, there is very little chance of incurring any bodily harm. Considering this, the hagomel seems like an appropriate metaphor for the computer game experience. As I've discussed in the previous chapter, the "ludopilgrimage" is a way of thinking about games as quasi-spiritual journeys. We might very easily translate this Jewish prayer to reflect the "unworthiness" of the player who is "bestowed upon…every goodness" that the game affords.

But the vital component of the conventional pilgrimage is the arrival home – an appropriate time to receive the hagomel. For game developers, perhaps this homecoming is a return to a sense of place, when games brought people together not to just play but to participate in meaningful experiences that could be shared with others. In pursuing this affective potential, this sense of place, of the game, they have overlooked that the journey must be terminal. The

game must be turned off, the ludopilgrim must return to the banality of the everyday. This necessity poses a problem for an industry that is seeking out the ultimate, all-encompassing platform that players of all stripes can call "home." We find single-player games like *Wolfenstein* becoming a legacy that can be repeatedly returned to. New episodes are added that reveal the backstory of side characters. Secrets in the game must be found. The narrative must come to an end. Yet the player can always return home with the release of additional content.

In *Wolfenstein: The New Colossus,* the security of home is never present. As the opening cutscene continues, the young Blazkowicz is led through the dark cellar of the family house by his belligerent father. The horror of this scene, which screams in visceral tension, culminates in the shooting of the family dog. Home in *Wolfenstein* is a place of nightmare, anguish, and heartbreak. According to Bachelard, the home is never simply a physical space, but a place imbued and transformed in the minds of those who have lived there into a place of "thoughts and dreams." It can no longer be accessed through presence, but a combination of entering the physical and experiencing the feelings invoked by being there. In the flashing between childhood and adulthood, the player of *Wolfenstein* experiences this liminality of the home split between memory and presence. The cellar here recalls Bachelard's description of the "*dark entity* of the house, the one that partakes of subterranean forces" (39; original emphasis). It is a place where "even when we are carrying a lighted candle, we see shadows dancing on the dark walls" (40). It is this spatial movement of returning the "house" of memories that haunts B.J. as he makes his way across America, and in late point in the game, returns to the home that is no longer home.

This metaphor of the return home is central to Fullbright Games' independent release *Gone Home* (2013), which plays on expectations of homecoming. A mysteriously deserted house makes for an uncomfortable homecoming in this first-person exploration game where the player

plays as Kaitlin Greenbriar, a student returning from a trip abroad. Most disconcerting is the whereabouts of Kaitlin's younger sister, Sam, who has vanished - though not without a trace. To help determine what happened to Sam, the player must follow clues and journal entries to uncover numerous secrets hidden throughout the house. Along the way, complicated and distressed relationships within the family are revealed. *Gone Home* engages the player's sense of exploration to uncover a story hidden within the walls and hallways of the protagonist's family home. Often referred to as part of a genre called "walking simulators," this game relies on the player's sense of exploration and sense of place to piece the narratives within the game into a cohesive whole. Rather than presenting the player with a linear trajectory, *Gone Home* instead works to distract the player with tangential arcs, clues that lead to nowhere, and artifacts from 1990's American subculture (like mixtapes of "riot grrrl" punk bands).

This mechanic and the theme of queer love has positioned *Gone Home* as a torchbearer of so-called "queer games." Bonnie Ruberg has recently defined these games as those that promote LGBTQ representation. Arguing that *all* games are queer games, Ruberg also points out the queerness of games is their capacity to intervene in conventional experiences and desires. Looking at games typically assumed to be heteronormative, Ruberg examines the inherent queerness of computer games and how they have the power to inspire ways of "being, doing, and desiring *differently* (7). Although Ruberg agrees that *Gone Home* does a good job in representing queer themes, the game fails to fully promote the queer play, to play *differently* (18). The onus, for Ruberg, is on the design of games to foster a greater capacity to play in unanticipated ways, a return to forms of emergent play that are increasingly being co-opted by open-world platforms like GTAV. So how should design accommodate this objective? By prioritizing the players' sense of place.

