STRUGGLING WITH SIMULATIONS: DECODING THE NEOLIBERAL POLITICS OF DIGITAL GAMES

by

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Abstract

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As a creative industry currently rivalling film and television, digital games are filled with a variety of political tensions that exist both between and within particular works. Unfortunately, internal discrepancies are often dismissed as indicators of political ambivalence, or treated as formal flaws that need to be overcome. To address this gap, this dissertation draws from game studies, media studies, and political economics to investigate the contradictory relationships between popular games and neoliberalism, specifically in relation to playful forms of resistance and critique that emerge during gameplay.

Part I develops this study's methodology by drawing from corresponding uses of assemblage theory, specifically articulated in Ong (2006, 2007), Lazzarato (2012, 2015), and Gilbert's (2013) control society approaches to neoliberalism and Taylor (2009), Pearce and Artemesia's (2009) digital ethnographic approaches to play. Derived from the French agencement, assemblage theory emphasizes heterogeneous relations in constant states of becoming that are understood as being real. Part II implements the aforementioned methodology by examining some of the most popular gaming franchises produced to date, with each demonstrating emergent political correlations and dissonances springing from relationships between different ludic and narrative components.

BioShock (2007–2013) and Red Dead Redemption (2011) are narratively structured by neoliberal discourse, yet each storyline fails to correspond with the resistant political logic embedded in their respective rule systems. Conversely, Call of Duty (2004 – present) attains a high level of political cohesion that does not result in a better playing experience, as much as it contributes to conflicts amongst publishers, developers, and fans. Finally, Minecraft (2009– present) provides a fascinating example of a game that representationally reinforces neoliberalism while simultaneously affording the creation of new digital objects, including objects that give players the opportunity to understand and appreciate the computational infrastructures that a neoliberal emphasis on source code takes for granted. This dissertation, as a result, charts the growing connections between emergent gameplay and new forms of resistance and critique—connections that contribute not only to game studies, but also to the study of digital media and the interdisciplinary study of neoliberalism.

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Dedication

This dissertation is dedicated to the memory of Frank Murphy

Note on Terminology

Throughout this dissertation, the terms "game," "gaming," and "digital game" will be used interchangeably to refer to digital games.

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INTRODUCTION

Near the beginning of *Red Dead Redemption* (Rockstar San Diego, 2010), John Marston approaches an abandoned military fort seeking the notorious outlaw, Wild Bill Williamson. Marston had been Bill's closest friend in a previous lifetime, but their relationship faded when Marston started a family. Reaching out, Marston urges Bill to turn himself in, but Bill is not interested in talking. Flanked by two men, he tells Marston to go away or risk being killed. Ignoring the threat, Marston is reaching for his revolver when a shot rings out. Cackling laughter pierces the desert air while his body falls to the ground.

As the sun sets, Marston lies motionless, until Bonnie and Drew MacFarlane stumble across his path. Luckily, the MacFarlanes are generous folk willing to take in a stranger. Upon awakening, Marston is introduced to Bonnie, who is far from amused, mainly because she paid fifteen dollars to the doctor who treated his wounds. To repay the debt, Marston agrees to work the night patrol for the MacFarlanes' struggling ranch, in the midst of acquiring the resources that he needs before confronting Williamson's gang (New Friends, Old Problems).

Based on the aforementioned premise, *Red Dead Redemption* is a typical story about a cowboy seeking revenge, but the experience takes on a different logic when the cut scene ends.

On a narrative level, John Marston is supposedly recovering from a bullet to the chest, but the avatar still runs fluidly when the X button is tapped. He has also just taken on a fifteen-dollar debt, even though wealth never falls below zero in the game's ludic economy. Following this pattern, players can acquire expensive properties and eloquently tailored suits in spite of the protagonist being comparatively poor in the game's narrative. In other words, on a representational level, John Marston is figuratively dripping in debt, while players are always debt-free in the game's ludic economy.

The tensions mentioned above exemplify an emergent conflict occurring between *Red Dead Redemption*'s ludic and narrative components, or, in other words, a form of ludonarrative dissonance (Hawking, 2007). Ludonarrative dissonance refers to specific sets of discrepancies that transpire when the emergence of gameplay fails to correspond with the logic embedded in a game's narrative. As a critical term, it often refers to tensions between game mechanics and narratives, but it can also be related to other components, such as tensions between the ludic logic embedded in rule structures and the narrative0 logic dictating how avatars are represented.

The prefix "ludo" can be articulated as referring to simulation based, game specific elements, which include mechanics, rules, and players. The suffix "narrative" can be articulated as referring to representation based, semiotic elements, which include plot, content, and avatar. Ludonarrative dissonance does not refer to discrepancies between ludic elements, such as tensions between mechanics and rules, or discrepancies between narrative elements, like avatar and plot. Instead, it refers to specific, heterogeneous sets of contradictions that emerge when simulation based elements interact with narrative based elements, some of which can be related to political resistance and critique, and others that are more apolitically oriented. ¹

¹ See Chapter 3 (pp. 62-63) for a comparison of resistant, critical, and apolitical forms of ludonarrative dissonance.

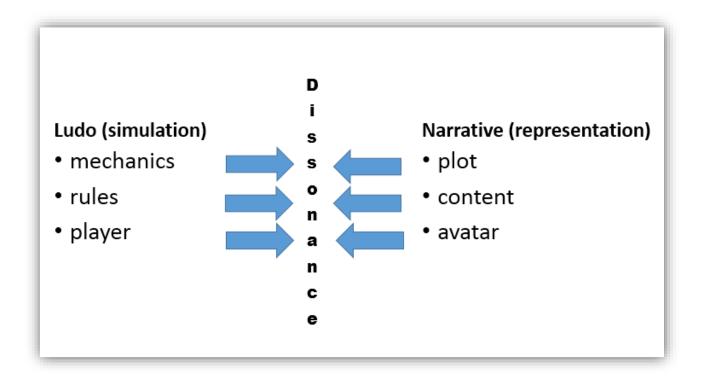


Figure 1. Ludonarrative dissonance.

While ludonarrative dissonance is often ignored, or treated as a formal flaw that needs to be overcome, this dissertation uses the term as a basis for investigating capitalism's inability to completely control the design of digital systems. Like other forms of popular culture, digital games are shaped by long-standing contradictions between use and exchange values (Harvey, 2014, p.15), primarily related to the production of commodities and the representation of identities. However, gaming also involves an additional layer of socio-technical struggle, stemming specifically from the autonomous development of digital technology. Digital games can reinforce neoliberal thinking through exploitative production and cynical representation techniques; however, these relations can either correspond to or contradict the emergent politics of play.

While the 20th century was marked by the rise of cinema as a popular form of entertainment, the 21st century is bearing witness to the cultural ascendency of digital games.

Initially beginning as a series of experiments accessible to a privileged few, the medium is growing into a vibrant and increasingly profitable form of expression. No longer understood as a passing trend, digital gaming has become an integral component of a shifting cultural landscape, and institutions seeking to capitalize on it are adjusting accordingly. Public libraries are establishing game collections, art galleries are curating game installations, and museums are beginning to preserve the technologies that facilitated the rise of digital play.

Correspondingly, academic inquiry is also undergoing change, shifting from previous disciplinary analyses to a vigorous interdisciplinary exchange. Cautious critics see a cultural commodity made ideal for a post-Fordist age (Kline, Dyer-Witheford & De Peuter, 2003), while optimists stress the rhetorical (Bogost, 2007), aesthetic (Jenkins, 2005) and educational capacities (Gee, 2007) of a new medium finding its legs. Despite disagreeing on many points, both arguments recognize high stakes, since digital games are a political battleground in which cultural warfare is waged: corporations are fighting for market-share, struggling economic regions are fighting for jobs, and frustrated fans are fighting for more inclusive, diverse representation.

Given the above developments, some critics use the rise of serious or independently produced games to easily identify progressive politics. Regrettably, the situation is far more complex, with alternative modes of production not necessarily guaranteeing alternative games. An independent studio can be just as exploitative as its mainstream counterparts, and some of the most politically abhorrent games have nothing to do with the mainstream industry. Political tensions do exist between games, with independent and alternative discourses imposing distinctions. However, political conflicts also occur within games despite simple categorizations.

Unfortunately, explaining disjuncture can be difficult; cohesive analysis is often more clear. Outside notable exceptions,² tensions are often downplayed in game criticism, from both formal and political perspectives. Digital games represent and simulate in ways that can often contradict, yet recognition of this point tends to treat it as a problem that innovative design will eventually fix (Hawking, 2007; Blow, 2008). In contrast, this dissertation is dedicated to overlooked moments, when play and narrative refuse to make sense; moments when games can represent the politics that control us and simultaneously simulate their end.

Like most inquiries, this is not the first discussion of neoliberalism and popular games; although it differs from existing scholarship in several important ways. Previous criticism relies on ideological (Barrett, 2006, Humphreys, 2012) and governmentality readings (Baerg, 2009; Voorhees, 2012), two perspectives criticized for ignoring differences between neoliberal policy and theory (Crouch, 2011). An ideological approach treats neoliberalism as a false belief system that views competitive individualism as the ideal basis for organizing society,³ while a governmentality approach focuses on the techniques, strategies, and technologies that governments use to create ideal citizen subjects.⁴ Both framings have made important contributions to the interdisciplinary study of neoliberalism, but they fail to provide meaningful insight into the shifting contradictions that characterize contemporary capitalism. To address this problem, subsequent case studies apply an assemblage approach to neoliberalism (Ong, 2006, 2007; Lazzarato, 2012, 2015; Gilbert, 2013), which carries the advantage of coinciding with the rise of financialization (Martin, 2002; Krippner, 2005) and transitions to societies of control

² See Silverman & Simon (2009), or Aldred & Greenspan (2011).

³ See Althusser (2006).

⁴ See Foucault (2008).

(Deleuze, 1992). Additionally, assemblage theory is also applied to the games themselves by drawing upon ethnographic (Taylor, 2009; Pearce & Artemesia, 2009) approaches to digital play. As such, this project not only makes a valuable conceptual and methodological contribution to digital media studies, but it also contributes to game studies, in addition to the interdisciplinary study of neoliberalism.

Scope

This dissertation examines the neoliberal politics of critically and commercially successful popular digital game franchises made between 2004 and 2014, with a particular focus on titles and theories developed after the 2007 global economic downturn. This period provides a snapshot of the relationship between a time of political economic instability and the cultural ascendancy of a digital form of creative expression, as a pastime previously understood as a subculture becomes an increasingly important element of popular culture. Subsequent case studies, in this temporal context, have been selected as a means of showcasing the expanding ways in which a gaming franchise can become popular and the relationship between this process and the contradictions that characterize the shifting state of 21st century capitalism. While scholarship has addressed similar issues in the context of particular games, I offer a comparative analysis involving three mainstream AAA⁶ franchises produced in the United States (*BioShock*, *Red Dead Redemption*, and *Call of Duty*) and one independently produced Swedish franchise (*Minecraft*) eventually acquired by a major software publisher (Microsoft). Accordingly, the

⁵ The criteria for case selection are explained in more detail in Chapter 1 (pp. 22-24).

⁶ AAA is an industry term referring to games with high production and marketing budgets.

analysis is geographically limited to a Western-European perspective, although insight will hopefully be useful for scholars focusing on other regions.

Instead of concentrating on a particular genre or mode of game production, this dissertation uses popularity as a criterion for case selection. According to Fiske (2011), popular culture is inherently processual, political, and complex, for "it is centrally involved in the distribution and possible redistribution of various forms of social power" (p. 1). While gaming is often problematically distinguished from a broader mainstream culture (Shaw, 2010, p. 404), digital games will be treated as an integral component of contemporary popular culture. For pragmatic reasons, analysis is confined to critically and economically successful franchises, as lucrative brands tend to warrant enough attention to make political economic analysis feasible, particularly in cases where production information is tightly suppressed.

From a game studies perspective, the primary shortcoming of political economic analysis is a lack of access to the production process, although this disadvantage also carries the ethical advantage of allowing for comparative critiques. Anthropological analysis carries the benefit of primary research, although it often needs to be justified in the interests of the industry. Notable literature balances these priorities by siding with independent studios (Whitson, 2012) and developers (O'Donell, 2014) over the interests of corporate elites. This scholarship provides valuable insight into the difficulties developers face, though for ethical reasons it often ignores the politics of the games being produced. In contrast, political economic analysis can engage in a comparative analysis without worrying about offending the developers in question.

Due to each franchise's popularity, new titles will be released in the near future. At the time of this writing, *Call of Duty: Black Ops 3* and *Red Dead Redemption 2* are currently in development. Digital game production moves rapidly, with popular franchises undergoing

frequent twists in response to changing technologies and business models. Accordingly, this dissertation can only provide a snapshot of a particular cross section of popular play by focusing on console and personal computer (PC) titles that have become an important component of digital popular culture.

Since I am primarily interested in conducting a comparative analysis of popular games, each franchise will be pragmatically discussed in slightly different ways. The analysis of *BioShock* (2007–2013) and *Red Dead Redemption* (2013 – present) focuses on single player play, as both franchises are lauded by fans and critics alike for their impressive story-driven campaigns. Initially, *Call of Duty* (2004 – present) was praised for similar reasons, but the franchise escalated in popularity due to the success of online play. Comparatively, *Minecraft's* (2009 – present) popularity expands beyond the game itself, for the franchise's cultural prominence cannot be separated from the videos that fans continue to make. Through comparative analysis of these different areas, I focus on the complex relationship between neoliberalism and digital games, specifically in the context of a medium whose cultural ascendency typifies contemporary capitalism's rapidly shifting state.

A wide range of qualitative and quantitative methodologies has been applied to the politics of digital games, each carrying particular advantages and disadvantages depending on context. Due to the emergent, rapidly shifting nature of popular digital play, my research questions are not suited to ethnographic (Pearce & Artemesia, 2009), qualitative content (Williams, Martins, Consalvo, & Ivory, 2009), or platform studies (Montfort & Bogost, 2009) methods, but are instead best tackled through the flexibility that a case study approach provides. According to Yin (2013), case studies are the preferred method for "how" and "why" questions dealing with uncontrolled events (pp. 1-2), thus enabling a holistic approach to complex

phenomena by combining a variety of evidence (p. 8). Ideally, cases are comparatively situated around an initial theoretical proposition that is later revised and refined during the process of analysis (p. 14). As noted previously, this dissertation proposes a complex and contradictory relationship between neoliberalism and digital games as a starting point for critical inquiry; subsequently, the analysis expands on this premise by connecting it to the contradictions that characterize 21st century capitalism.

Integral to the aforementioned approach is the recognition of an essential systemic difference between contemporary political economics and previous forms of profit accumulation. Consequently, capitalism is not understood as operating in a traditionally Marxist, culture industry sense (Adorno & Horkheimer, 1944). Under financialization, wealth is no longer primarily accumulated through the production and sale of material items; instead, it is increasingly generated through the rapid trading of immaterial investments. This new stage of profit generation is made possible by the affordances that digital technologies provide, and is characterized by the financial sector's increasing influence over politics and culture. Many competing labels have been applied to these phenomena, with the corresponding development of counterarguments as a result, from Marxists stressing the historic continuity of global class struggles (Mosco, 2004) to anthropologists (Latour, 2012) emphasizing recurring social/technological relations. While such arguments have their advantages, assemblage theory provides an implicit counter to the individualistic problematic raised by neoliberalism, specifically by granting reality to emergent social relations that proponents of neoliberalism reject as being nonexistent.

The relationship between digital gaming and neoliberalism is complicated and diverse, involving the production of entertainment commodities, the emergence of playing experiences,

and a wide variety of peripheral fan activities. Limiting analysis to any one of these areas downplays the contradictions and correlations that exist within this relationship, which can be investigated by viewing game politics as heterogeneous formations, with popular franchises containing parts influenced by neoliberalism and parts that escape. Subsequent case studies build on this approach by treating popular digital game franchises as utopian processes, where utopia is understood not as a goal, but as a hermeneutic method. As Levitas (2013) explains, "This analytic rather than descriptive definition reveals the utopian aspects of forms of cultural expression rather than creating a binary separation between utopia/non-utopia" (p. 4). Instead of being understood as a form of naïve idealism, or as a specific blueprint for societal perfection, utopian thinking is recast as a provisional, hermeneutic process linked to the desire for alternative systems.

Chapter Outlines

This dissertation is divided into two sections: part I builds a flexible assemblage theory framework for analyzing neoliberalism and digital games, while part II applies it to four popular franchises in slightly different ways. Chapter 1 begins with a discussion of utopian and dystopian approaches to digital games. The emphasis then shifts to a brief genealogy of assemblage theory (DeLanda, 2006; Deleuze & Guattari, 2009), focusing on how the methodology has been taken up by game scholars in two overlapping ways. Following an overview of the criteria for case study selection, assemblage theory returns in the context of existing scholarship on neoliberalism and digital games. By insisting on the primacy of representation (Barrett, 2006; Humphreys, 2012), or of simulation based forms of meaning (Baerg, 2009; Voorhees, 2012), previous literature downplays political contradictions existing within popular games. Conversely,

assemblage approaches to play (Taylor, 2009; Pearce & Artemesia, 2009) provide a more flexible utopian methodological framing, situating representation and simulation as components with the capacity to coincide or contradict. In closing, I describe how assemblage theory can also be applied to neoliberalism, particularly in terms of transitions to societies of control (Deleuze, 1992).