Implications for Design

So, what does a better appreciation for sense of place mean for game design? Looking back to the origin stories of games might be a good place to start. Many of the designers cited throughout this work—Crowther, Bartle and Trubshaw, and Garriott—are among the most prominent in most accounts of computer game history. Their work has been singled out in these accounts not because their work is especially good but because these games are the embodiment of their creators' senses of place. All these creators had a particular player in mind. Whether it was with their children or their friends, these relationships are *felt* when playing these games. To play *Ultima IV* is to join Richard Garriott and his camp friends. To wander the halls of *MUD1* is to walk in the footsteps of Bartle and Trubshaw, to share in their sense of place.

But what if we were to prioritize place in design, instead of character or narrative? Bartles' *Designing Virtual Worlds* aside, place barely gets a nod in current works dedicated to instructing would-be designers on the finer points of the craft. Tracy Fullerton, for example, is an academic as well as one of the principal designers of the award-winning *Walden*, a virtual recreation of Thoreau's experience building his storied cabin. In addition, Fullerton is also a scholar of "walking simulators," a genre of games like *Gone Home* that promote meditative wandering and exploration. It's surprising that in her textbook *Game Design Workshop*, there is no mention of place whatsoever. In the section on world building, for instance, Fullerton describes world building as "often beginning with maps and histories" but can also include other *spaces* like "languages, mythologies, governments, politics, economies, etc." (115). Mark Wolf refers to this approach as "subcreation," a term J.R.R. Tolkien used to describe worldbuilding as a borrowing of real-world spaces (23). What about those real-world places, like those Crowther and Garriott used to build the worlds of *Adventure* and *Ultima*?

In some cases, it may only be a matter of semantics. In Katie Salen and Erik Zimmerman's foundational *Rules of Play* for example, the authors list the elements of a game system as objects, attributes, internal relationships, and environment (51). The criteria for sense of place are remarkably similar. Later in the text, the authors devote an entire chapter to games as a "cultural environment" than blurs the distinctions between the spaces of the game and the real world (572). This is certainly getting to the heart of place. So why avoid calling it as such?

Designer Jesse Schell hints at a likely answer in his book *The Art of Game Design*. Discussing game spaces, Schell argues for thinking of them as discrete so that, "you can more easily think about [them], without the distractions of aesthetics or the real world" (133). This approach to game design (which echoes the first stages of the phenomenological method) is no doubt crucial to efficient production. It seems ironic that we would want to reduce distractions from our games which are themselves distractions. That is, unless one were to consider everything *else* the distraction from the game. If one were designing a game to maintain focus, reducing distractions from the game world, this might be a consideration. To be sure, it might even make sense from a practical, production standpoint. Is this approach the only option?

Perhaps not. In *Situational Game Design,* Brian Upton advocates for techniques that privilege those forms of play that manifest themselves when a player rejects winning or even interactivity with the game (5). Conventional games, for Upton, are designed to be "game-centric." These approaches, like those described by Schell and Fullerton, focus on the game as a discrete object. The player, in other words, is another distraction from the game. Upton's *player-centric* design approach focuses less on the actions that take place in the game and more on the situations the player can encounter in the game space. Instead of the game systems of rules and mechanics, the situational game is instead built around the player's attitudes and perspectives as

well as their historical and cultural contexts. By focusing on working with these subjectivities, Upton claims that games can foster profound, meaningful experiences (9). While Upton's conceptual model is promising, we must still consider the player.

Implications for the Player

From time to time, it may appear that I am viewing sense of place as a positive quality. I do, in fact, regard sense of place as contributing to a heightened appreciation for the environment, one's community, and the wonderment of the world. However, as mentioned in the previous chapter, even spiritual pilgrimages can become addictive. Players hyper-attuned to their sense of place can be inebriated by the need for connection and presence in gamespace. And why not? There's security in the place of the game and the world has yet to provide an instruction manual. After the workaday hassles, drudgery, and dissatisfaction of the real world, games offer a safe respite where deeds are rewarded, and the goal is always clear. The *home*, which has been a recurring structure in games, takes on a new significance at a time when housing in America is facing an uncertain future. Economic factors have contributed to the lowest homeownership rates in nearly thirty years (Goodman and Mayer 54). Young adults are choosing to delay commitments that are perceived as potentially harmful (Dickerson 436). While an owned home is not necessarily a *stable* home, the precarity of the home place is symptomatic of other instabilities being experienced by younger and middle-aged generations (465). Given this disparity in access to income and housing security, it is little wonder that place is being redefined and that it is our media that has usurped that sense of place.

One might be reminded of Tuan's notion of "topophilia," introduced in the first chapter. The "love of place" speaks to the commitment displayed by many dedicated players. For Tuan, a

dependency on the ideal universe balanced in harmony is fundamental to how humans organize the actual chaos of experience into a more comprehensible form (16). This capacity for self-orientation within a "cosmic schemata," Tuan warns, can lead to egocentrism. Collectively held beliefs of this kind can manifest themselves as patriotism and fealty to one's local community or imperial regent (101). This form of topophilia is particularly suspect at the time of this writing and is typically associated with extreme right-wing agendas.

Yet we can also see excess of sense of place among some groups of computer game players, particularly young males who feel that gaming is their terrain. As evidenced in the #Gamergate fiasco, when numerous women associated with the gaming industry were terrorized for discussing the misogyny of the gaming, there exists a topophilia of games. Framed as a form of "place attachment," the game might be said to be viewed by these "patriotic" players as an extension of their identity (Belk 42).Place attachment, according to Setha Low and Irwin Altman can serve as a bonding mechanism but also as a source of stimulation and security, "offering predictable facilities, opportunities to relax from formal roles, the chance to be creative, and to control aspects of one's life" (10). The anatopistic game place, therefore, is a haven for those who have experienced those feeling of being out of place themselves. Finding a haven in the game, there is little wonder why Others wandering into their territory would be similarly ostracized. While the sporadic instances like #Gamergate might seem isolated, I anticipate that this toxic gaming culture will only become more so as guilds, clans, and groups carve out and protect their terrains.

In his recent work, techno-historian Yuval Harari sees a potential future for the discarded class as one that is increasingly occupied with computer games. "Unnecessary people might spend increasing amounts of time within 3D virtual-reality worlds that would provide them with

far more excitement and emotional engagement then the drab reality outside" (331). Even if we reject this dire prediction, we would still need to reconcile the fact that games and game-like spaces are increasingly being turned to for escape. Meanwhile, the real world is beginning to feel more and more like a game itself. How does our understanding of sense of place accommodate an existence where nearly every aspect is designed as a game place?

Parting Thoughts

For Lefebvre, the pulse of the urban space was not reducible to the inputs received through one's sense of vision. "No camera, no image or sequence of images can show these rhythms," he argued. "One needs equally attentive eyes and ears, a head, a memory, a heart" (227). For today's computer game player, the experience is limited to the depleted sensorium of hearing, vision, and touch to some degree. To develop a sense of place, then, entails a greater demand on those memories made through shared experiences. As described these players as virtual tourists, transforming the synthetic into the authentic. Cultivated through the mindful attention to the social and an appreciation for the virtual landscape, a sense of place is reinforced through routine and the incorporation into the everyday. This self-empowered authenticity is produced through a sense of place that is only partially—but increasingly—induced by the hands of the developers and the spaces they've designed.