Chapter 2 turns to interdisciplinary scholarship to conceptualize an assemblage approach to neoliberalism. Traditionally, the study of neoliberalism focuses predominantly on policy; however, scholarship rooted in ideological (Harvey, 2005) and governmentality (Foucault, 2007, 2008) perspectives has applied the term to everyday life. While both approaches have made meaningful contributions to interdisciplinary debates, they have also been criticized for ignoring inconsistencies noticeably present in a hypocritical pattern of governments supporting large firms while encouraging citizens to take care of themselves (Crouch, 2011; Fisher, 2009). Due to this problem, an assemblage conceptualization (DeLanda, 2006; Ong, 2006, 2007; Lazzarato, 2012, 2015; Gilbert, 2013) provides a more flexible means of unravelling the unfolding paradoxes that constitute neoliberalism's two-faced nature, particularly in relation to the spread of financialization (Martin, 2002; Krippner, 2005) and transitions to societies of control (Deleuze, 1992). Such an approach also carries the advantage of granting neoliberalism a provisional identity (Hall, 2011) that will undoubtedly continue to change, specifically in response to the shifting contradictions (Harvey, 2014) that characterize 21st century capitalism.

Building on Chapter 2, Chapter 3 proposes an assemblage framework for conducting digital game criticism, specifically focusing on the methodology's ability to highlight political tensions. It begins with an overview of game criticism from both inside and outside the academy, paying particular attention to the academic move away from representational work (Aarseth,

2001, 2004) and the corresponding rise of the video game blogosphere (Abraham, 2011; Parker, 2014). The focus then shifts to ideological media ecology approaches (Wark, 2007; Dyer-Witheford and de Peuter, 2009, Crogan, 2011) to show how various perspectives emphasize internally coherent meaning, even though notable designers (Hawking, 2007; Blow, 2008) have been simultaneously preoccupied with story/design contradictions. While scholars working in the ideological tradition have yet to account for the aforementioned critique, a new current of academic and online criticism has begun to articulate story/design cohesion as an aesthetic ideal (Fortugno, 2009; Rusch, 2009; Fernandez, 2009; Dawn, 2014; Keogh, 2014). Against this trend, I question whether discord between representation and simulation is necessarily a bad thing, particularly when a game symbolically reinforces neoliberalism while simulating systemic alternatives. From this perspective, ludonarrative dissonance is better understood as a utopian methodological phenomenon (Levitas, 2013), one specifically linked to capitalism's inability to assert total control over the development of digital technology.

Part II implements the concepts and methodologies advanced in the previous section, beginning with Chapter 4's discussion of *BioShock*. The chapter opens with an analysis of utopian and dystopian discourse in the context of the game industry, focusing specifically on media coverage following the 2007 economic downturn. Brimming with enthusiasm, multiple commentators predicted that gaming would continue to thrive despite the recent economic downturn (Snider, 2009, January 18; Lewis, 2009, February 18; Hadekel, 2009, March 4). Unfortunately, these optimistic perspectives ignored multiple problems, as shrinking profit margins prompted AAA publishers to reduce investment risk by backing increasingly conservative projects (Whitson, 2012). Intriguingly, the *BioShock* franchise relies on a similar

discordance between representation and design, one generated by game systems that fail to correspond with the logic implicit in narratives that reinforce neoliberal thinking.

Chapter 5 moves from *BioShock's* dystopic cities into Rockstar's Western frontier, focusing on *Red Dead Redemption's* delicate dance with debt. Touted as the largest game environment made to date, the title's production was extremely taxing on staff, eventually resulting in a widely read blog post (Rockstar Spouse, 2010, January 7) detailing horrible working conditions. Following the game's successful completion, employment circumstances went from bad to nonexistent, particularity for 40 "restructured" Rockstar employees (Mcwhertor, 2010, July 14). In addition to hanging over production, debt influences the game's narrative. Representationally, repayment is an overarching theme structuring relationships between multiple characters. In contrast, meritocratic fantasies dictate the game's economy, where debt states are never reflected through scores. By narratively depicting debt anxiety and systemically modelling its absence, *Red Dead Redemption* relies on a profound political dissonance.

Chapter 6 leaves the American West for the battlefields of war simulated in Activision's immensely popular *Call of Duty* franchise. *Call of Duty* began as a World War II campaign based first person shooter (FPS) that was designed to compete with Electronic Arts' *Medal of Honor* (1999-2010) franchise, but it has since morphed significantly into a form that embraces online play. Neoliberalism can be linked to multiple controversies created by a competitively paranoid work environment, while campaign narratives also demonstrate neoliberal patterns of inclusion (Ong 2006, 2007) by distinguishing worthy global citizens from dangerous collectivist groups. Multiplayer design also rewards selfish play, but political harmony does not necessarily

create a more engaging play experience so much as it facilitates hostilities amongst publishers, producers, and players.

Chapter 7 brings section II to a close with the analysis of an incredibly unique popular gaming franchise. Humbly beginning as Markus Persson's part-time hobby, *Minecraft's* rise in popularity is littered with political contradictions, made explicit primarily through the franchise's acquisition by Microsoft. The game's early development exhibited a tenuous commitment to liberal ethics borrowed from free/open source software production (Coleman, 2013); however, a discursive commitment to broad user rights clashed repeatedly with the perpetual reassertion of authorial control. On a representational level, neoliberalism is present in the mythologizing of computer programming—working to characterize source code as a form of magic (Chun, 2011)—but instead of reinforcing this process, the design surprisingly critiques it through the affordances that a polymorphous programmable element, otherwise known as "redstone," provides. Using redstone, players program slowly by creating and linking the logic gates obscured by high level programming languages. Ben Craddock's (2010, September 28) Minecraft computer provides a useful example of this process, showcasing how redstone affords the direct manipulation and corresponding aesthetic appreciation of computational infrastructure. Contradicting an industrial push toward smaller, faster, legally protected digital devices, Craddock's computer is big, open, and slow, providing a visual representation of computation as it is performed. Liberated from a neoliberal obsession with source code, programming is transformed into a socio-technical, ecological relation that is intrinsically more complex than a magical thing.

The conclusion first describes the journey that this project had to take before offering some final thoughts. Through their complicated and contradictory relationships with

neoliberalism, popular digital game franchises exemplify the persistence of long-standing political struggles that coincide with the ongoing development of new socio-technical conflicts.

Three circuits of political struggle are integrally connected to this process, particularly in relation to the production of commodities, the representation of identities, and the design of simulations.

Digital culture moves quickly in response to developing technologies and new political events which, in turn, necessitate the development of new critical methodologies. Game studies and the interdisciplinary study of neoliberalism are moving swiftly in this regard, creating a situation in which scholarship needs to be constantly updated. Chapter 1 begins this process by using assemblage theory to build a critical methodology that both extends and complicates existing approaches to game criticism.

PART I STRUGGLING WITH SIMULATIONS

CHAPTER 1

Controllers and Contradictions:

Using Assemblage Theory for Utopian Game Criticism

Halfway through *BioShock Infinite* (Irrational Games, 2013), Booker Dewitt flees a secluded security tower with a mysterious young woman named Elizabeth Comstock. To wipe away a gambling debt, Booker must escort Elizabeth to New York City, but the task is not as easy as it seems. For most of her life, Elizabeth has been confined to the District of Columbia, a city suspended in the sky. Seeking a means of escape, Booker is forced to make a deal with Daisy Fitzroy, a young black woman working at Fink Factories, where she is trying to organize a worker revolution.

In exchange for her help, Booker agrees to supply Daisy with a large cache of weapons, which will provide her with a means of arming the workers. As he tracks down the guns, Elizabeth witnesses the horrible conditions that the workers routinely face, prompting her to sympathize with their plight. Upon retrieving the weapons, Elizabeth expresses unbridled optimism, hoping for a revolution akin to *Les Misérables*. Unfortunately, subsequent events are considerably more brutal.

As the workers stain Columbia's streets with blood, Fitzroy descends upon Fink Factories. Unarmed, the factory owner pleads for mercy, but the revolutionary will not be stopped. After murdering Fink, Fitzroy grabs a young boy who witnessed the entire event. As she presses her pistol against his head, Booker stalls for time, questioning her motivations:

Booker: Is this it, is this your movement Daisy?

Daisy: This is what needs to be done. You see, The Founders ain't nothing but weeds: cut'em down, and they just grow back. If you want to get rid of a weed, you got to pull it up from the root. (Finkton)

Columbia's founders, led by Zachary Comstock, are all Caucasian, so instead of fighting for equality, Daisy is advocating for ethnic cleansing. However, before the revolutionary can shoot the boy, Elizabeth stabs Fitzroy in the back. Cynically commenting on the situation, Booker insists that the "the only difference between Comstock and Fitzroy is how you spell the name" (Finkton).

By having to murder Daisy, Elizabeth is narratively punished for expressing naïve utopian beliefs. Consequently, *BioShock Infinite* equates the desire for political change with an inevitable descent into fascism. According to Levitas (2013):

construing utopia as dangerous in this way supports the view that there is no alternative to the present and to the ravages of global capital. All forms of radical alterity are rendered illegitimate unless they can be contained within or coopted to the existing system. (p. 10)

From this perspective, *BioShock Infinite*'s narrative is imbued with an implicit cynicism that corresponds with neoliberal thought, specifically in relation to the latter's refusal to acknowledge the potential reality of political alternatives. As a result, it has become easier to envision the

collapse of civilization than alternatives to contemporary capitalism. As Jameson (2005) notes, the crisis of socialism has created a cultural break where "traditional utopian production seems to have come to a halt" (p. 216).

While I sympathize with the above argument, it is important to consider whether utopian production has disappeared entirely, or simply shifted into new forms of creative expression. On a representational level, *Bioshock Infinite* is presumably anti-utopian, but its story does not necessarily correspond with the gameplay, in which users can temporarily "experience an alternative configuration of needs, wants, and satisfactions" (Levitas, 2013, p.4). Many critics refer to the ambivalent nature of game politics when commenting on the aforementioned political tension, but the analysis commonly ends right after this point is made. In contrast, this dissertation uses ambivalence as a starting point for conceptualizing how the political paradoxes that characterize digital games stem from the contradictions that characterize 21st century capitalism.

Expanding on this point, this chapter draws from game studies, utopian studies, media studies, and political economics to develop an assemblage approach to game criticism.

Fundamental to this methodology is the ontological flexibility needed to account for political correlations and dissonances, specifically those arising between production, representation, and design. Instead of reducing analysis to revolutionary emancipatory or ideologically limiting binaries, game politics will be described as being heterogeneous in form. Popular gaming franchises, from this perspective, are clearly influenced by neoliberal thinking, but they also contain evasive components that provide new opportunities for resistance and critique.

Utopia vs. Dystopia

Traditionally, the study of digital games has been driven by the competing concerns of multiple disciplines, creating a situation in which scholarship has been ensnared repeatedly in a series of highly politicized debates. Recognizing this problem, an interdisciplinary group of international scholars began organizing in the early 2000s, with the goal of facilitating a more organized approach. The first broadly defined computer game studies journal was founded in July 2001, while the International Digital Games Research Association held its first conference in 2003. Suddenly, gaming was no longer confined to the fringes of unrelated disciplines; an international conversation was beginning to take place.

As game studies developed, writing was filled with optimism over the digital game's potential to surpass the limitations of analog mass media, particularly in terms of educational and democratic benefits. Amid passionate discussion over the possible directions that game studies might take were concerns over colonizing attempts from other disciplines such as literary and film studies. Ideological criticism was explicitly written off as a tactic from a "previous war" (Aarseth, 2001, para. 3), as game culture was conceptualized as being "very distinct" (Shaw, 2010, p. 414) from mass media and the broader mainstream culture.

While emphasizing difference, notable scholarship was conceptually split between utopian and dystopian perspectives, with prominent optimists touting the critical possibilities inherent in a particular subset of experimental games (Frasca, 2001; Bogost, 2007). Based on a few examples, simulations were reconceived as rhetorical forms of persuasion, with the tangible capacity to criticize and improve actual systems. Conversely, critical scholarship (Kline, Dyer-Witheford, and de Peuter, 2003; Galloway, 2004; Wark, 2007) was providing a darker dystopian take. Instead of stoking the desire for alternative political systems, digital games were the

quintessential post-Fordist commodity (Kline, Dyer-Witheford, and de Peuter, 2003, p. 76), exemplifying new forms of subjugation and corresponding strategies for resistance.

While both approaches provide valuable contributions to scholarship, they tend to downplay contradictions arising between a game's status as both a material commodity and an immaterial playing experience. As a result, digital games are reduced to being political in a revolutionary emancipatory or ideologically limiting sense. In an effort to bridge this gap, this dissertation will use a case study approach to investigate neoliberalism's relationship with popular digital game franchises. Instead of reducing games to a utopian/dystopian binary, utopianism will be understood as a hermeneutic method (Levitas, 2013) that results in both cohesions and contradictions between production, representation, and design.

Since game studies lacks a methodological toolkit for conducting ideological criticism, I have decided to use a case study approach that, according to Yin (1994), "allows an investigation to retain the holistic and meaningful characteristics of real life events" (p. 3). To avoid downplaying content, digital games will be viewed as complex assemblages, as opposed to constituting a strictly representative or simulative form. Traditionally used as a descriptive term, assemblage theory is becoming an important theoretical framework for the study of digital media. While the concept has been employed in many ways, its use in game studies is rooted in the philosophy of Deleuze and Guattari.

Derived from the French *agencement*, assemblage theory emphasizes arrangements of connections giving "concepts their sense" (Phillips, 2006, p. 108). While ontologically similar to actor network theory, ⁷ A *Thousand Plateaus* (Deleuze and Guattari, 2009) draws from modernist

⁷ While assemblage and actor network theories collapse distinctions between human and non-human entities, assemblages differ by refusing to define a part's (node's) value in terms of its relationship with other parts.

art practice to view relations between human and non-human entities as collages, where meaning is co-determined by an arrangement and its relation to other arrangements. Assemblage theory emphasizes creative flexibility while granting reality to the "unstable and heterogeneous structuring of everyday life" (Dewsbury, 2011, p. 149). Contrary to reductive strategic or capitalist realisms (Fisher, 2009), assemblage approaches constitute a more expansive experimental form of realism.

While the digital entities populating game spaces have been traditionally understood as existing outside of reality, an assemblage approach provides an ontological flexibility that views immaterial objects as being real. Chapter 7's discussion of Ben Craddock's arithmetic logic unit provides a powerful example of this process, given that Craddock's logic unit in the game exists as an impressive fan creation with the capacity to handle all of the logical operations performed by its material counterpart. By revealing the foundation of computer processing, the ALU visually demonstrates the technical infrastructure that information flows through when computation occurs, which is an experience that was previously rare given the size and speed of contemporary computer processors.

Assemblage theory has been taken up in a variety of disciplines, resulting in uses that are "disparate and sometimes imprecise" (Phillips, 2006, p. 108). Following this trend, game studies utilizes the concept in several ways. One approach corresponds with an anthropological/cultural studies pattern of using assemblage theory to describe "a distinctive heterogeneity of a form or object in a phase of development or becoming" (Markus and Saka, 2006, p. 102). Joseph and Knuttila (2014) use this strategy to collapse categorical distinctions between single and multiplayer into "a mess of objects and relations" (p. 214). Galloway (2004) applies a similar ontology, defining gaming as relations between organic and inorganic machines (p. 2).

A closely related but slightly different interpretation involves using assemblage theory to describe "emergent social conditions" (Markus and Saka, 2006, p. 102). Research investigating multiplayer gaming incorporates this approach to examine evolving player interactions. Taking their cue from DeLanda (2006), Pierce and Artemesia (2009) use assemblage theory to describe online player communities as constituting real emergent cultures. Taylor (2009) echoes a similar sentiment, arguing for an understanding of games as "artifacts that traverse multiple communities of practice" holding "multiple, often contested, meanings" (p. 33).

In terms of this dissertation, it is important to differentiate DeLanda's assemblage position from Deleuze and Guattari's (2009) schizoanalytic work. In *A Thousand Plateaus:*Capitalism and Schizophrenia, schizoanalysis is described as a preference for rhizomatic formations that escape repressive territorializations (p. 17-21). Subsequent scholarship has heavily debated this concept, with some critics drawing troubling parallels between schizoanalysis and the playful state of contemporary capitalism. Avoiding this debate, DeLanda (2006) steers clear of hermeneutic readings and concentrates instead on Deleuze and Guattari's ontology, focusing specifically on the study of emerging populations rather than emphasizing the revolutionary potential of rhizomatic formations.

Following DeLanda's (2006) approach, Chapter 2 focuses on intermediate social relations by linking discrepancies between macro neoliberal policy and micro neoliberal discourse to the contradictions that characterize 21st capitalism. In a related manner, Chapter 3 draws on Deleuze and Guattari's emphasis on heterogeneous forms to outline an assemblage framework for conducting game criticism that specifically highlights political contradictions

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⁸ Boltanski and Chiapello (2005) provide one of the most influential critiques of Deleuze and Guttarri, describing contemporary capitalism as embodying a playful quasi-Deleuzian spirit in its de-territorializing tendencies.

between representation and simulation. The subsequent case studies will build on both interpretations to differentiate parts of popular game franchises influenced by neoliberal thinking from parts that offer opportunities for resistance (Chapters 4 & 5) and critique (Chapter 8).

Central to assemblage methodology is a rejection of philosophical definitions that view play as a wasteful activity (Caillois, 1961) existing outside of everyday experience (Huizinga, 1949). Instead of limiting digital games to discussions of virtual, synthetic (Castronova, 2005), or half-real (Juul, 2005) worlds, this ontology emphasizes co-determining, overlapping systems that cannot be reduced to internal components. From this perspective, games derive political meaning from associations with neoliberal systems while also helping to define those systems in return. Rather than existing in a virtual actual binary, digital and material systems work together by co-determining each other.

In keeping with an assemblage emphasis on individualizing processes of becoming, digital games will be analyzed in terms of their distinctive relations with a broader neoliberal assemblage. Since the case study's "unique strength is an ability to deal with a full variety of evidence" (Yin, 1994, p. 8), the framework provides an ideal means of exploring these dynamics. For pragmatic reasons, cases have been selected based on popularity as opposed to genre or mode of production. In doing so, this dissertation collapses distinctions between game culture and a broader mainstream culture.