Much of this project has required thinking about games as urban spaces specifically designed to evoke certain behaviors and feelings. This is no doubt due to my own preference for cities. Yet cities, as we've seen in the case of playgrounds, also help illustrate how tightly engineered spaces can be transformed into meaningful places through play. "If life is a game whose aim is to discover the rules," describes architect Alberto Iacovoni, "a space is created in

which play can be activated to try out various moves to change them, operating within that 'zone of uncertainty between brain and environment'" (14). These thresholds present a point along a boundary that opens between one zone and another, such as a door or gateway, the threshold is also a tightly restricted space. Transitions include public v. private, inside v. outside, commercial v. industrial, urban v. rural. Thresholds serve as natural gathering points but also as traffic bottlenecks. Here risk is more prevalent as density increases and intrapersonal proxemics (scales of social proximity) are constrained (54). This is because, according to Quentin Stevens, this is where recurring play "can become ritualized and symbolically charged" (165), the threshold may offer the greatest potential for intervention—in those moments between anticipation and action.

So how are these places appropriated by subversive behavior through play? Like the relationship of paidia to ludus, the abstraction and contingency of space is always present in the security of the structures and sociocultural significances of place (Tuan 4). As part of a public demonstration, the tactical intervention works towards a renegotiation of a place as a socio-politically contentious terrain. The struggle over place entails the appropriation of significant places—those locales that are rhetorically significant to the prevailing powers—and assign new meaning to them. But this rhetorical sheen, however, must first be broken down into the more nebulous space before constructing new meaning to them. Returning to Lefebvre, space represents the political use of knowledge and the production of social relationships. These spaces, however, are designed to obfuscate their ideological origins (17). This space then must be reconstructed so that a new representation of place may be constructed in its wake. This liberated place takes on the physical, architected space and supplants the sanctioned identity with one that is more aligned with the movement.

How does this movement relate to an augmented reality game like *Pokémon Go*? The

appropriation of the Sherman Park area may entail the creative transduction of the roiling social space into a creative space that embraces ontogenetic potentials. Social space, according to Lefebvre, "contains potentialities—of works and of appropriation—existing to begin with in in the artistic sphere but responding above all to the demands of a body 'transported' outside itself in space, a body which by putting up resistance inaugurates the project of a different space (either the space of a counter-culture, or a counter-space in the sense of an initially utopian alternative to actually existing 'real' space" (349). The "Riverwest 24," a 24-hour bike ride held in Milwaukee, is an example of how play can subvert space through intentional, tactical placemaking. Emerging from the ethos of the Occupy movement, the original Riverwest 24 was initially a small group of people who wanted to hold a fun event. Now a decade old, the "RW24" welcomes over one thousand riders and organizers to this volunteer-run event every year. Despite never receiving the official stamp of approval by the city, the roads of Riverwest are always freshly paved right before the ride begins.

If capitalism indeed homogenizes and fragments urban space into digestible and controllable commodified zones, play still displays the power to unify place. In areas particularly susceptible to this destruction, play and leisure are sequestered to private spaces like bars and churches or spaces engineered to further separate pleasure from the other modes of existence. Releasing this playful energy into homogenized areas "always gives rise to an effect, to damage, to a change in reality. It modifies space or generates a new space" (Lefebvre 177). Although I would not argue that *Pokémon Go* could assist in this—nor that is "radical play"—the phenomenon of attracting the greater urban population to gather, socialize, and explore the neighborhood offers a viable model for resuscitating the essence of community place within the space of the city.

I introduced this project looking at Ivan Sutherland's concept of the "ultimate display," the concept that laid the technological ground for virtual reality. When Sutherland first envisioned the ultimate display, he considered it a way for users to become familiar with a "mathematical wonderland." filled with new ways to experiment with virtual objects, develop new processes for managing machines, and even control mass itself. "With appropriate programming," he pondered, "such a display could literally be the Wonderland into which Alice walked" (n.p). Given the profound influence of games and virtual places over users, one begins to wonder if it was the machine or the person who requires programming.

Although virtual reality has not been discussed here per se, it's worth acknowledging that this project emerged from some earlier interests in how the technology has been used to evoke a sense of "being there." The limits of immersion, which according to Slater are identical to the limits of place illusion, are continuously being pushed and expanded. Considering the efficacy of augmented reality games like *Pokémon Go,* it may not even be necessary to simulate virtual worlds. The place illusion already exists in the places we inhabit in the actual world.
What is lost when we can reduce or eliminate feeling out of place? Are the resolutions and solutions procured through games enough to satisfy the need for place? No longer convinced in the stability of our real-world spaces, Harari's argument about the migration of the discarded class to virtual worlds is convincing. And developers are eagerly guiding us along these ludopilgrimages, where our information, interests, and data can be exchanged for downloadable licensed content and in-game perks. Souvenirs collected on a journey without struggle.

But perhaps it isn't home that players are seeking out but another place altogether, somewhere between the transience of non-place and the quiet wonder derived from a sense of place. How might this "third *place*" of play, as an intentional act of placemaking, motivate us to

intervene not just in the game but in our world-as-game? How might we create a virtual "Riverwest 24" in *Grand Theft Auto V* or take the non-violent path in *Wolfenstein*? As more players become developers themselves, will they develop the tools to tactically break the game as a form of authentic placemaking? What will happen to our sense of place when there are no anatopistic places left? How out-of-place will games be when games saturate the everyday? As play continues to be designed and coaxed by open-world game mechanics, where will players turn to make places-out-of-place?

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EDUCATION

PhD in English, Digital Media Studies, University of Wisconsin–Milwaukee, 2019
Dissertation: *A Player's Sense of Place: The Computer Game as Anatopistic Medium*
Director: Dr. Stuart Moulthrop
MA in Rhetoric and Composition, Old Dominion University, 2013
BA in Professional Writing, Old Dominion University, 2011
AAA in Graphic Design, Milwaukee Area Technical College, 2003

ACADEMIC POSITIONS

University of Wisconsin-Milwaukee, Milwaukee, WI
- Graduate Teaching Assistant, 2013–2017, 2018-2019

UWM Student Support Services Program
- Associate Lecturer, Summer 2018, Summer 2019

Milwaukee Area Technical College
- Lecturer, Fall 2017

Old Dominion University, Norfolk, VA
- Teaching Assistant

ADMINISTRATIVE POSITIONS

University of Wisconsin-Milwaukee, Milwaukee, WI
- Project Assistant, UWM English Department, Fall 2016–Fall 2018
- Project Assistant, Digital Arts and Culture Program, Fall 2014–Spring 2016
  UWM Digital Humanities Lab.
- Intern, Fall 2016–present

INSTRUCTOR of RECORD

University of Wisconsin-Milwaukee
- English 310: Writing, Speaking, and Technoscience in the 21st Century (Spring 2019)
- English 215: Strategies for Academic Writing (Spring 2017)
- English 201: Introduction to English Studies (Fall 2016)
- English 102: College Writing and Research (Online, Summer 2016)
- English 102: College Writing and Research (Multimodal, Fall 2015–Spring 2016)
- English 102: College Writing and Research (Spring 2015)
- English 101: Introduction to College Writing (Fall 2013–Fall 2014)

UWM Student Support Services Program, Summer 2018, Summer 2019
- Writing Component

Milwaukee Area Technical College, Fall 2017
- English 1

HONORS & AWARDS

UWM Chancellor Award, 2013
Graduate Research Network Travel Award, 2017
UWM Travel Award, 2015
HASTAC Scholar, 2016–present, presented by the UWM Digital Humanities Lab

PUBLICATIONS

Purzycki, Kristopher. "Procedural-Relational Power Analysis: A Model for Deconstructing and Intervening in Everyday Games." In Richard Colby, Rebekah Schultz Colby, and Matthew S. S. Johnson. (Eds.) *Playing with the Rules: The Ethics of Playing, Researching, and Teaching Games in the Writing Classroom.* (forthcoming).