Criteria for Case Selection

In this study, each franchise can be defined as a component of popular digital culture via their achievement of critical and financial success; however, each case achieved popularity for slightly different reasons. *BioShock* is commonly praised for its story and art design, while *Red*

Dead Redemption is known for scope and depth. Call of Duty's success stems from its popular multiplayer mode, and Minecraft is known for its player-created content. In terms of sales, BioShock (2007-2013) has reportedly sold over 13 million copies (Mallory, 2013, July 30); Call of Duty (2003-present) has sold 175 million copies (Makuch, 2015, March 25); Red Dead Redemption (2010-present) has sold over 13 million copies (Makuch, 2012, February 12), and Minecraft (2009-present) has sold over 70 million copies (Sarkar, 2015, June 30).

From an economic perspective, the franchises selected can all be understood as being popular; however, they have not been chosen for purely economic reasons. *Grand Theft Auto* (1997-2013) is arguably the most popular franchise released in the selected time period, but its relationship with neoliberalism has already been discussed extensively. Since this dissertation omits the franchise, the criteria for case selection needs to be situated in a more expanded definition of popular culture. According to Fiske (1989), popular culture is not limited to the commodities produced by culture industries: it is produced by an active audience, which is not a stable sociological category, as it involves constantly shifting sets of forces and social allegiances (pp.23 - 24). Some allegiances correlate with external social categories, like class, race, gender, age, and ability; some allegiances cut across social categories, and others choose to ignore them entirely. Popular culture, in other words, is a shifting set of forces that are related to but not solely determined by external political processes, as it involves shifting social allegiances which include new forms of resistance and critique.

Following Fiske's definition, cases have been selected as a means of showcasing new varieties of resistance and critique, and how such forms can emerge when different ludic components interact with different political components. *Bioshock* (Chapter 4) and *Red Dead*

⁹ See Barrett (2006); Redmond (2006); Dyer-Witheford & de Peuter (2009); and Vanolo (2012).

Redemption (Chapter 5) can be understood as resisting neoliberalism by simulating economies where debt is not present. Game systems can be resistant, in this sense, through forms of play that emerge from rules, which overlap with but do not strictly emerge from game mechanics. Resistance also does not necessarily constitute a new form of critique, in both cases. In the example of Call of Duty (Chapter 6), quick-scoping can also be understood as resisting the franchise's traditional focus on military realism, but not necessarily resisting neoliberalism, as it involves a highly individualistic play style that corresponds with a neoliberal discursive emphasis on competitive individualism. Comparably, *Minecraft* (Chapter 7) can be understood as a unique case where affordances and mechanics permit the creation of computational objects that provide new aesthetic experiences, including experiences that provide more explicit visually oriented critiques of a neoliberal emphasis on source code. Given the aforementioned differences, the franchises have been selected as a means of showcasing a shifting popular cultural landscape that involves fluctuating sets of forces and social allegiances, primarily emanating from playful forms of resistance and critique that emerge from different ludic components.

BioShock, Call of Duty, and Red Dead Redemption are big budget console titles, also referred to as AAA games, and they will be discussed as related cases in terms of production.

Minecraft, on the other hand, is an independent production that became widely popular, so it will be treated as a unique case. In correspondence, BioShock, Call of Duty, and Red Dead Redemption will be related to the production problems that AAA games are encountering in the contemporary marketplace. Conversely, Minecraft will be discussed as a unique example that points to the shifting state of popular play.

Due to the tight secrecy that often surrounds game development, the production of each franchise will be analyzed from a political economic perspective using the information that is publicly available. *BioShock* (Chapter 5) will be analyzed using blog posts, mainstream media reports, and ESRB sales statistics. Similarly, *Red Dead Redemption* (Chapter 6) will be discussed using blog reports, mainstream media reports, and an IGDA survey. *Call of Duty* (Chapter 7) will be analyzed using blog reports, court documents, forum postings, and fan videos. Finally, *Minecraft* (Chapter 8) will be discussed using the developer's blog, forum postings, and fan videos. Each case study will use the data listed above to provide an analysis of game production that will then be compared with representation and design, primarily as a means of highlighting political inconsistencies linked to the contradictions that characterize contemporary capitalism.

Understood as an assemblage, neoliberalism adopts a narrow, business oriented ontology that denies the existence of broader community relations. Assemblage theory provides a methodological counterpoint to this problem by classifying emergent socio-technical formations as real systems, including those which might offer possible alternatives to neoliberal corporate capitalism. Expanding on this point, Chapter 2 links neoliberalism's stubborn persistence to the contradictions that characterize contemporary capitalism, particularly in relation to the rise of financialization (Martin, 2002; Krippner, 2005) and transitions to societies of control (Deleuze, 1992).

¹⁰ The academic literature on financialization and transitions to societies of control demonstrates the parallel recognition of a new state of capitalist accumulation, where wealth is increasingly accumulated through financial channels instead of mass production and the trade of commodities. Comparatively, the analysis of financialization is often more specific and applied, while the conceptualization of transitions to societies of control can tend to be more abstract, theoretical, and wide ranging.

CHAPTER 2

Untangling Neoliberalism:

A Literature Review

Upon its release in 2007, *Call of Duty: Modern Warfare* (Infinity Ward) transformed a previously successful franchise into an immensely recognizable brand, triggered in particular by the immense popularity of online multiplayer play. Prior to the game's success, first person shooters were viewed as a predominantly PC genre, with console releases being derided for their slower analog controls. Designed for a "hardcore" audience, shooters were marketed towards a specific (male) demographic willing to spend thousands of dollars on hardware upgrades.

Reversing this trend, *Modern Warfare* helped to popularize online multiplayer play amongst a broader console audience.

Before *Modern Warfare*'s massive success, popular online shooters like *Counterstrike* (Valve Corporation, 1999) tended to favor cooperative play. Conversely, *Call of Duty: Modern Warfare* supports a more aggressive "run-and-gun" style, ¹¹ geared distinctively toward intense fire fights. Amid a plethora of multiplayer options, the game generally pits teams against each other; however, it also provides special advantages for individuals, such as players who accomplish a series of successive kills without dying. In *Modern Warfare*, kill streaks of three

¹¹ "Run-and-gun" generally refers to first-person shooters that require constant movement, as opposed to more stealth oriented combat scenarios where players move slowly.

are rewarded with a radar (UAV) scan, revealing the locations of enemy players; kill streaks of five result in an air strike launched at a target of choice; and kill streaks of seven gift a helicopter that rains bullets from above. Subsequent editions add customizable streaks, allowing players to combine them through a process referred to as "stacking." In *Modern Warfare 2* (Infinity Ward, 2009), killing twenty-five enemies rewards a tactical nuclear strike, guaranteeing victory even when the team is behind.

By instituting kill streaks, the designers of *Modern Warfare* effectively promoted greater competition, not only between teams, but increasingly between the players within them. In many respects, this type of design reflects a neoliberal logic that views competitive individualism as the best means of organizing human endeavors. Technically, squad members are supposed to be playing together, but many are now more interested in earning achievements.¹²

As the above example demonstrates, simulations can be designed to incorporate the biases implicit in neoliberal thinking, resulting in influences on behavior. Similarly, neoliberalism can work in accordance with different political regimes that can subtly utilize its techniques without espousing its discourse. These tensions can be conceptualized in relation to transitions from disciplinary societies to societies of control (Deleuze, 1992), where governance is increasingly exercised more subtly through digital forms of subjugation. Recently, the 2007 financial downturn demonstrated the contradictions that emerge from these shifts, as governments engaged in a hypocritical pattern of supporting large firms while encouraging citizens to take care of themselves. In response to these events, the interdisciplinary study of neoliberalism is continuing to rearticulate the term. This chapter reviews recent academic

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¹² See TheSandyRavage (2013, January 26) for a description of the problems that often occur when players are more interested in chasing kill streaks than cooperating with teammates.

literature on the subject, including scholarship written before and after the 2007 financial downturn, in order to clarify the concept's use in this dissertation.

Historically speaking, the study of neoliberalism has focused predominantly on policy; however, scholarship rooted in ideological (Harvey, 2005) and governmentality (Foucault, 2007, 2008) perspectives has applied the term to everyday life. While both approaches have made meaningful contributions to interdisciplinary debates, they have also been criticized for ignoring inconsistencies that are noticeably present in a hypocritical pattern of governments supporting large firms while encouraging citizens to take care of themselves (Crouch, 2011; Fisher, 2009). Employing an assemblage conceptualization (DeLanda, 2006; Ong, 2006, 2007; Lazzarato, 2012, 2015; Gilbert, 2013) avoids this problem by providing a more flexible means of unravelling the unfolding paradoxes that constitute neoliberalism's two-faced nature, particularly in relation to the spread of financialization (Martin, 2002; Krippner, 2005) and transitions to societies of control (Deleuze, 1992).

"Two-faced," as defined by the Oxford English Dictionary, is an adjective meaning "insincerity" or "deceit," ¹³ otherwise known as saying one thing and deliberately doing something different. Neoliberalism, understood as a two-faced assemblage, works precisely in this way, with its discursive form promising to liberate individuals by providing more freedoms, while its economic form simultaneously subverts the freedoms promised by increasingly subjugating citizens to the highly volatile, networked flows of 21st century capitalism. According to Brown (2016),

Neoliberalism emancipates individuals from one kind of state regulation and social solidarity to make them available for interpellation and integration by a different set of

¹³ See http://www.oed.com/view/Entry/208225?redirectedFrom=two+faced#eid.

political-economic imperatives and arrangements, ironically repeating the "double freedom" Marx described as integral to proletarianization in the transition from feudalism to capitalism. Formally freed from legal interference in their choices and decisions, subjects are at every level identified with and integrated into capital's imperatives and predicaments. Thus, as neoliberal citizenship sets loose the individual to take care of itself, it also discursively binds the individual to the well-being of the whole — demanding its fealty and potential sacrifice to national health or economic growth. (pp. 4-5)

In contemporary Marxist thinking, ideology is at play in this situation, and it often works by denying, smoothing over, or negating the aforementioned contradictions. ¹⁴ Unfortunately, such an approach is limited to the discrepancies that exist between representational elements, including tensions between that which is depicted and that which is not. ¹⁵ Ludonarrative dissonance, on the other hand, involves a different set of tensions that occur when representational and simulational elements interact—tensions that cannot be isolated on a purely representational level.

Due to the aforementioned problem, an assemblage methodology provides several advantages for investigating the political potential implicit in the unique set of discrepancies that characterize ludonarrative dissonance. Firstly, it provides a heterogeneous framework with the capacity to chart new sets of contradictions that occur when simulation and representation interact. Secondly, it grants reality to emergent social relations and potential systemic alternatives that a neoliberal focus on individualism repeatedly works to deny. And thirdly, an

¹⁴ See Hall (1985, 1986) and Zižek (1989).

¹⁵ See Hall (2000).

assemblage approach also carries the advantage of granting neoliberalism a provisional identity (Hall, 2011) that will undoubtedly continue to change in response to the shifting contradictions (Harvey, 2014) that characterize 21st century capitalism. While discrepancies between use and exchange values played an integral role in the recent financial downturn, neoliberalism has also been linked to new systemic contradictions related to capitalism's shifting relationship with the autonomous development of digital technology. Accordingly, simulations can be conceptualized as new sites of struggle, with neoliberalism's influence extending beyond the domain of representation without effecting total control over the design of digital systems.

Neoliberalism, Globalization, and Postmodernism

While the term 'neoliberal' has been in use for many years, it has recently gained traction in evolving discussion of globalization and postmodernism. Initially receiving some critical attention, neoliberalism is increasingly replacing or accompanying scholarly use of both terms. According to McChesney (2001), the concept is preferable to descriptions of globalization specifically designed to emphasize "natural force" (p. 2). Similarly, Rapley (2004) describes a particular form of globalization that is intrinsically driven by neoliberal policy (p. 8). Likewise, Harvey (2005) describes neoliberalism as being theoretically "compatible" with an analysis of postmodern culture, historically emerging as a full-blown "intellectual dominant" (p. 42).

As an interdisciplinary concept, neoliberalism provides a framework for rooting discussions of globalization and postmodernism in specific policy patterns. Unfortunately, the latter concepts can cast human beings as passive political actors ensured in a current of uncontrollable forces, with this perspective leading to cynicism and apathy. Conversely, the interdisciplinary study of neoliberalism encourages an ongoing discussion of concrete political

alternatives, sparking dialogues between "a range of academics working on different issues, in different parts of the world" (England and Ward, 2007, p. 22).

Existing scholarship demonstrates a lack of consensus with regard to origins of the term. Harvey (2005) points to an influential 1953 text by Dahl and Lindbloom (p. 10); Plehwe (2009) prefers Heckscher's *Old and New Economic Liberalism* (p. 10), and Foucault (2008) describes a German ordoliberal rejection of welfare societies (p. 140). Elaborating on this distinction, Peck (2008) insists that "the challenge implicit in ordoliberalism was to ascertain where and when to put the break on the state" while "the challenge implicit in Chicago neoliberalism was to know where and when to put a break on the market" (p. 27).

While origins vary, there is consensus in describing neoliberalism as a rejection of social liberal welfare perspectives with the goal of reviving a doctrine of market superiority (Steger and Roy, 2010, p. 9-10). Key thinkers did not use the term to describe themselves, preferring to distinguish their ideals from the intellectual dominance of Keynesian economics. According to Friedman (1962), his own work was a natural extension of classic liberal thinking. Taking a more antagonistic approach, Hayek (1944) and Lippman (1937) attacked social liberals, condemning their collectivist thinking as a regression into fascism.

Operating within a national and international context, neoliberal thinking redefines the roles of governments and the relationships between economies and states. Recognizing that governments can help businesses, neoliberals insist that the state's primary role is to promote the growth and expansion of economies, implicitly replacing a social liberal preference for protecting citizens from markets. As a result, the difference between classic and neo forms of liberalism stem primarily from a different take on government intervention, which is no longer viewed as being fundamentally opposed to market interests. According to Friedman (1962), "it is

desirable that we use government to provide a general legal and economic framework that will enable individuals to produce growth in the economy" (p. 38).

Competing Definitions

There is consensus with regard to the differences between social and neo forms of liberal government, but little agreement persists beyond the recognition of this change. Intriguingly, discussion of the concept permeates multiple debates connected to a wide range of theories and methods. Neoliberalism has been successively defined as "an ideological system that holds the 'market' sacred" (Mudge, 2008, p. 706); "the set of national and international policies that call for business domination of all social affairs" (McChesney, 2001, p. 2); and "new forms of political-economic governance premised on the extension of market relationships" (Larner, 2000, p. 5).

In addition to competing definitions, multiple voices have sought to advance similar critical concepts. Klein (2007) describes the post 9/11 rise of disaster capitalism, which preys conveniently on citizens in a state of shock (p. 18). Quiggin (2010) prefers market liberalism on the grounds of a more accurate correspondence with how proponents prefer to define themselves (p. 3). Hardt and Negri (2000, 2004) also refer to the interdisciplinary study of neoliberalism, but prefer to emphasize emerging dialectical networks characterized primarily by an encroaching international empire and a rising oppositional multitude. Although they do not use the term directly, nationally focused critiques of British Thatcherism and American Reganism are also retroactively viewed as contributing to the interdisciplinary study of neoliberalism (Steger and Roy, 2010).

The term is sometimes dismissed as an overgeneralization due to a plethora of related concepts coupled with a lack of self-identifying neoliberals. According to Gilbert (2013), this strategy tends to go along with the rejection of related concepts like "ideology, capitalism, and hegemony" (p. 7). In response, neoliberal literature counters by insisting that the primary problem is not the term itself, but rather a mixture of under conceptualization and poor use. ¹⁶ Echoing a familiar refrain, Larner (2000, p. 5-6) and Mudge (2008, p. 706) insist that neoliberalism is often ill-defined and woefully underestimated. Peck (2008) expands on this view to emphasize a complex historical pattern of pragmatic experimentation:

Neoliberalism, it seems, was a transnational, reactionary, and messy hybrid right from the start. There was never a pristine moment of mountaintop clarity; it never represented a singular vision free of doubt and dispute. Instead, from its origins in the 1930's, neoliberalism signified an experimental and polycentric project aimed at the contradictory problem space between the state and the market. It represented an attempt to conceive and construct a market (-like) order, one that has since been perpetually reconstructed through practice. (p. 4)

Following this logic, a significant proportion of literature opts for a multidimensional ontology, for, according to Steger and Roy (2010) "it makes sense to think of plural neoliberalisms rather than a single monolithic manifestation" (p. xi). Within this body of scholarship, Larner's (2000) policy, ideology, and governmentality model exists as a popular multidimensional approach, with Gilbert (2013) adding technical assemblage as a recent critical category. A recurring theme that emerges from complexity approaches is an emphasis on

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¹⁶ Overuse of the concept has created a situation whereby multiple theorists have been accused of being neoliberal, which sadly ignores a troubling pattern of blaming individuals for broader systematic failures.

disjuncture, particularly in response to those who conflate neoliberalism with smaller forms of government. Distinguishing the term from libertarian leanings, scholarship emphasizes a pattern of shifting priorities, where "governments are to remain large so as to better serve the corporate interest" (McChesney, 2001, p. 2). From this perspective, neoliberalism subsequently "exists in a self-contradictory" way as a rule system that "paradoxically defines itself as a form of antiregulation" (Peck and Tickell, 2002, p. 401).