Henthorn, Jamie, Andrew Kulak, Kristopher Purzycki, and Stephanie Vie. "Introduction – Not Just Play: Spaces of Contention." *The Pokémon Go Phenomenon: Essays on Public Play in Contested Spaces*, with Jamie Henthorn, Andrew Kulak and Stephanie Vie. McFarland, 2019, pp. 1-17.

Purzycki, Kristopher. "For Anatopistic Places: *Pokémon Go* vs. Milwaukee County. *The Pokémon Go Phenomenon: Essays on Public Play in Contested Spaces*, edited by Jamie Henthorn, Andrew Kulak, Kristopher Purzycki and Stephanie Vie. McFarland, May 2019, pp. 172-188.

Gimse, Geoff, and Kristopher Purzycki. "PhronesisMU: Reclaiming Aesthetic and Rhetorical Potentials within the Software Obsolete." *The Proceedings of the 2018 Annual Computers & Writing Conference,* 2019, pp. 53-64.

Purzycki, Kristopher. "Gone Home." *Learning, Education, and Games Vol. 3*, edited by Karen Schrier. ETC Press. 2018 (forthcoming)

Purzycki, Kristopher. "Intimate Male Relationships in Almost Human." *New Male Studies*, vol. 5, no. 1, 2016

Purzycki, Kristopher. "Dissimulation, Disability Rhetoric, and the Application of Virtual Reality-Based Therapy." *Meaningful Play Conference Proceedings*, 2014

Rodrigo, Rochelle, and Kristopher Purzycki. "Making Learning Reel: Student-Made Videos on Mobile Devices." *Enhancing Instruction with Visual Media: Utilizing Video and Lecture Capture*. IGI Global: 2013

EDITED COLLECTIONS

Henthorn, Jamie, Andrew Kulak, Kristopher Purzycki, and Stephanie Vie. *The Pokémon Go Phenomenon: Essays on Public Play in Contested Spaces*, McFarland, May 2019

REVIEWS

Purzycki, Kristopher. "The Uncanny Valley in Games and Animation." *animation: an interdisciplinary journal*, vol. 14, no. 1, 2019

Purzycki, Kristopher. "Videoland: Movie Culture at the American Video Store." *Film Criticism*, vol. 41, no. 3, 2017

EDITORIAL POSITIONS

Co-Editor, 2018-2019, *The Proceedings of the 2018 Annual Computers & Writing Conference,* with Chen Chen and Lydia Wilkes

Co-Editor, 2017-2018, *The Proceedings of the Annual Computers & Writing Conference, 2016-2017*, with Cheryl Ball, Chen Chen, and Lydia Wilkes

Founding Editor, 2017-2019, *OneShot: An Interdisciplinary Journal of Games and Play*, with Daniel Cox and Lauren Woolbright.

Editor, *cream city review,* I/0 section, vol. 40, no. 1, Spring/Summer 2016

PUBLICATION PRODUCTION

Production Manager, 2013-2017, *cream city review*

Reviewer, *Learning, Education, and Games Vol. 3*., edited by Karen Schrier, ETC Press, 2019 (forthcoming)

Reviewer, *Press Start*, vol. 1, no. 1, University of Glasgow, 2014

WORKSHOPS

"Remixing Performance in Games." Conference on College Composition and Communication, 2019

"MUDs, MOOs, and Why They Still Matter." with Geoff Gimse. UWM Digital Humanities Lab, May 11, 2018.