Despite paradoxical turns in neoliberal theory, academic research is still predominantly focused on policy; however, literature connecting the concept to everyday life is beginning to appear. In this context, game criticism is raising important research questions in an ideological and governmentality context, but existing contributions also need to be updated to incorporate recent theoretical developments. Luckily, this problem can be overcome by focusing on the systemic contradictions that necessitate an assemblage approach (Ong, 2006, 2007; Lazzarato, 2012, 2015; Gilbert, 2013). From this perspective, ideology and governmentality methodologies are simply incomplete due to the recent proliferation of digital technologies.

Hegemony, Governmentality, Control

Foucault's (2007) analysis of governmentality sparked a popular theoretical approach by defining neoliberalism as a technology or technique of government. In an influential discussion of George W. Bush's policies, Brown (2006) uses this definition to explain how neoliberalism "does not align exclusively with any political persuasion" (p. 691). Within this framework,

neoliberal political rationality, which knows no political party, has inadvertently prepared the ground for profoundly anti-democratic political ideas and practices to take root in the culture and the subject. This is what permits neoconservatism to become more than a

contestable political ideology or agenda whose star might rise or fall according to economic indicators, immigration politics, or success in imperial wars. Neoconservatism sewn in the soil prepared by neoliberalism breeds a new political form, a specific modality of governance and citizenship, one whose incompatibility with even formal democratic practices and institutions does not spur a legitimation crisis because of the neoliberal devaluation of these practices and institutions that neoconservatism then consecrates. (p. 702)

When defined as a form of governmentality, neoliberalism is understood as working in accordance with different political regimes that utilize its techniques without wholeheartedly embracing its beliefs. The concept is not understood as being hegemonic in an ideologically specific sense, nor is it linked to American imperialism, for, according to Plehwe, Walpen, and Neunhoffer (2006), neoliberalism "was on the ascendance right at the time when many indicators pointed to the relative decline of the US hegemonic position" (p. 7). Governmentality readings explicitly stress a pattern of uneven spatial temporal implementation (England and Ward, 2007, p. 10) created by "complex interactions" (Ong, 2006, p. 8).

Instead of drawing on governmentality theory to extend the work of Foucault, multiple critics conceptualize neoliberalism using a hegemonic framing by drawing on the work of Antonio Gramsci. This scholarship can be located in the Gramscian tradition, but it also breaks from a past preference for structuralism in terms of what is commonly described as a Neo-Gramscian approach, which cites the global and historic pervasiveness of neoliberal policy as an indicator of ideological dominance. Numerous critics have made this argument, but the following passage from *A Brief History of Neoliberalism* (Harvey, 2005) is widely cited and worth quoting at length:

Almost all states, from those newly minted after the collapse of the Soviet Union to oldstyle social democracies and welfare states such as New Zealand and Sweden, have embraced, sometimes voluntarily and in other instances in response to coercive pressures, some version of neoliberal theory and adjusted at least some policies and practices accordingly. Post-apartheid South Africa quickly embraced neoliberalism, and even contemporary China, as we shall see, appears to be headed in this direction. Furthermore, the advocates of the neoliberal way now occupy positions of considerable influence in education (the universities and many 'think tanks'), in the media, in corporate boardrooms and financial institutions, in key state institutions (treasury departments, the central banks), and also in those international institutions such as the International Monetary Fund (IMF), the World Bank, and the World Trade Organization (WTO) that regulate global finance and trade. Neoliberalism has, in short, become hegemonic as a mode of discourse. It has pervasive effects on ways of thought to the point where it has become incorporated in a common-sense way many of us interpret, live in, and understand the world. (pp. 2-3)

Providing a similar perspective, Peck (2008) argues that "like its predecessor, Keynesianism, neoliberalism has achieved a form of hegemony without being monolithic or even completely unified; instead existing as a polymorphous bundle of principles and practices" (p. 33). Likewise, Plehwe, Walpen and Neunhoffer (2006) emphasize the multidimensional shifting state of neoliberal hegemony by distinguishing between "different neoliberal hegemonic constellations" (p. 3). While still influenced by Gramsci, the aforementioned perspectives refrain from describing neoliberal hegemony as a monolithic political force, creating a situation where the scholarship shares commonalities with research rooted in the governmentality tradition. As a

result, hegemony and governmentality perspectives should not be understood as dichotomous research methods even though they stem from different theoretical traditions.

By introducing hegemony as a critical concept, Gramsci (1971) created a pedagogic term illustrating how the elites of society lead the masses, who in turn willingly consent to the "general direction imposed on social life by the dominant fundamental group" (p. 12). This process traditionally relies on solid historical blocs that exist in reciprocal relationships with more coercive forms of legal state power "exercised on those groups who do not 'consent' either actively or passively" (p. 12). According to Gramsci (1971), it is wrong to insist that the fundamental unity of a given historic power bloc is achieved though juridical and political methods; it is actually achieved though "the organic relations between State or political society and civil society" (p. 52). Hegemony, consequently, exists as a crucial means of maintaining political power and justifying state coercion.

To achieve power in any given society, a social group must first win an immaterial war of ideas, for intellectual battles precede actual political victories. Appropriately, states cannot be easily separated from broader social processes. According to Gramsci (1971),

the general notion of State includes elements which need to be referred back to the notion of civil society (in the sense one may stay that state = political society + civil society, in other words hegemony protected by the armour of coercion. (p. 263)

It is important to remember that Gramsci was reformulating Marxism at a time (1929–1935) when structuralism was a popular methodological framework. States are, correspondingly, understood as being more expansive than initially thought; however, they are still afforded stability within time and space. Four decades later, biopolitical theory was developing while structuralism faced critique for failing to account for social processes. Instead of constituting

states as components of solid historical blocs, Foucault (2008) took a radically different turn by arguing that the state is "nothing else but the mobile effect of a regime of multiple governmentalities" (p. 77).

Foucault's analysis stresses the myriad of ways through which governance can be said to occur, including means not traditionally associated with states. Technology further complicates this process because it has the capacity to influence behavior by affecting how citizens view themselves. In contrast to Gramsci, power does not solely reside within dominating social groups; it is primarily articulated through discourse.

Given the above distinction, both perspectives are often viewed as a set of dichotomous research methods despite the fact that they share corresponding political concerns.

Governmentality work is sometimes interpreted as a bottom-up approach interested primarily in the political formation of subject positions. Similarly, hegemonic work is interpreted as a top-down approach that emphasizes how dominant social groups influence the beliefs of others.

While many theorists make this distinction, Springer (2012) describes the perceived dichotomy as a simplistic division that separates research sharing similar political concerns. By providing a Neo-Gramscian spin (Plehew, Walpen and Neunhoffer, 2006; Harvey, 2005; Peck, 2008), hegemonic approaches actually tend to complement governmentality research by portraying neoliberalism as a shifting multi-dimensional entity that persists beyond a juridical understanding of the sovereign nation state.

Additionally, Neo-Gramscian approaches often rearticulate hegemony using language that alludes to Deleuze, while the discussion of neoliberal governmentality is not concerned solely with individual subject formation. For Brown (2006), analysis centers on the relationship between neoliberalism and a particular political regime, specifically in relation to the strategic

implementation of particular policies. Instead of constituting a situation in which subjective identity formations expand into overarching elusive forms of government, governmentality is conceptualized as a process whereby "the modern sovereign state and the modern autonomous individual co-determine each other's emergence" (Lemke, 2001, p. 191).

From an assemblage perspective, both approaches can be understood as complementing each other in acknowledging emerging contradictions, primarily between the macro institution of policies and the micro reproduction of discourse. For Lemke (2012), Foucault's work parallels and may even be linked to "theories of the state that work in the Neo-Gramscian tradition" (p. 60). Likewise, Springer (2012) recognizes "consistency between Neo-Gramcian and governmentality approaches" (p. 138). Intriguingly, both methods use similar examples to connect neoliberalism to everyday life, while increasingly alluding to assemblage theory either implicitly or explicitly. Ong's (2006, 2007) work is notable in this regard for initially focusing on neoliberal governmentality (2006) before shifting to a mobile technology definition (2007).

By emphasizing heterogeneous forms in constant states of becoming, an assemblage conceptualization provides a useful theoretical framework for drawing from hegemony and governmentality scholarship. Key to this perspective is an unravelling of contradictions stemming from neoliberalism's relationship with contemporary capitalism. According to Crouch (2011), "actually existing, as opposed to ideologically pure, neoliberalism is nothing like as devoted to free markets as is claimed" (p. viii). Reiterating this point, Fisher (2013) draws on the work of Badiou, Žižek, and Jameson to describe a capitalist realism that does not necessarily believe in neoliberal doctrine, but holds that "whether we like it or not, the world is governed by neoliberal ideas, and that won't change" (p. 90).

Using an assemblage paradigm, neoliberalism can be associated with financialization (Martin, 2002; Krippner, 2005) and transitions to societies of control (Deleuze, 1992) where governance is exercised more subtly via technical forms of modulation (p. 5). Importantly, this perspective builds upon a governmentality approach, but it also differs in response to recent political developments. According to Foucault (2007), security involves the management of entire populations (p. 11), and the new problem of encouraging people to move in particular patterns. As an alternative to enclosing subjects in disciplinary structures, government makes space for uncertainty to better account for the reactions of bodies from a distance. Instead of creating a perfectly disciplined society, governments acknowledge the impossibility of suppressing exposure to negative elements, and priority shifts to minimizing risk (p. 19).

Conversely, financialization (Martin, 2002; Krippner, 2005) creates a situation where risk operates along an entirely different dimension. Key to this shift is a new "pattern of capital accumulation in which profits accrue primarily through financial channels rather than through trade and commodity accumulation" (Krippner, 2005, p. 174). From a control society standpoint, populations become increasingly subjected to the interests of financial capital; however, contrary to the claims of many economists, risk is not necessarily minimized. In the case of the recent financial downturn, mortgage backed securities socialized risk instead of reducing exposure to negative elements (Martin, 2002), thus exposing the broader banking system to the perils of subprime lending.

A Two-Faced Assemblage

When considering these developments, neoliberalism is not necessarily characterized by minimizing the population's exposure to potentially harmful elements. Risk is supposedly

managed, or shifted in response to the concerns of investors. Such changes indicate a fundamental shift in the nature of capitalism, as the interests of industrialists are increasingly subverted by the interests of financiers. Accordingly, political interventions can be dictated not by state law, but by "the institutions that govern finance" (Lazzarato, 2015, p. 110).

By valuing individuals based on their profit generating potential, neoliberalism repeatedly fails to acknowledge historical, physical, and material differences that still benefit particular social groups. Following this logic, neoliberal political rationality abandoned a classic liberal distaste for the monopolistic behavior of large firms. While Lippman (1937) viewed corporations as dangerous collectivists, Hayek (1979) rejected this concern, arguing that markets spread the influence of successful individuals through the imitation of their behaviour (p. 75). From this microeconomic perspective, discursive support for entrepreneurialism becomes primarily targeted toward the behaviour of citizens, creating a situation in which it becomes "unnecessary to create one's own small business in order to become an entrepreneur; one need only behave like one" (Lazzaratto, 2012, p. 94). Consequently, large firms can receive government support, even at the expense of small businesses, because corporations are viewed as aggregates of competing individuals. According to Crouch (2011), this contradiction creates new dilemmas that can profoundly corrupt markets by providing space for "mutual interferences between government and private firms" (p. 93).

Contradictions of the 21st Century

When considering the aforementioned inconsistencies, assemblage theory provides a useful means of linking neoliberalism's continued persistence to the contradictions that characterize 21st century capitalism. According to Harvey (2014), there are two basic ways to use

the concept of contradiction in the English language: a logical approach, rooted in the work of Aristotle, in which conflicting statements indicate that a particular statement cannot be true; or another mode of usage in which oppositional forces are simultaneously present under particular conditions (p. 1-2). In critical scholarship, contradictions have been conceptualized in a variety of ways, particularly in relation to ideologies. Historically, Marxists have described ideologies as fetishistic masks obscuring a deeper material reality. Following this interpretation, contradictions are organized simplistically in relation to popular entertainment, which pacifies citizens by distracting them from an actual political reality (Adorno & Horkheimer, 1944).

Unsatisfied with the aforementioned perspective, Hall (1986) developed a different approach using the ideas of Gramsci and Althusser. Integral to this work is the problem of describing ideology using terms that can connote something which is false. For Hall (1986), ideologies are better understood as socially complex formations that are mutually determined by material and immaterial influences. Ideologies, from this perspective, also involve inherent contradictions that are naturalized through social reproduction and the formation of common sense.

Essential to this naturalization process are systems of language and representation, which, according to Hall (1985), also constitute an important locus of social struggle. In this sense, the contradictions inherent in capitalism cannot be reduced to an ideological masking of reality because representation also exists as a site of contestation.¹⁷ Importantly, Hall (1986) does not conceptualize language as a free floating system of signs: economics is influential, but it "cannot effect a final closure on the domain of ideology" (p. 43).

¹⁷ Importantly, the struggle for representation also persists beyond a simple analysis of capitalism, as problems like sexism and racism have persisted in a plethora of political systems.

Grappling with the same problem, Fiske (2008) extended Bourdieu's work on taste and class to describe popular culture's relationship with different kinds of meaning. Integral to this approach, is the positing of a distinction between financial and cultural economies (p. 565), where meanings circulate in surprisingly diverse ways (p. 567). Differentiation is subsequently created by a fundamental capitalist contradiction, where the values prescribed for use do not necessarily correspond with exchange. Put simply, the financial economy revolves around exchange values, otherwise known as the prices affixed to goods and services. As fixed assessments, these approximations fail to reflect the values ordinary people ascribe to things, because it impossible to predict how something will eventually be used.

According to Fiske (1992), fans can appropriate entertainment in a variety of active, meaning-producing ways, including activities that conflict with the approximations that dictate economic exchange. Due to the above discrepancies, popular culture is understood as being inherently processual, political, and complex, for "it is centrally involved in the distribution and possible redistribution of various forms of social power" (Fiske, 2011, p. 1). While this friction is often ubiquitous, creative control is becoming an escalating point of contention, occasionally creating conflicts between producers and fans. In part II, the production of *Minecraft* (Chapter 7) provides a fascinating example of this process, as the franchise's development was far from smooth.

Under neoliberalism, producer/fan conflicts are rising, but the systemic friction preceding them is not necessarily new. According to Harvey (2014), discrepancies between use and exchange values constitute a fundamental capitalist contradiction, "which can, on occasion, give

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¹⁸ Fan fiction provides a good example of this process, as enthusiasts rewrite copyrighted works to better align them with unfulfilled fantasies, such as the desire to see heterosexual characters engage in queer romance.

rise to a crisis" (p. 15). Recently, the bursting of the American housing bubble exemplified this process: according to Allon (2010), the economic crisis involved wide discrepancies between use and exchange, stemming from a situation in which "homes and mortgages are valued above all else as financial products and investment vehicles, an identity that is far removed from the home as a consumption good that provides a housing service" (p. 374). Integral to this shift is a new discursive contradiction linked to the shrinking of welfare states, where citizens are paradoxically encouraged to embrace the risks associated with investment as a means of securing long-term financial independence. According to Ong (2006), the aforementioned process can be further expanded into a new approach to immigration, with regions welcoming citizens who have the capacity to invest, in addition to excluding those who may require social assistance. On a narrative level, *Call of Duty* (Chapter 6) provides an interesting example of this process, specifically through the surprisingly ambivalent way in which Russia is repeatedly represented.

While discrepancies between use and exchange values played an integral role in the recent financial downturn, neoliberalism is also linked to new systemic contradictions related to capitalism's shifting relationship with digital technology. Similar to the domain of ideology, economics influences technological development, but it cannot effect a final state of closure. According to Harvey (2014),

capital was not and is not the only agent involved in the pursuit of technological advantages. Different branches of the state apparatus has always been deeply involved. Most prominent, of course, has been the military in search of superior weaponry and organizational forms. (p. 93)

From this perspective, economics exerts an influence, but development remains unpredictable because it involves the participation of multiple actors. In the case of 21st century capitalism,

"innovations create a vast domain of ever-changing possibilities for sustaining or increasing profitability" (Harvey, 2014, p. 94).

Digital technologies are playing an integral role in this shift, as exemplified by the ubiquitous expansion of credit. Before neoliberalism, social liberal welfare states were running into stagflation, an economic problem characterized by low returns on investment and corresponding high rates of inflation. Responding to a difficult economic climate, banks began pushing credit cards as a useful means of bolstering shrinking profit margins. Doing so required costly investments in the systems that expanded use, which "ultimately brought huge profits to the few that could afford the costly technology" (Williams, 2004, p. 15).

An oft-cited paradox linked to the expansion of credit involves a notable increase in bankruptcies during periods of growth. A sudden rise in filings for bankruptcy during the 1990s puzzled multiple governments, and lead to new legislation. However, instead of considering systemic changes, the increase was framed as a moral problem, and the debtor was defined as "a person in need of treatment" (Ramsay, 1997, p. 271). Conversely, Sullivan, Warren, and Westbrook (2000) link rising bankruptcy rates to a pattern of economic growth driven by corporate "downsizing and contract employment" (p. 4).

Following a similar pattern, citizens are increasingly blamed for austerity measures instituted in response to the global credit crisis. According to Lazzaratto (2015), a considerable effort has been undertaken by states, governments, and media "to ensure a population's guilt for a debt into which it has never entered and, therefore, its responsibility for faults it has never committed" (p. 42). Similarly, Atwood (2008) points to a shifting pattern of social anxieties no longer linked to the hygiene of bodies, but increasingly stemming from the contents of financial portfolios (Atwood, 2008, p. 7). On a narrative level, *BioShock* (Chapter 4) and *Red Dead*

Redemption (Chapter 5) are thematically steeped in the anxieties associated with debt; however, the state is noticeably absent from the game systems being simulated.

Using the aforementioned examples, simulation can be conceptualized as a new site of political struggle related to the shifting technological contradictions that characterize 21st century capitalism. From a control society perspective, the expansion of debt cannot be limited to an analysis of political discourse, as it is reliant predominantly on the ubiquitous presence of digital technology. According to Lazzarato (2012), debt involves subjectivity in two primary ways:

'Social subjection' operates molar control on the subject through the mobilisation of [...] conscience, memory, and representations, whereas 'machinic subjugation' has a molecular, infrapersonal, and pre-individual hold on subjectivity that does not pass through reflexive consciousness and its representations. (p. 146)

From this perspective, neoliberalism has a discursive presence, but its influence also persists beyond discourse, for it is also reproduced through repetitive procedures embedded in protocols and algorithms. Consequently, an analysis of utopian production needs to account for capitalism's attempt to influence the design of simulations, which does not necessarily result in symbolic reinforcement so much as it creates new conflicts. One example of these new conflicts appears in the case of *Call of Duty* (Chapter 6), as players who are more interested in chasing individual achievements can stop cooperating with fellow team members.

The interdisciplinary study of neoliberalism is in an ongoing process of refinement in response to political developments and accusations of overuse, prompting Hall (2011) to grant the term "a provisional conceptual identity, provided this is understood as a first approximation"

(Hall, 2011, p. 706). 19 Neoliberalism can thus be understood not as an ideology reinforced through representation, but as a two-faced assemblage innately linked to the contradictions that characterize contemporary capitalism, including both shifting and long-standing systemic inconstancies.

Understood as an assemblage, neoliberalism will undoubtedly continue to change, so an analysis needs to be provisional. In terms of long-standing contradictions, an integral discrepancy between use and exchange values affects production and representation; however, simulation adds a new layer of political complexity related to the development of digital technology. Unfortunately, utopian approaches to popular culture focus primarily on representation, meaning that existing criticism can only provide partial insight into these processes. Fortunately, game critics are beginning to investigate a new set of contradictions linked to the emergence of play. Chapter 3 expands on this point by turning to the burgeoning field of digital game criticism and the struggle to develop a new critical vocabulary.

¹⁹ Correspondingly, utopian methodologies (Levitas, 2013) are also understood as temporary approximations, and assemblages (DeLanda, 2006) are similarly interpreted as intermediary social relations.

CHAPTER 3

Hybrid Moments:

Ludonarrative Dissonance and Assemblage Theory

As mentioned in Chapter 2, neoliberalism's stubborn persistence can be linked to a plethora of capitalist contradictions, including long-standing discrepancies between use and exchange values and the shifting state of technological development (Harvey, 2014). Existing approaches to popular culture have investigated these processes by analyzing the struggle for representation (Hall, 1985) and the existence of alternative fan economies (Fiske, 1992), but little attention has been paid to the emerging conflicts created by the rapidly shifting state of technological development. To address the aforementioned gap, this chapter links capitalism's inability to exert complete control over digital technology to ludonarrative dissonance (Hawking, 2007), a critical concept that refers to discrepancies between narratives and emergent gameplay. This approach provides a fresh take on a concept connected to multiple debates that persist among academics, developers, and critics searching for a new game-specific vocabulary.

A Lack of Serious Criticism?

Before entering into a discussion of ludonarrative dissonance and the corresponding debates over the concept's use, it is useful to begin with an overview of methodological

approaches to game criticism. Doing so situates a political reconceptualization of the term within ongoing debates both inside and outside the boundaries of game studies. Within academia, game criticism has been conducted by a wide variety of scholars who are often forced to import methodologies from home disciplines. Outside academia, many critics have lamented a lack of serious criticism; however, others are beginning to notice change. Citing a recent debate over *BioShock Infinite* (Irrational Games, 2013), Suellentrop (2013) insists that:

we do not live merely in a golden age of video games but also in a golden age of video game criticism. There has never been more, and better, writing about games and what they mean, how they work and how they fail. (para. 2)

While the above pronouncement is somewhat exaggerated given that few titles get the extensive attention that *BioShock Infinite* received, it does point to a shift that is currently taking place. Most commercial game criticism is still consumer oriented, but a game-literate critical community is beginning to raise its voice. Such writing is clearly influenced by academia; however, it often exists on the fringes of traditional publishing models, particularly foregoing lengthy peer reviews and crystallizing "around websites" (Keog, 2014, p. 10). According to Abraham (2011) this "critical videogame blogosphere" is an important emerging knowledge episteme concerned with "radical conservatism and neoliberalism" (p. 7). Echoing a similar sentiment, Parker (2014) notes a parallel shift among a new generation of "essayist critics" who are playing an "increasingly important role in promoting indie, amateur, and otherwise non-mainstream games" (para. 8).

In terms of authorship, the video game blogosphere is filled with a cacophony of professional and amateur perspectives engaged in a variety of conceptual debates. Surprisingly, important writing has emerged from a wide variety of sources, including authors not traditionally

viewed as critical authorities.²⁰ Hawking's (2007) discussion of ludonarrative dissonance provides a good example of an influential blog post that questions the perceived cohesion of narrative and systemic meaning often assumed by a variety of methodological approaches to digital game criticism. Intriguingly, the perspective ontologically alludes to assemblage theory (DeLanda, 2006) and scholarship using other Deleuzian approaches; however, instead of understanding gameplay as a complex process that holds "multiple, often contested, meanings" (Taylor, 2009. p. 33), discordance is described as a fundamental problem that needs to be overcome.

While online writing has become increasingly political, a significant amount of media criticism also predates coordinated attempts to define game studies as a field of research.

According to Consalvo (2013), early content study was dominated by the analysis of race and gender, with feminist research focusing primarily on the visual depiction of women (p. 408).

Unfortunately, instead of pushing critical methodologies forward, extensive discussion of *Tomb Raider*'s (Core Design, 1996) Lara Croft²¹ raised a series of unanswered questions regarding the application of existing feminist frameworks to a new form of creative expression (Kennedy, 2002). Due to this problem, academic critics abandoned representational analysis, largely in response to Aarseth's (2001, 2004) rejection of scholarship that analyzes games using methodologies developed in unrelated disciplines.

In response to the limitations of the existing literature, game studies developed a plethora of formal approaches, many which loosely incorporate or completely ignore previous scholarship. Both politically influential and apolitically ambivalent claims have been made

²⁰ See chapters 4 and 5 for discussions of the influential "EA Spouse" and "Rockstar Spouse" posts.

²¹ See Schleiner (2001); Kennedy (2002); and Mikula (2003) for some of the most widely cited discussions of Lara Croft.

among the many theories now describing the particular properties of digital game expression. In terms of influence, Frasca (2001, 2004) and Bogost (2007) extend Aarseth's (1997) cybertextual work into the domain of computer science, provocatively situating simulations within an ideological context. In terms of apolitical claims, Eskelinen (2004) insists that avatars lack representational meaning, having "only use and exchange values to them" (p. 37). Similarly, Kirkpatrick (2011) rejects the analysis of cultural politics on the grounds of profound ambivalence (p. 10).

Displaying comparable thinking, multiple theorists responded to the Lara Croft debate in ways that distinguish game studies from previous scholarship. Directly addressing the example, Newman (2002) has argued that "the degree to which the player considers themselves to 'be' the character – is not contingent upon representation" (para. 24). Similarly, Aarseth (2004) insists that Lara's body is "irrelevant to me as a player, because a different-looking body would not make me play differently" (p. 48). Influenced by these arguments, subsequent criticism abandoned the analysis of race and gender to investigate a wide variety of topics. Some have sought to understand digital games in conversation with other media;²² others have explored time and space;²³ and a plethora of scholars developed methodologies specifically geared towards improving game design.

While criticism still needs to account for visual information, a rejection of representation is not uncommon, prompting many to criticize the reductionism inherent in the aforementioned arguments. Countering claims of irrelevancy, Keogh (2014) calls attention to the ludic importance of pictorial information, noting how "Lara Croft's representation as a human being

²² See Wolf (2001) and Perron (2009).

²³ See Juul (2011) and Aarseth (2007).

suggests that the player should jump over the bottomless pit rather than fall into or float over it" (p. 7). Correspondingly, Soderman (2009) notes a pattern of eerie similarities running thorough anxieties "over the rise of casual games" (para. 1), and a ludology discourse that theoretically downplays the role of narrative and visual elements.

Despite the perceived split between ludic and representational approaches to digital game criticism, existing scholarship does not constitute a simple dichotomy. Unsurprisingly, formal theory has had considerable influence on more politically oriented forms of criticism rooted in media ecology methodologies. According to Fuller (2005), media ecologists study "dynamic systems in which any one part is always multiply connected, acting by virtue of those connections always variable, such that it can be regarded as a pattern rather than simply as an object" (p. 4). Traditionally, this approach is interested in the specific features of a particular form of expression; however, distinctiveness is not necessarily viewed in a favorable light. Following Innis's (1950, 1951) communication work, the specific attributes of digital games are conceptualized as a series of biases leading to monopolies of knowledge and power.

Following this approach, Crogan (2011) links cybertextual theory (Aarseth, 1997) to Virilio's (2006) technocultural²⁴ philosophy in order to critically conceptualize the political effect of digital gameplay, Specifically, he describes simulations as technologically mediated experiences in which players are concerned primarily with predicting "the eventualities of the event space" (p. 78). Like a missile system forecasting the trajectory of a nuclear strike, or a program designed to predict the weather, a player succeeds by learning to predict the behavior of an algorithm instead of critically engaging with the design of the system. Consequently, digital

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²⁴ Technoculture commonly refers to an interest in relationships between technology, politics, and culture (Penley & Ross, 1991).

gameplay involves an inherent communicative bias, with simulations exerting a subtle political influence linked to the preemptive regulation of the future's emergence (p. xx).

Dyer-Witheford and de Peuter (2009) apply Innis's political economic methodology to an analysis of the gaming industry in a related manner, specifically by integrating Hardt and Negri's (2000, 2005) work on empire and multitude. Using a more spatially oriented approach, Wark (2007) defines game-space as a bleak atopic refuge, where a "level playing field" (para. 21) delivers on the meritocratic myths that neoliberalism fails to keep.

As in previous scholarship, media ecology perspectives tend to conceptualize the medium's political capacity using representation/simulation preferences. Favouring simulation, Crogan (2011) stresses the ludic destabilization of the modern narrative form, emphasizing the transition "from a hermeneutic-based experience" to the performance of interactive mastery (Crogan, 2011, p. xxiii). In a similar fashion, Wark (2007) describes the post-ludic remnants of unsophisticated narratives, which merely recount the "steps by which someone beat someone else" (para. 7). Dyer-Witheford and de Peuter (2009) prefer representation, pointing to AAA narratives that limit political subversion by reducing systemically created problems to simple tales of "bad-apple delinquency" (p. 194).

Expanding on the aforementioned approaches, this dissertation eschews the theoretical privileging of representative or simulation based meaning, as both viewpoints favor internal cohesion at the expense of external interactive processes. Consequently, cohesions and dissonances are frequently downplayed by the preference for a particular component that often functions as the ideological driving force behind a given reading. Luckily, the video game blogosphere has been developing a new critical approach devoted to the contradictions that emerge during play. In order to build on this point, it is necessary to turn to Hawking's (2007)

influential discussion of ludonarrative dissonance, a critical term that continues to provoke extensive debate.

The Problem of What the Game is about

On October 7, 2007, Clint Hawking posted an influential critique of *BioShock* (Irrational Games, 2007) that was carefully distinguished from a traditional game review. From an entertainment standpoint, he praised the game for asking "important and compelling questions" (Hawking, 2007, para. 3); however, from a philosophical standpoint, he derided the game for providing confused answers that were "frustrating, deceptive, and unsatisfactory" (Hawking, 2007, para. 3). At issue was the disjuncture between the game's narrative premise and the mechanics experienced during play. According to Hawking (2007), *BioShock* suffered "from a powerful dissonance between what it is about as a game, and what it is about as a story" (para. 4).

Integral to the discrepancy was a series of interactive moral options that allowed players to choose between altruism and objectivism,²⁵ as well as a successive string of indifferent bonuses that provide similar rewards. Further compounding the problem was the narrative setting of an objectivist dystopia and the protagonist's decision to help a stranger escape. Choosing to take the selfish, objectivist route, Hawking identified three main problems with *BioShock*'s narrative contract:

First, this contract is not in line with the values underlying Randian rational self-interest; 'helping someone else' is presented as the right thing to do by the story, yet the opposite proposition appears to be true under the mechanics.

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²⁵ Objectivism is a philosophy dedicated to the pursuit of self-interest.

Second, Atlas²⁶ is openly opposed to Ryan,²⁷ yet again, as mentioned above, I am philosophically aligned with Ryan by my acceptance of the mechanics. Why do I want to stop Ryan, or kill him, or listen to Atlas at all? Ryan's philosophy is in fact the guiding principle of the mechanics that I am experiencing through play.

Thirdly, I don't have a choice with regards to the proposition of the contract. I am constrained by the design of the game to help Atlas, even if I am opposed to the principle of helping someone else. In order to go forward in the game, I must do as Atlas says because the game does not offer me the freedom to choose sides in the conflict between Ryan and Atlas.

This is a serious problem. In the game's mechanics I am offered the freedom to choose to adopt an Objectivist approach, but I also have the freedom to reject that approach and to rescue the little sisters [...]. Yet in the game's fiction on the other hand, I do not have that freedom to choose between helping Atlas or not. (para. 12 – para. 16)

When considering the above critique, it is important to note that Hawking's main issue is with BioShock's lack of narrative options. Instead of criticizing the mechanics for not matching the story, he attacks the story for not matching the mechanics. By describing a ludonarrative dissonance, Hawking goes beyond a remediation (Bolter and Grusin, 1999) perspective, which attributes the meaning created by commercial games to elements borrowed from television and film (p. 91). Additionally, his analysis avoids the pitfalls of completely disregarding representation by assuming that commercial games are suffering from a bad case of "cinema envy" (Zimmerman, 2004, p. 157). For Hawking, representation and simulation are equally

²⁶ Atlas initially appears as a young father trying to escape Rapture with his family.

²⁷ Andrew Ryan is the founder of Rapture and a staunch supporter of objectivism.

political and deserving of attention, particularly in terms of logical correspondences and illogical contradictions.

Ludonarrative dissonance received some attention within game studies, but it was bloggers who really latched onto the term, prompting Keogh (2012) to declare a new wave of post-*BioShock* criticism. Its use became particularly pervasive when *BioShock Infinite* (Irrational Games, 2013) was released and multiple critics (Alexander, 2013, April 11; Turner, 2013, April 16; Chuluunbaatar, 2013, April 14; Brainy Gamer, 2013, April 9; Cook, 2013) drew inspiration from Hawking's post. As commercial reviews praised the game's storytelling, the blogosphere erupted in harsher tones, criticizing the relationship between a supposedly progressive narrative and strikingly conservative first-person shooter mechanics. According to Alexander (2013, April 11), *Infinite* "was supposed to be a game about the nuance of fundamentalism, exceptionalism, Occupy, and some other slurry ideals I can't hear over the noise of my own bullet addled grunting" (para. 18). Likewise, Turner (2013, April 16) insists that the game's mechanics work to completely undermine the story, and Brainy Gamer (2013, April 9) claims that the problem is not the shooting, but that "*BioShock Infinite* has nothing to say about the shooting" (para. 1).

Interestingly enough, criticism of dissonance in *BioShock Infinite* echoes the communicative tensions explored by Blow (2008) in his lectures on commercial game design. Tackling the same problem, he articulates the disjuncture between story meaning and dynamical meaning as a fundamental conflict from which AAA commercial games are suffering. Similar to Bogost's (2007) theory of procedural rhetoric, dynamical meaning is conceptualized as being more "vague and fuzzy" (17:50-17:53), because commercial game systems communicate something to the player whether designers "intended to or not" (16:53-17:11). According to

Blow (2008), specifically defined rules do not necessarily reflect an intended rhetoric because such system behavior "can just exist" (17:40-18:10).

Following this line of thinking, Blow (2008) describes the conflict between story and dynamical meaning as the primary hindrance preventing games from achieving artistic status. Expressing similar sentiments, multiple critics describe ludonarrative dissonance as the primary design problem plaguing AAA games. For Makedonski (2012, September 9) the concept can be understood as a roadblock to realism that works primarily by undermining "every gaming experience" (para. 2). Sawrey (2013, April 26) offers a more constructive perspective that argues for equal emphasis on story and mechanics (para. 13), which is a balance Blow presumably attempted to achieve when designing *Braid* (2008).²⁸

While Blow (2008) and Hawking (2007) received considerable positive attention, their arguments were also met with resistance from professional critics, developers, and fans. Chipman (2013, September 8) addressees ludonarrative dissonance on his YouTube channel, admitting that although the term "makes a lot of sense," it poses the potential problem of consistently bending gameplay to ensure narrative consistency in a way that ends up "undermining player agency" (7:30 - 8:11). Taking a more combative tone, Sterling (2013, September 23) describes ludonarrative dissonance as a form of "pseudo-intellectual wobbling" used by the gaming intelligentsia to make the point that "violence and storytelling have become mutually exclusive" (2:48-2:57).

In a comparably dismissive manner, Blow disregarded a plethora of fan interpretations posted in response to *Braid*. Upon the game's release, its structure was closely analyzed by a variety of enthusiasts writing on blogs and forums. Providing a popular feminist reading, Holly

²⁸ See http://www.critical-distance.com/2009/04/22/braid/ for a guide to the online discussion of *Braid*.

(2008, August 11) described the protagonist as a "stalker ex-boyfriend" obsessed with a princess he thinks he can rescue (para. 14). In a manner somewhat unprecedented for a game designer, Blow referred to Holly's analysis as an example of "an author following a feminist agenda" (as cited in Dahlen, 2008, August 27, para. 24). At issue was a perceived critical misunderstanding of *Braid*'s "fundamental structure" (para. 19), primarily due to the privileging of representation at the expense of systemic meaning.²⁹ According to Blow, "there is something more meaningful about creating a system because the universe is a system" (para. 68).