"Pedagogy and Playfulness: Exploring Games in the Composition Classroom." Conference on College Composition and Communication, 2018

"Classroom Uses for the Twine Platform." Digital Humanities Lab, 2016

"Play as Activism: Using Game-Based Pedagogy to Build Structural Understanding, Foster Empathy, and Scaffold Change." Conference on College Composition and Communication, 2016

"Risky Teaching," Conference on College Composition and Communication, 2015. "Multimodal Composing on Mobile Devices," Workshop. Conference on College Composition and Communication, 2014

"Lost in a Wonderland of Mobile learning," assisted Dr. Rochelle Rodrigo in conducting workshop, EDUCAUSE 2012, Denver, Colorado. November 2012

PRESENTATIONS

"Performing Games/Performing Composition: Playing, Imagining, and Creating Embodied Rhetorics in the Writing Classroom." Conference on College Composition and Communication, 2019

"Teaching Context Through the Language of Games." Conference on College Composition and Communication, 2018

"[[Enter Twine'd]]: Linking Teaching and Learning through Hypertext," HASTAC Conference, 2017

"A Wizard's Sense of Place: Meditations on Placemaking and Loss in MUSH-Space." Computers & Writing, 2017

"Communities of Interactivism: Procedural Fluency and the Rhetoric of Digital Public Spaces." Conference on College Composition and Communication, 2017

"Passages and Pedagogies: Classroom Applications for the Twine Platform." Meaningful Play, 2016

"Creative GREP Works." Electronic Literature Organization, 2016

"Teaching the Game Experience: An Ecological Approach to Genres of Paratext." Computers and Writing, 2016

"Digital Pedagogy Brownbag: Classroom Uses for the Twine Platform." UWM Digital Humanities Lab, Oct. 12, 2016

"Failure, Loss, Loop: Negative Feedback and the Affect of Uncanny Games in *The Stanley Parable*." International Conference Series in Games and Literary Theory, 2015

"Reading the Newsgame: Considerations for Using Games to Teach Critical Thinking Skills." Computers & Writing, 2015

"So Who's Right? Analyzing Rhetorical Leverage Points of #Gamergate to Discuss Ethics and Stakeholders." Computers & Writing, 2015

"Serious Gaming: *Minecraft*." with Stuart Moulthrop. UWM Digital Humanities Lab, Oct. 3, 2014

"Ludic[rous?] Pedagogy: The Promises and Pitfalls of Gamifying the Composition Classroom." Conference on College Composition and Communication, 2014

ROUNDTABLES

"Wrangling a Collection is Hard: Lessons Learned from Editing a Scholarly Collection on a Pop Culture App." Southwest Popular American Culture Association, 2019

"Looking for Group: Building Interdisciplinary Game Studies Communities." Meaningful Play, 2018 "Serious Play on Twitch: Experiments in Academic Streaming." Meaningful Play, 2018

"Possibilities and Realities of Digital Humanities Across Disciplines: What can other disciplines learn from DH and what can DH learn from other disciplines?" Roundtable, HASTAC Conference, 2017

SERVICE

Council for Play and Game Studies

- Associate Chair, 2019–present
- Assistant Chair, 2018–2019
- Publicity Coordinator, 2016–2018

C's the Day

- Executive Committee Chair, 2016–2018
- Volunteer, 2014–2018

Graduate Research Network

- Chair, 2015–2016, 2018

Ride2CW, Co-Coordinator

- Chair, 2015–present

UWM Food Center and Pantry, Volunteer, 2018–2019

Midwest Interdisciplinary Graduate Conference (MIGC)

- Chair, "In Process," 2016
- Vice Chair, "Unbearable," 2015
- Volunteer, "Animacy," 2014

CREATIVE INSTALLATIONS

"Our Time in Los Santos." Screen capture photography. Midwest Interdisciplinary Graduate Conference, 2018

"MUSAIC." Multi-user Dungeon. with Geoff Gimse. Midwest Interdisciplinary Graduate Conference, 2017

"myMesis." Interface Installation. Arts+Tech Night. UWM, 2014

MEDIA BROADCASTING

Screens, Live Radio Broadcast, with Allain Daigle. WXRW, FM Radio. 2015–present

Lunch Zone, Twitch stream, with UWM Serious Play, 2017–2019

Classic Quests. Twitch stream, with Scott Bruner and Dr. Thomas Malaby. 2018–2019

Strange Playces, Twitch Stream, 2017–2018