Strangely enough, the above statement is not dissimilar to Chipman's rejection of ludonarrative dissonance over fear of mechanics being altered to make games more like "movies" (11:44-11:58). Echoing a similar sentiment, Yang (2013) goes even further to argue that ludonarrative dissonance does not actually exist, because "becoming an experienced gamer means learning to readily resolve a game's dissonance and ignore it" (para. 6).

A central problem with this argument is the critical privileging of a hardcore "gamer" perspective. According to Shaw (2012), gamer identification is closely linked to a history of marketing practices that exclusively target affluent young men.³⁰ As a result, "those who do not have access to the necessary resources cannot claim gamer status" (Shaw, 2012, p. 10). From this perspective, Yang's rejection marginalizes alternative perspectives and unwittingly privileges a marketing niche. Conversely, ludonarrative dissonance is easily recognized by less experienced players, who will often call attention to the fact "that you just took food out of a trashcan and

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²⁹ According to Blow, "there is something more meaningful about creating a system because the universe is a system" (as cited in Dahlen, 2008, August 27, para. 68).

³⁰ Kline, Dyer-Witheford, and de Peuter (2003) connect gamer identity to a culture of militarized masculinity and Shaw links identification to high levels of consumption tied to industry marketing.

didn't get ill, or fell from a height of 10m and didn't so much as feel it" (Caveshen, para. 11-para. 12).

Harmony and Cohesion

While Yang relies on various theories to argue that ludonarrative dissonance does not exist, Blow (2008) sees disharmonious experiences³¹ that explain why games of the AAA variety fail to resonate with a broader audience (6:15 -7:03). Following this critique, a recent trend in formal criticism focuses on special gameplay moments in which simulation and representation are no longer misaligned. In an in-depth discussion of *Shadow of the Colossus* (Sony, 2005), Fortugno (2009) describes the successful integration of a wide variety of elements that combine to create a "genuine experience of tragedy" (p. 178). Exploring *Dragon Age: Origins* (BioWare 2010), Zook (2012) identifies a similar internal consistency arising from the constant metaphoric use of blood. Similarly, Fernandez (2009) describes how *Monkey Island* (Lucas Arts, 1990) achieves an impressive level of cohesion by interweaving story and puzzle elements (p. 51).

Inside game studies, the push for tighter story-design integration is spearheaded by *Well Played*, a journal that publishes close examinations of internally cohesive games (Well Played, 2011, para. 3). Among bloggers, the discussion of ludonarrative dissonance has also expanded into essays on games that presumably achieve cohesion and harmony. According to Dawn (2014, January 6), "mechanics which do their job and help draw the player in are referred to as having achieved 'ludonarrative cohesion'" (para. 4), while Abraham (2013, August 17) describes a

³¹ For Blow (2008), smaller, art-based projects are less conflicted because they often eschew narrative meaning in favor of communicating through "behavioral and perceptual primitives" (7:47-8:22).

particular experience from *Gone Home* (Fullbright, 2013) as an example of ludonarrative harmony (para. 3).

Instead of privileging story at the expense of design, readings emphasizing harmony cast simulation and representation as interacting components with the capacity to coincide and contradict. Despite lacking a defined ontology and critical vocabulary, this approach coincides with an assemblage preference for experimental realisms seeking to understand games not "according to their innate, morphological essences but as expressions of certain movements, sensations, and interactions with their environments" (Parikka, 2010). Contrary to claims of nonexistence, ludonarrative dissonance is subsequently treated as a real emergent phenomenon, contingent upon recurring narrative interpretations and the persistent emergence of play.

While the above readings raise interesting questions, a focus on harmony can only speak to borderline gameplay moments that exist predominantly as exceptions to recurring patterns of internal inconsistency. When ludonarrative dissonance is described as a formal flaw, greater cohesion implies a better playing experience despite the political implications remaining unclear. Luckily, ludonarrative dissonance can also be defined as a utopian methodological phenomenon (Levitas, 2013), inherently linked to the shifting technological contradictions (Harvey, 2014) that characterize 21st century capitalism. This approach conceptualizes narrative/design tensions in relation to ongoing sociotechnical struggles, springing from the desire for alternative political systems.

In Chapters 4 and 5 ludonarrative dissonance emerges from logical discrepancies between the rules that dictate each game's scoring system and the avatars depicted in each game's narrative. Such tensions cannot be separated from broader politics because they contribute to the emergence of affective states of grace, where debt states are noticeably absent.

Conversely, *BioShock* and *Red Dead Redemption* are also open to more formally oriented mechanic/narrative forms of dissonance, including forms that do not necessarily resist neoliberalism. In *Read Dead Redemption*'s game mechanics, players can choose to shoot a wide assortment of non-player characters (NPC's), and the vast majority will die; however, if the character is needed to advance a future plot point, the bullet will have no effect. *BioShock* operates in a similar manner, as NPC's that are integral to the game's plot can be fired at when encountered, but they will not die like the other enemies that populate each level. Such discrepancies are dissonant in a manner that is neither political, nor necessarily a design flaw, as a game may freeze, crash, or glitch if an important NPC is killed accidently.

In the cases mentioned above, ludic economies resist neoliberalism, but do not necessarily critique it like *Minecraft* can,³² specifically in terms of affordances that permit the creation of new computational objects and new aesthetic experiences. This dissertation, as a result, avoids celebrating ludonarrative cohesion to question whether the union of representation and simulation is always politically desirable. My goal is to complicate the dichotomy of an apolitically free or ideologically naturalized neoliberal playing subject by calling attention to the disjunctions that occur when players are not smoothly integrated into game-playing experiences. Integral to this approach is the utopian methodological (Levitas, 2013) conception of moments when narrative and play refuse to make sense, moments when games symbolize neoliberal politics while simultaneously simulating their end.

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³² Such distinctions are important because resistance and critique overlap, but are not necessarily the same thing. Quick-scoping, in the case of *Call of Duty*, can be understood as resisting the franchise's focus on military realism, albeit in manner that does not contradict the neoliberal politics implicit in the game's design. Using this example, Chapter 6 demonstrates how political cohesion is not necessarily a good thing, particularly when it can be linked to conflicts between developers and fans.

By using assemblage theory for political critique, the case studies examined here will complicate the presumption of coherent political meaning implicit in media ecology scholarship, while simultaneously questioning whether dissonance between representation and simulation is necessarily bad. Far from being politically monolithic, multiple aspects of popular digital game franchises are influenced by neoliberalism; however, there are also resistant components that provide opportunities for critique. From this perspective, digital games are profoundly influenced by the contradictions that characterize contemporary capitalism, particularly in relation to production of commodities, the representation of identities, and the design of simulated systems.

In the cases examined below, ludonarrative dissonance is clearly far more complex than a formal flaw that needs to be overcome, as the emergence of play is heterogeneously contingent on the utopian desire for alternative systems. In order to develop these points, it necessary to turn to the transitioning state of digital game production created by the economic fallout from the global credit crisis and the contrasting forms of playful resistance that can emerge from multiple ludic components.

PART II DECODING THE POLITICS OF DIGITAL GAMES

CHAPTER 4

From Cynicism to Grace:

Control and Freedom in the BioShock Franchise

While part I of this dissertation developed an assemblage framework for linking the contradictions that characterize contemporary capitalism to ludonarrative dissonance (Chapter 3) and the persistence of neoliberalism (Chapter 2), part II examines how these tensions contribute to conflicts—in both material and digital spaces—by analyzing the production, representation, and simulation of four popular gaming franchises. As previously discussed, Neoliberalism, understood as a two-faced assemblage, is propped up by anti-utopian sentiments, including sentiments that have the capacity to infiltrate a game. Thus, it becomes necessary to distinguish the parts of popular gaming franchises that reinforce the cynicism implicit in neoliberalism from the parts that provide new opportunities for resistance and critique. To begin this process, the following chapter connects capitalist contradictions—linked to the autonomous development of digital technologies (Harvey, 2014)—to the shifting state of AAA game development and the corresponding paradoxes that permeate the *BioShock* franchise.

There is no Alternative

Shortly after winning a third majority government in 1987, Margaret Thatcher was interviewed by the magazine *Women's Own*. Like most fluff pieces, the conversation begins with softball questions about the future, including Thatcher's potential plans for celebrating the forthcoming millennium. The discussion eventually shifts to the disintegration of family values, prompting Douglas Keay to equate the expansion of free enterprise with the rise of greed. In response, Thatcher adopts a resolutely dismissive tone, insisting that there is nothing wrong with wanting more money. Pushing the argument further, she proceeds to blame the perceived collapse in morality on the decline of individual responsibility:

I think we have gone through a period when too many children and people have been given to understand "I have a problem, it is the Government's job to cope with it!" or "I have a problem, I will go and get a grant to cope with it!" "I am homeless, the Government must house me!" and so they are casting their problems on society and who is society? There is no such thing! There are individual men and women and there are families. (para. 106)

Integral to this perspective is a political attempt to determine what counts as being real, particularly in terms of viable political economic systems. Sticking to this mantra, Thatcher staunchly rejected opposition to neoliberalism, repeatedly insisting that "there is no alternative."

According to Jameson (2005) and Žižek (2009), the cynicism implicit in Thatcher's reasoning has become culturally pervasive, resulting in the widespread rejection of utopian modes of thought. For Fisher (2009), proponents of neoliberalism have played an integral role in

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³³ See McLean (2001) for a rhetoric analysis of Thatcher's use of the slogan.

this process, emphasizing that "whether we like it or not, the world is governed by neoliberal ideas, and that won't change" (p. 90). Consequently, the anti-utopianism implicit in neoliberalism is directly linked to capitalist realism, which is understood as a business ontology designed to protect from the seductions of fascism (Fisher, 2009).

According to Fisher (2009), capitalist realism spreads "the widespread sense that not only is capitalism the only viable political and economic system, but also that it is now impossible even to imagine a coherent alternative" (p. 2). Neoliberalism, in this sense, persists not because elites necessarily believe in it so much as that they believe in a lack of viable options. Due to this problem, utopian thinking is experiencing a revival among both activists and theorists seeking to stoke the desire for systemic change.

In keeping with this sentiment, an assemblage methodology employs a broader experimental realism that recognizes the potential of emergent social relations (Chapter 1) at the same time as it questions whether utopian production has come to an end. To expand on this point, it is necessary to examine the shifting state of AAA game production exemplified by *BioShock's* (2007-2013) contradictory relationship with neoliberal thought (Jameson, 2005; Žižek, 2009; Fisher, 2009; Lazzarato, 2012, 2015; Fisher & Gilbert, 2013). On a representational level, narrative critiques of objectivism (*BioShock*, 2007), collectivism (*BioShock* 2, 2010), and American exceptionalism (*BioShock Infinite*, 2013) are all tinted by an anti-utopian lens; however, the franchise still corresponds with a utopian methodology (Levitas, 2013) by simulating affective states of grace, otherwise known as fulfilled states in which one no longer experiences alienation, which are explicitly present in game systems marked by the absence of debt.



Figure 2. BioShock concept art depicting the city of Rapture.

As stated previously, *BioShock* is one of the most polarizing critically acclaimed titles produced to date, simultaneously heralded as an illustration of the medium's creative potential (Sicart, 2009) and derided as an example of its expressive limitations (Blow, 2008). Director Ken Levine has been celebrated as a commercial auteur who elevated the artistic impact of games (Parker, 2014, p. 92). Additionally, the franchise has won countless game of the year awards and has been cited as a watershed moment for critics (Keogh, 2012). Created by Irrational Games, *BioShock* was "conceived as convergent content from the start—specifically, as the franchise that would hybridize the FPS and RPG³⁴ genres, and span multiple games as well as a feature-length film" (Aldred & Greenspan, p. 485). Published by 2K games, the title was also heavily marketed toward a "hardcore" FPS audience through an extensive advertising campaign.

³⁴ Role-playing game.

³⁵ At the time of writing, plans for a *BioShock* movie are in limbo, with a previous production cancelled and rumors of a forthcoming Sony production persisting.

As the big budget spiritual successor to the critically acclaimed, commercially underperforming *System Shock 2* (Irrational Games, 1999), *BioShock*'s production was far from smooth. According to level designer Jean Paul LeBreton:

Shortly after the game's strong showing at E3 2006, Ken emerged from discussions with 2K marketing and announced to the team that we would be marketing the game as a shooter - but not to worry, we were still making the same smart FPS/RPG hybrid, we might just make a few small design adjustments here and there to make it accessible to the Halo crowd. (as cited in Parkin, April 17, 2014, para. 30).

This strategy led to an internal battle between lead designer Paul Hellquist and director Ken Levine, in addition to a year-long institution of mandatory overtime (Parkin, April 17, 2014, para. 41) that plunged staff into a cycle of stress.

Unlike many productions, the grueling development schedule paid off, resulting in a critical and financial success. According to *The New York Times*, *BioShock* stands among the best games ever made, with a "provocative, morality-based story line, sumptuous art direction and superb voice acting" (Schiesel, 2007, September 8, para. 4). Eurogamer was equally enthusiastic, praising the most "elaborate and artistic game world ever conceived" (Reed, 2007, August 16, para. 3). Correspondingly, Metacritic declared universal acclaim, giving the game a score of 96 out of a possible 100 ("Metascore," n.d., para. 1).

In terms of gameplay, *BioShock* appealed mainly to the first-person shooter audience, as its design is not as groundbreaking as some claim. Like most shooters, play is devoted to killing anything that moves using a variety of short and long-range weapons. In terms of game mechanics, the primary wrinkle is the addition of special element-based attacks (plasmids), such as the ability to electrocute an enemy. Despite their uniqueness, plasmids are also somewhat

cumbersome in that they require players to constantly toggle back and forth between standard weapons and special attacks.

Although *BioShock*'s gameplay is not inherently innovative, the franchise's audiovisual style sets it apart from other first person shooters (Parker, 2014, p. 112). According to Aldred and Greenspan (2011), the title's "immense popularity has [...] been attributed to the environment of Rapture itself, the grandeur and complexity of which tends to overshadow the game's familiar mechanics" (p. 483). Set in the crumbling underwater city of Rapture, *BioShock* I and II incorporate a modernist art deco style. ³⁶ Existing in the same narrative universe, *BioShock Infinite* opts for a more classic Americana look, ³⁷ suspending the city of Columbia in the sky.



Figure 2. The city of Columbia, as depicted in Bioshock Infinite's concept art.

³⁶ Art deco is an influential design style that combines traditional aesthetics with imagery associated with industrial revolution and the rise of the machine age.

³⁷ Americana is a specific design style intended to invoke feelings of patriotism and nostalgia by incorporating famous elements from American history, such as paintings, objects, and statues.

Recession Proof Paradise?

According to Williams (2003), digital games are historically represented through an ambivalent pattern of mainstream media coverage, with the medium passing "through marked phases of vilification followed by partial redemption" (Williams, 2003, p. 543). In keeping with this pattern, McKernan (2013) identifies a recent trend of utopian framings, highlighting in particular the medium's "transcendental value" (p. 321). At the beginning of the global credit crisis, the business press followed this current, with many sources predicting further industry growth.³⁸ Some saw the future in reflections of the past, recalling Hollywood's success during the Great Depression (Lewis, 2009, February 18, para. 9). Others made exceedingly optimistic pronouncements and declared gaming recession proof.³⁹ However, infinite growth proved to be unsustainable, with profits beginning to decline in 2011.⁴⁰



Figure 3. US coverage of the gaming industry in the midst of the global economic downturn.

³⁸ See Snider, 2009, January 18; Lewis, 2009, February 18; and Hadekel, 2009, March 4.

³⁹ See Frazier (para. 3) as cited in Snider (2008, January 18).

⁴⁰ See Entertainment Software Association (2015).

Unbeknownst to these commentators, the AAA industry was encountering trouble, for the transition to a new generation of platforms was not going well. Faster computers created demand for larger, more expensive productions, but retail prices plateaued at the previous hardware generation's range. According to Whitson (2012), AAA development was becoming an "unsustainable paradigm," with shrinking profit margins choking innovative design. As 2012 came to an end, many mid-tier studios either closed or restructured (Graft, 2012), resulting in major layoffs.

An overview of Entertainment Software Association (2015) sales statistics shows a steady decline in retail video game sales. ⁴² New income sources ⁴³ maintained a continued pattern of overall growth during 2009 and 2010, ⁴⁴ but revenues began dipping in 2011 before rebounding slightly and remaining stagnant through 2014 (p. 12). Multi-platform causal games are pioneering new free-to-play models, although profits are difficult to reap, except in the cases of major hits that can be licensed into additional merchandise. Zynga, a popular free-to-play game company, recently cut 364 employees (Makuch, May 6, 2015) following a brief period of questionable growth. ⁴⁵

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⁴¹ At the time, new titles were listed in a 60-70 dollar price range. Currently, they are listed in a 70-80 dollar range.

⁴² In 2008, retail sales peaked with 298.6 million units sold, compared to 278.9 million units sold the following year.

⁴³ A comparative analysis of video game sales is complicated by new forms of revenue stemming from digital downloads, subscription fees, and in-game purchases.

⁴⁴ Online sales have been steadily increasing, although gains for 2014 were reportedly offset by retail losses.

⁴⁵ Zynga is a popular and somewhat notorious provider of social media games known for creating the immensely popular *Farmville* (2009). Since going public in 2011, the company has experienced a steady stream of losses leading to a pending lawsuit alleging the defrauding of shareholders (Stempel, 2015, March 25).

Outside the attention surrounding *Grand Theft Auto*'s latest release, most new games fail to garner mainstream media interest. 46 The coverage of record-breaking launches also obscures the poor working conditions that rank and file developers routinely face. In 2004, an anonymous blog post written by ea_spouse called attention to the stressful overtime scheduling consistently implemented by Electronic Arts. 47 Following up, the International Game Developers Association surveyed its membership and drafted a more comprehensive quality of life white paper.

According to the IGDA (2004), the digital game industry is plagued with stressful working conditions, contributing to the exodus of burnt-out workers (p. 21). A follow-up survey conducted in 2009 insisted that the problem of poor work/life balance still persists (p. 8). As O'Donnell (2014) notes,

the words of ea_spouse caused a ripple in the videogame industry, one that is still being felt, though in different ways. For a brief moment, it seemed revolutionary, though seven years later, new QOL⁴⁸ controversies emerge, demonstrating that very little has actually changed. White papers were written and special interest groups formed, and awareness was certainly raised, but death-march crunches still occur and many developers accept them blindly. (p. 20)

The following discussions of *Red Dead Redemption* (Chapter 5) and *Call off Duty* (Chapter 6) reaffirm this conclusion, showing that poor working conditions have not gone away. Conversely, mainstream media coverage continues to tout revenue growth, as if the industry were suspended in the sky. Intriguingly, the *BioShock* series relies on a similar discordance—working in the

⁴⁶ Popular blogs, like Kotaku (http://kotaku.com/), currently fill the void by reporting on industry news that mainstream press agencies continue to ignore.

⁴⁷ See http://ea-spouse.livejournal.com/.

⁴⁸ Quality of life.

opposite way—with depictions of collapsing civilizations departing from ludic systems that simulate more equitable economic relations. On a representational level, the franchise uniformly deplores utopian thinking while carefully avoiding an explicitly partisan intent. Conversely, political cynicism cannot extinguish the longing for a world without debt, for affective states of grace emerge from ludic economies during gameplay.

Dystopian Play

After the 1990s economic progress—coupled with the collapse of soviet communism—led Fukuyama (2006) to declare the end of history, successive incidents contributed to the death of politically optimistic economic thinking. For Žižek (2009),

Fukuyama's utopia of the 1990s had to die twice, since the collapse of the liberal-democratic political utopia on 9/11 did not affect the economic utopia of global market capitalism; if the 2008 financial meltdown has a historic meaning then, it is as a sign of the end of the economic face of Fukuyama's dream. (p. 5)

Similarly, Jameson (2005) cites the rise of Thatcherism, now predominantly described as neoliberalism, as a key factor contributing to anti-utopian cynicism:

A kind of break can then be posited for the emergence of Thatcherism and the crisis of socialism, the emergence of a world-wide late capitalism from its modernist integument, for which it bursts in the form of full-blown globalization and postmodernity. For whatever reason, after this moment of convulsive transition, traditional utopian production seems to have come to a halt. (p. 216)

Such collective attitudes can be attributed to the cultural effect of a two-faced neoliberal assemblage, in which policy and discourse rarely align. Representationally, the "new ideal of the

common good rests on market oriented values, such as self-reliance, efficiency, and competition" (Brodie, 1996, p. 131). Systemically, bailing out banks becomes economically necessary while citizens are blamed for unaffordable mortgages. Meanwhile, proponents of the neoliberal way vociferously condemn "collectivism," despite corporate collectivism becoming a common staple of international monetary policy.

For some, the financial downturn should have signaled an end to neoliberal thinking;⁴⁹ nevertheless, the concept still dominates. According to Crouch (2011), neoliberalism's strange and seemingly immortal nature relies on a profound discordance, for "actually existing, as opposed to ideologically pure, neoliberalism is nothing like as devoted to free markets as is claimed" (p. viii). Following this logic, post-apocalyptic metaphors are increasingly applied to the stubborn perseverance of neoliberal thought. Quiggin (2010) speaks of "zombie ideas that brought the global financial system to the brink of meltdown" (p. 2), and Peck (2010) describes neoliberalism as an uncanny, lumbering undead:

The brain has apparently long ceased functioning, but the limbs are still moving, and many of the defensive reflexives seem to be working too. The living dead of the free-market revolution continue to walk the earth, though with each resurrection their decidedly uncoordinated gait becomes even more erratic. (p. 109).

Representationally, the recent dystopian trend in popular entertainment coincides with the above metaphor. According to Levitas (2013),

Public discourse and political culture are profoundly anti-utopian, portraying utopia as an impossible quest for perfection whose political consequences are almost necessarily totalitarian. This climate is predicated on the Cold War and the later capitalist

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⁴⁹ See Klein (2008).

triumphalism that accompanied the fall of communist regimes after 1989. It contains two implicit equations: 'utopia equals totalitarianism equals communism equals Marxism equals socialism', and 'communism equals totalitarianism equals fascism.' (p. 7)

Similarly, *BioShock* (2K Boston & 2K Australia, 2008) finds little revolutionary potential in Rapture's working class, for according to director Ken Levine the game is more about the dangers of fanaticism than politics in general (as cited in Bray, 2007, August 27, p. E5).

Expanding on this sentiment, *BioShock 2* (2K Marin & 2K Australia, 2010) explicitly links the dangers implicit in utopian thinking to communist modes of thought, while *BioShock Infinite* (Irrational Games, 2013) is comparably skeptical of revolutionary possibilities.

Utopian and dystopian themes have received some attention within the growing literature on *BioShock* (2007), ⁵⁰ although most writers use both terms loosely without providing definitions. Schmeink (2009) and Packer (2010) discuss *BioShock* within a utopian context, emphasizing the coming together of narrative and mechanics in critically persuasive ways. Schmeink (2009) recognizes utopian moments in the agency provided by interactive fiction, where alternative endings renegotiate the possibility of comparatively better alternative futures (para. 23). Packer (2010) is more critically dystopian, lauding a powerful critique of objectivist philosophy represented and simulated through narrative and mechanics. Schulzke (2014) goes even further, defining the critical potential of virtual dystopias as relying on the cohesion of narrative and play. In contrast, Aldred and Greenspan (2011) identify a more complex dialectic that simultaneously celebrates and interrogates technological progress (p. 481). In a similar manner, the next section will draw on Levitas's (2013) utopian method to show how *BioShock*

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⁵⁰ For other notable perspectives on these themes, see Tayinor (2009), Sicart (2009) and Jackson (2014).

often represents anti-utopian sentiments while simultaneously simulating affective states of grace.

Welcome to Rapture

BioShock (2007) opens with players assuming the role of Jack, a plane crash survivor accidentally discovering the underwater city of Rapture. Upon descending into the municipality, Jack is welcomed by Rapture's founder and resident objectivist, the appropriately creepy Andrew Ryan:

Is a man not entitled to the sweat of his brow? "No," says the man in Washington. "It belongs to the poor." "No," says the man in the Vatican. "It belongs to God." "No," says the man in Moscow. "It belongs to everyone." I rejected those answers. Instead, I chose something different. I chose the impossible. I chose Rapture. A city where the artists would not fear the censor; where the scientist would not be bound by petty morality; where the great would not be constrained by the small. And with the sweat of your brow, rapture can become your city as well. (Welcome to Rapture)



Figure 4. A still from the in-game promotional trailer that welcomes players to Rapture.

Ryan's introduction is a clear reference to objectivism, a philosophy famously articulated by Ayn Rand (1959):

man's highest moral purpose is the achievement of his own happiness; and that he must not force other people nor accept their right to force him; that each man must live as an end in himself and follow his own rational self-interest. (as cited in Wallace, 1959)

Objectivist and neoliberal thought have a lot in common, but they are far from equal as philosophies. Both emphasize rational individualism coupled with a collectivist, fascist equation; however, instead of denouncing altruism in all its forms, neoliberals promote market altruism as the most effective form of government. From this perspective, the franchise representationally

negotiates a careful criticism of objectivist philosophical thinking while still maintaining the

anti-utopian undertones that colour neoliberal thought.

On a narrative level, Rapture is literally and metaphorically dripping in criticism of objectivism, as plastic surgeons, artists, and businessmen repeatedly disregard basic human rights. The city, in the midst of its collapse, is overrun by genetically altered humans seeking a powerful body-altering drug referred to as ADAM. Due to Andrew Ryan's free market dogmatism, ADAM was neither banned nor regulated, linking widespread addiction to the Rapture's moral decay. Intriguingly, players also collect ADAM to upgrade special abilities; advancement is particularly necessary to defeat the more powerful adversaries in the game. *BioShock*'s interactive narrative smartly revolves around this dynamic, providing opportunities to earn ADAM upgrades when Jack encounters Little Sisters.

Each level contains several Little Sisters protected by powerful Big Daddies. Upon defeating a big daddy, players proceed to collect ADAM by choosing to harvest or release the Little Sister. Initially, players are following the orders of Atlas, a poor father trying to escape

Rapture with his family, who urges players to harvest the girls. Doing so results in more immediate upgrades, though on a narrative level the decision will eventually lead to bad endings. Systemically, choice matters little, resulting in similar statistical advancement over the course of the game. Multiple designers have been critical of this discord; Hawking (2007, October 7), for example, insisted that players would need to lose ADAM when setting a Little Sister free if the designers were really invested in simulating altruistic states.



Figure 5. A Little Sister that players can choose to harvest or release.

ADAM addicts, otherwise known as Splicers, are *BioShock*'s primary enemies, but when Jack reaches port Neptune (Neptune's Bounty) he is brought into conflict with Rapture's working class. To gain entry into Fontaine Fisheries, Jack is asked to take a series of photos for a fisherman named Peach Wilkins. But upon completing the task, Peach reneges on the deal and orders his fellow workers to attack. *BioShock*, via such depictions, sees little potential in the revolutionary capacity of Rapture's working class. Like Splicers, the fishermen are selfish, untrustworthy, and violent, a point reinforced by the game's narrative twist.

Initially, Jack is trying to help a poor Irish father seek a better life for his family. As the narrative progresses, the father is revealed to be Frank Fontaine: a major player in the smuggling

of ADAM. Following Fontaine's directions, players are unwittingly contributing to a wellorganized political coup. Integral to this plan, is the assassination of Andrew Ryan at the hands of Rapture's disgruntled working class. According to Fontaine,

These sad saps. They come to Rapture thinking they're gonna be captains of industry, but they all forget that somebody's gotta scrub the toilets. What an angle they gave me... I hand these mugs a cot and a bowl of soup, and they give me their lives. Who needs an army when I got Fontaine's Home for the Poor? (Olympus Heights)

As the above dialogue indicates, *BioShock* is far from socialist, implicitly critiquing objectivism for providing a weak state.⁵¹ As a two-faced assemblage, neoliberalism often works in this way by equating socialism with the evils of communism, fascism, and totalitarianism. Fontaine's class uprising promises a future worse than the present, with the ADAM trade supplanting Ryan's rule.

Correspondingly, *BioShock*'s multiple endings critique objectivism without necessarily departing from neoliberal thinking. ⁵² If players elected to harvest some, or all of the Little Sisters, Jack takes control of Rapture before commandeering a nuclear warhead and escaping. Electing to release the girls results in a happier ending, in which they take on Jack as their father, escape to the surface, attend school, and get married.

Such sentiments correspond with neoliberalism's recognition of close familial bonds and implicit questioning of broader community relations. For according to Thatcher, there is no such thing as a macro society: "there are individual men and women and there are families" (as cited in Keay, 1987, para. 44).

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⁵¹ The game's narrative is quite neoconservative in this regard, with Rapture collapsing due to Andrew Ryan's soft approach to crime.

⁵² *BioShock* has three possible endings, depending on the choices that players make.



Figure 6. BioShock's happy ending, where the Little Sisters escape.

The Requirements of Utopia

BioShock 2 (2010) abandons its forerunner's objectivist preoccupation, equating utopianism with a fascist, collectivist mystique. Set in the years following Andrew Ryan's demise, players assume the role of Delta: a Big Daddy desperately searching for his lost Little Sister. As the first of his kind, Delta was initially paired with Eleanor, the daughter of Sophia Lamb, who was Adrew Ryan's primary political adversary. In her hopes to disprove objectivism by raising the perfect utopian, Lamb is revealed to be a peculiar collectivist: as a staunch Freudian, she believes that human beings are inherently individualistic, irrational, and self-seeking. Consequently, her goal of creating a true utopia necessitates genetic re-engineering (Ryan Amusements). Seeking test subjects, Lamb kidnaps little girls and transforms them into Little Sisters. Her quest for utopia is both a political and literal threat to old-fashioned family values.

In contrast to Sophia's utopianism, Delta is aided by August Sinclair, a former ally of Andrew Ryan. Acknowledging capitalism's imperfections, Sinclair rejects objectivism but still exploits Rapture's working poor:

some slob shacked up here buys a box of syringe parts from me for twice what it's worth. He assembles 'em in his rathole, and I buy back the finished product... for a dime against the dollar that I'll get from Ryan. Profit comin', profit goin'. Ol' Andy rambles on about the Great Chain... I got people shellin' out to pull it for me! (Pauper's Drop)

Expanding on this plan, the businessman hopes to escape Rapture and sell its technology to the rest of the world. Delta initially aids his quest, until Sinclair is captured by Sophia Lamb. As the plot progresses, Delta is reunited with Eleanor, who has been learning telepathically from the decisions he made (Persephone). Before this meeting, the game has several interactive scenarios in which players can choose to forgive or condemn.⁵³ If a player grants forgiveness by refusing to kill those who wronged Delta, Eleanor will have a compassionate, rebellious spirit. However, if one seeks revenge on behalf of the Big Daddy, Eleanor will be cynical, selfish, and depressed.

In an effort to escape to the surface, Delta and Eleanor encounter Gilbert Alexander,

Sophia Lamb's initial failed attempt to create the perfect utopian. According to Alexander,

Sofia believes the perfect human altruist is 'just a formula, waiting on us to solve for X.'

Intelligence and consciousness are not the same, she argued. Awareness of self naturally becomes obsession with it. So if we could suppress my sense of self, but imbue me with cognitive capacity to serve the common welfare...we could thereby generate the first

Utopian. And then, Sofia said... at long last...Utopia would follow. (Fontaine Futuristics)

⁵³ Delta repeatedly encounters characters that have somehow wronged him in the past. During each instance players can let the offender go, or dole out a merciless punishment.

Unsurprisingly, the experiment led to Alexander's deformation, prompting Sofia to try again with her own daughter. Lamb's goal was to modify Eleanor with the DNA of Rapture's intellectual elite to create a perfectly altruistic, utopian being.⁵⁴

As the plot reaches its climax, Lamb manages to kidnap and genetically modify August Sinclair. Delta and Eleanor can still use his escape pod, but they need to defeat Sinclair and retrieve his key. After besting Sinclair, who has lost control of his physical actions, Delta accepts a surprising apology. Apparently, his former ally rented the Big Daddy to Fontaine Industries for the purpose of plasmid testing. To make amends the businessman offers his lifeboat so that Delta and Eleanor can make their escape (Inner Persephone).

In contrast to Sophia's cold collectivism, Sinclair symbolically atones for his misdeeds. Such redemption corresponds with a neoliberal logic, which maintains that individuals are morally inclined to repay for broader systemic failures. According to Lazzarato (2015), "The state, technocratic governments, and the media must therefore invest considerable energy to ensure a population's guilt for a debt into which it has never entered and, therefore, its responsibility for faults it has never committed" (p. 42). Conversely, Lamb is not afforded narrative redemption, for her attempt to engineer the perfect utopian inevitably slides into totalitarian rule.

During therapy sessions, Lamb actively recruits Rapture's depressed working class, forming a dangerous collective of Splicers. In the game's final battle, players must defeat "the family" to ensure Delta and Eleanor's escape. In doing so, Delta is given the opportunity to

⁵⁴ Conversely, neoliberal thinking views individualism as an integral component of rationalism. According to Hayek (1979), "in a society in which rational behavior confers an advantage on the individual, rational methods will progressively be developed and be spread by imitation" (p. 75).

⁵⁵ At Fontaine Industries, Delta was used to test plasmids, which are special powers that require ADAM.

become a proper father, provided that players have chosen to forgive. The game's ending treats players to three possible scenarios, depending on the choices they made. If one opts for compassion, Eleanor learns from Delta and chooses to save her mother. This good ending offers a different processual take on utopia, countering the game's cynical narrative leanings, for in the words of Eleanor, "utopia is not a place, but a people [...] and in our story Rapture is just the beginning."

As is made clear in the game, utopianism is far from a dangerous quest for impossible perfection; instead, it involves the desire for an alternative future rooted in Eleanor's newfound belief in people. Corresponding with this view, Levitas (2013) argues that utopia is best understood as a provisionally reflexive analytical method, rather than an ultimate goal: "Utopian thinking in this sense is not about devising and imposing a blueprint. Rather, it entails holistic thinking about the connections between economic, social, existential and ecological processes in an integrated way" (p. 18-19). Importantly, utopia-as-method need not be representational, with desire involving affective states of grace (p. 15), also known as periods where one is no longer punished for being unable to repay.



Figure 7. Eleanor's optimistic outlook from *BioShock* 2's happy ending.

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⁵⁶ Rapture is in the midst of a flood as Delta and Eleanor try to escape. If players opted for vengeance instead of mercy, Eleanor lets her mother drown.

"Bring us the girl and wipe away the debt"

In contrast with *BioShock* 2's uplifting ending, *Bioshock Infinite* (2013) is narratively built upon the anxieties associated with repayment. Booker Dewitt sets out on a quest to "wipe away" his debts by retrieving a young woman from a flying city. Like Rapture's roots in objectivism, Columbia was designed to symbolize American exceptionalism before eventually seceding from the United States. Correspondingly, the city resembles a confederate utopia steeped in racism, religion, and greed.



Figure 8. Concept art from BioShock Infinite.

Returning to the franchise's suspicion of utopia, Columbia is dripping in patriotic criticism. However, by drawing from the genre of virtual history writing, critiques are unsurprisingly strategic. Columbia is literally bursting with stars and stripes, but is also clearly differentiated from the United States. As the narrative unfolds, the city's founder, Zachary Comstock, plans an invasion of New York City. Consequently, Columbia's religious fanaticism is explicitly aligned with international acts of terror. As a result, the story smugly critiques American patriotism without directly criticizing America.

Infinite's narrative is also critical of racism and classism, although problematic stereotyping still occurs. Representationally, the Vox Uprising led by Daisy Fitzroy provides a good example of this tension. After finding the girl (Elizabeth), who turns out to be Comstock's daughter, Booker goes to Fink Factories to seek a means of escape (Finkton). There he encounters Columbia's black underclass toiling under awful working conditions. Seeking freedom, Daisy Fitzroy is organizing an uprising among the workers, but she needs weapons to fend off the state. In exchange for supplying the workers with arms made by Chen Lin, she promises to help Booker and Elizabeth escape.

Booker fights his way to the gunsmith's shop, only to discover upon arrival that Chen Lin is dead. Thinking quickly, Elizabeth opens a portal to another reality where the arms maker is still alive. ⁵⁷ When found, Chen speaks in broken English and is unable to understand Daisy's request. He is depicted as a clueless Asian merchant who will sell to anyone if it gets him ahead.

After the weapons have been obtained, Elizabeth sympathizes with the workers' plight, hoping Daisy will lead a revolution similar to *Les Misérables*. However, contrary to this idealism, she immediately encounters a vicious, bloody rebellion run by a recently deceased Booker in a parallel reality.⁵⁸ As the workers fight through Columbia, Daisy descends upon Fink Factories to confront her former boss. The revolutionary proceeds to murder Fink in cold blood, and then grabs a young boy who witnessed the event. As Daisy raises her pistol, Booker stalls for time by questioning her motives:

Booker: Is this it? Is this your movement, Daisy?

⁵⁷ While players cannot control Elizabeth, they can call upon her special powers, which include an ability to open portals leading to new areas in the game.

⁵⁸ To arm the workers, Elizabeth opens multiple time portals leading to alternate realities. In the dimension where the revolution is underway, Booker exists as a martyred hero and symbol of the workers' cause.

Daisy: This is what needs to be done. You see, The Founders ain't nothing but weeds:

Cut'em down, they'll just grow back. If you wanna get rid of the weed, you got to
pull it up from the root. (Finkton)

Since the founders are all Caucasian, Daisy is alluding to ethnic cleansing, a depiction invoking white paranoia and implicitly justifying her exploitation. However, before Daisy can shoot the boy, Elizabeth stabs her former hero in the back.⁵⁹ For Booker, "the only difference between Comstock and Fitzroy is how you spell the name" (Finkton).



Figure 9. A smashed statue of Zachary Comstock, Courtesy of the Vox Populi.

Through this treatment, the franchise returns to an anti-utopian slippery slope motif in which fascism and collectivism are explicitly equated. In having to murder Daisy, Elizabeth is punished narratively for expressing naïve utopian beliefs, which are rendered illegitimate due to their inability to correspond with capitalist forms of realism.

⁵⁹ In "Burial at Sea – Episode Two," which is available as additional downloadable content, it is revealed that Daisy never intended to kill the boy, but actually allowed herself to be murdered so Elizabeth would have the strength to eventually kill Comstock.

By corresponding with anti-utopian sentiments, the game's critique of American patriotism is still keeping with an assemblage approach to neoliberalism. For Ong (2006),

The elements that we think of coming together to create citizenship - rights entitlements, territoriality, a nation - are becoming disarticulated and rearticulated with forces set into motion by market forces. On the one hand, citizenship elements such as entitlements and benefits are increasingly associated with neoliberal criteria, so that mobile individuals who possess human capital or expertise are highly valued and can exercise citizenship-like claims in diverse locations. Meanwhile, citizens who are judged not to have such tradable competence or potential become devalued. (p. 6-7)

From this perspective, *BioShock Infinite*'s post-nationalistic leanings are indicative of neoliberal approaches to citizenship, a point made clear when players enter the arcade in Battleship Bay.

Inside, Booker encounters a series of mechanical carnival attractions. One machine, titled The Patriot's Proud Pose, explicitly expresses post-nationalistic sentiments:

Are you a Duke or a Dimwit? When Duke hears the Columbian Anthem, he stands at attention and sings along, proud and clear. When Dimwit hears the Columbian Anthem, he just says, "That song again? I'm too tired to sing!" Remember, boys and girls, don't be a Dimwit. (Soldier's Field)

Considering the retro design and propagandistic message, patriotism is clearly represented as an antiquated false virtue. Such a depiction certainly qualifies as a critique of American exceptionalism, yet it is also points to shifting relationships between nations and states. Under neoliberalism, territorial sovereignty no longer comprises the primary basis for government; instead, "the economy is the force that generates, directs, and legitimates politics" (Lazzarato, 2015, p. 99). Correspondingly, Elizabeth is expected to leave Columbia rather than expect

change, for if the government "engages in activities you object to or are unwilling to pay for, and these more than balance the activities you favor and are willing to pay for, you can vote with your feet by moving elsewhere" (Friedman, 1980, p. 28).

After killing Daisy, Booker and Elizabeth attempt to leave by commandeering her airship; unsurprisingly, the escape is stopped by a giant mechanical bird. Back in Columbia, Booker and Elizabeth must make their way to Comstock's house in an effort to access his zeppelin. Along the way, it is revealed that Comstock is not Elizabeth's father; he secretly acquired her from an unknown couple (Emporia). As the narrative reaches a climax, Booker confronts and kills Comstock (Comstock House), before undergoing a final confrontation with the Vox Populi (The Hand of the Prophet). Subsequently, Columbia is revealed to be a parallel reality, existing amongst of plethora of possible outcomes.

In the game's ending, the player learns that Booker was in dire straits before he agreed to extract Elizabeth from Columbia. Depressed over his role in the Wounded Knee massacre, ⁶⁰ the former soldier fell into a gambling binge, so he sold his daughter (Elizabeth) to Zachary Comstock to wipe his debts clean. In an effort to undo this wrong, Booker seeks out a parallel universe where he and Comstock are the same. ⁶¹ There, a group of Elizabeths proceed to drown their father, effectively preventing Columbia's creation. ⁶² Through this ending the narrative restresses a commitment to the importance of honoring one's debts. Booker pays narratively as a consequence of selling his daughter, for the good father must be economically disciplined.

⁶⁰ The Wounded Knee massacre is an actual historical event that occurred in 1890 when US cavalry opened fire on the Lakota tribe and killed many innocents, including women and children who were trying to flee.

⁶¹ In this universe, Booker agreed to be baptised following the Wounded Knee massacre. Afterwards, he changed his name to Zachary Comstock and founded Columbia.

⁶² The success of Booker's sacrifice is unclear, with the final scene ending before he can tell whether his daughter is safe inside her crib.



Figure 10. Zachary Comstock being drowned by Booker.

Affective States of Grace

In light of the problems that big-budget game development has been facing, the aforementioned anxieties are by no means surprising: in the two-faced neoliberal era, debt becomes an important means of control. For Lazzarato (2015),

The level of economic and discursive violence used by states, markets, and the media appears proportional to people's resistance to the creation of a memory of debt, [and] proportional to their refusal to interiorize the sense of guilt, bad conscience, and responsibility. (Lazzarato, 2015, p. 42)

Within this context, the franchise is profoundly anti-utopian; however, its political capacity cannot be reduced to representation alone. An understanding of utopia as method (Levitas, 2013) entails recognition of non-representational states of grace that can be located within emergent forms of play. Booker's narrative quest is motivated by wiping away his debt, but money is

easily found in the streets of Columbia. Apart from the protagonist's economic state, players gradually increase their wealth while advancing through the game.

In many respects, the same procedural logic can be found in *BioShock* (2007) and *BioShock* 2 (2010), as Rapture is littered with useful items. The importance of searching for hidden objects becomes immediately apparent during a battle occurring early in the first game. At the end of the "Medical Pavilion" stage, players have their first encounter with one of Rapture's Big Daddies while Jack is still relatively weak. If the Big Daddy is attacked too quickly, it may become necessary to abandon the fight and scavenge for more ammunition. Due to this design, the franchise rewards prudent play, as sweeping each level for resources often leads to success. As is the case with many RPGs, advancement is relatively steady provided that one takes the time to grind. Searching through desks, garbage cans, and washrooms allows players to gain immense in-game wealth, eventually upgrading an underpowered character into a formidable fighting force.

Through this design choice, the franchise simulates consistent growth in ludic economies where debt is absent. According to Levitas (2013), utopia provisionally emerges during these transcendental moments of growth, dialogically "understood in relation to the existential components of alienation" (p. 12). Game studies has previously alluded to such states, albeit in a less political manner. For Aarseth (1999), digital games rely on an oscillation between aporia and epiphany that constitutes a knowledge process (p. 37). Aporias are in-game challenges that players must overcome, whereas an epiphany is a "sudden, often unexpected solution to the impasse in the event space" (p. 38). This conceptualization can be interpreted as transcendent for, according to Berkun (2010), epiphany "initially meant that all insight came by divine power"

(p. 5). However, Aarseth seems to be relying on a more scientific connotation in which epiphanies are understood as intellectual breakthroughs.⁶³

When considering the provisional absence of alienation that corresponds with the experience of playing *BioShock*, the narrative's anti-utopian narrative leanings are quickly undone. The franchise is overwhelmingly cynical on a representational level, while on a simulative level players temporarily "experience an alternative configuration of needs, wants, and satisfactions" (Levitas, 2013, p.4). Accordingly, ludonarrative dissonance can be understood as a utopian methodological phenomenon related to capitalism's inability to assert total control over the design of digital technology. Corresponding with this process is the socio-technical expansion of debt, as well as emerging forms of political resistance dedicated to envisioning an alternative world where debt no longer exists.

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⁶³ See Kounios & Beeman, 2009.

CHAPTER 5

Devils, Delusions, and Discordances:

Red Dead Redemption's Dance with Debt

Ludonarrative dissonance (Hawking, 2007) can contribute to the unravelling of antiutopian sentiments, as mentioned in Chapter 4, while also providing insight into structural
problems that capitalist realism (Fisher, 2009) frequently ignores. Under neoliberalism,
technological development has played a prominent role in the ubiquitous expansion of credit
(Chapter 2) and the corresponding desire for freedom from the debilitating effect of debt. To
expand on this point, this chapter uses the case of *Red Dead Redemption* to connect capitalism's
inability to control the development of digital technology to the utopian production of simulated
systems where credit no longer exists. Understood as a utopian methodological phenomenon,
ludonarrative dissonance is intrinsically linked to this process, specifically when a player's ingame wealth increases steadily despite narrative depictions of the protagonist remaining in debt.

Defying Debt

On February 19, 2015, students attending 14 Ontario Everest college campuses awoke to a shocking discovery. Recently, the academic institutions' parent company, Corinthian Colleges

Inc., had gotten into trouble with the United States government over reports of multiple colleges inflating grades to keep poorly performing students enrolled so a publicly traded company could continue collecting their loans (Harris, 2015, February 25). After investigating the allegations, the United States government fined Corinthian Colleges Inc. (Johnson, 2015, April 26, para. 7) and the Ontario Ministry of Training, Colleges and Universities revoked its operating license (Evans, 2015, February 19, para. 2). As a result of the crackdown, the company's reputation was significantly tarnished, leading to the closure of multiple for-profit schools.

In many respects, the Corinthian Colleges scandal typifies the horrifying impact that neoliberalism is having on education, as students plunge deeper into debt while investors profit from their misery. According to Lazzarato (2015), "student indebtedness exemplifies neoliberalism's strategy since the 1970s: the substitution of social rights (the right to education, health care, retirement, etc.) for access to credit" (p. 66). While Corinthian drove multiple students into debt for degrees that some say are worthless, the company's actions have also been met with new forms of resistance. Emerging from the Occupy Wall Street protests, the Strike Debt movement recently launched a rolling jubilee. Touted as a "bailout of the people by the people", 64 the project is dedicated to abolishing debt by purchasing it on the secondary market (Zandt, 2012, November 28, para. 5). In September of 2014, Strike Debt made its first purchase, effectively absolving the loans of 2,700 Everest College students (Kasperkevic, 2014, September 17). Traditionally understood as a personal problem, debt was subsequently transformed into a collective political cause.

Integral to new forms of debt activism are attempts to educate the broader public about the shifting state of contemporary capitalism, particularly in relation to the rise of

⁶⁴ http://rollingjubilee.org/ (para. 2).

financialization (Martin, 2002; Krippner, 2005) and transitions to societies of control (Deleuze, 1992). While commonly described as a social contract between creditors and debtors, neoliberalism has created a situation in which debt has expanded into a complex network. On a structural level,

debt sustained aggregate demand, fueled liquidity to lubricate financialization, and facilitated assemblage of entrepreneurial subjects responsible for their own economic security. Public welfare was replaced by self-care and working classes were constrained to fund their private welfare through private debt, while calibrating their conduct with the demands of precarious labor markets. (Mahmud, 2012b, p. 5)

Implicit in the aforementioned transition is a disjuncture between the greater freedoms presumably afforded by the expansion of free enterprise and the subtle and perpetual ways that debt limits options for behaviour. Similarly, "open world" games are frequently touted for invoking an emancipatory sense of autonomy. No longer shackled by the tyranny of linear levels, players explore a presumably open game environment, completing chosen objectives in whatever order they see fit. In economic terms, freedom is far from free, with bigger worlds coming at a steeper cost, as productions increasingly involve larger teams, higher budgets, and greater risks.

As a critical and commercial success, *Red Dead Redemption* (Rockstar, 2010) provides a useful example of an open world production's delicate dance with debt. During development, reports (Rockstar Spouse, 2010, January 7) indicated stressful working conditions that negatively impacted employee mental health. After completion, the studio proceeded to lay off staff despite enjoying strong sales (Mcwhertor, 2010, July 14). In addition to influencing production, debt permeates the game itself, though only on a narrative level. Representationally, repayment is an overarching theme that structures relationships between multiple characters. Conversely,

meritocratic fantasies dictate the game's economy, where debt states are never reflected through scores.

In 2002, Capcom released a trailer for *Red Dead Revolver*, a third-person shooter set in the Wild West. The gameplay was fast and frenetic, inspiring comparisons to *Gun.Smoke* (1985), a critically acclaimed arcade success. Unfortunately, development did not run smoothly and the production was eventually cancelled. Luckily for fans, Rockstar San Diego acquired the developer (Angel Studios), and the game was finally released in 2004.

While Capcom's initial production involved fantasy elements, Rockstar added a Spaghetti Western twist to the plot. In a stroke of good luck, Nate Harlow and his partner Griff discover a vein of gold, but Griff is later captured by the Mexican army. Thinking quickly, the prospector avoids execution by giving up his share of the find to the commanding officer, General Diego. However, Diego is unsatisfied with half of the fortune, so he sends his men after Nate Harlow. In the ensuing assault, Harlow is brutally murdered alongside his indigenous wife. Miraculously, his son Red survives the attack, and begins plotting his revenge.

In many respects, Rockstar's vision was quite different from the game Capcom initially set out to make. According to Hamish Brown, the original version was filled with supernatural elements, including "a character who could fly" (as cited in McGreevy, 2004, April 7, para. 16). Changes were obviously made, and *Red Dead Revolver* (Rockstar Games, 2004) is muddled as a result, sometimes feeling like two different games. The plot revolves around a conventional revenge scenario, but many levels depart from the story, following side characters for reasons that are not immediately apparent to the average player. According to Perry (2004, April 30) it is "clear *Red Dead Revolver* was a game that, in its many years of development, took several directions and was remolded many times over" (para. 10). Davis (2004, May 3) offers a similar

appraisal, insisting "there are too many playable characters and too many unique gameplay elements that just don't gel" (para. 9).



Figure 11. A screenshot from Red Dead Revolver.

In terms of design, *Red Dead Revolver* unfolds in a linear fashion, with straightforward levels and saving points. Consequently, the game departed from the open-world sandbox style that Rockstar is famous for. In a question and answer session with fans, it was revealed that near the end of the production process, the linear structure felt too constrained, and it was decided internally that an open world environment would be a better fit for a Western game (Rockstar Games, 2010, April 16, para. 13). A teaser trailer was leaked for a new game a year after *Red Dead Revolver*'s release; it provided no details in terms of story, but showcased a far more expansive environment. Officially announced in 2009, *Red Dead Redemption* was one of the most ambitious games conceived to date, expanding the scale of AAA production to a level that few studios could attain.

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⁶⁵ See https://www.youtube.com/watch?v=cLE1oRjxyJA

Designed to take advantage of a new hardware generation, *Red Dead Redemption* was conceived as a massive four-year project, with a budget estimated to be somewhere between 80-100 million dollars (as cited in Schiesel, 2010, May 16, para. 6). Key to the game's scope was the computational ability to render vast environments in real-time. ⁶⁶ According to Chris Cantamessa,

creating a huge open space, and [then] making it beautiful and believable and full of things to do, were the biggest challenges we faced in the making of Red Dead Redemption, but the ways we solved these challenges are now some of the game's greatest strengths. First, we had to squeeze as much processing power as possible from the consoles using our RAGE engine in order to create such a high level of detail over massive distances, and we also used that power to deliver the finest details. Not only do our characters and environment look and behave realistically, but telegraph wires sway in the wind, and puddles will pool and then dry after a storm. (as cited in Cabral, 2010, April 7, para. 6).



Figure 12. The sprawling dessert of Gaptooth ridge.

⁶⁶ Games from previous hardware generations have comparatively smaller levels because play must stop so new areas can load.

Rockstar's massive investment was somewhat unprecedented at the time,⁶⁷ even for a big budget game. Luckily, the gamble paid off, and *Red Dead Redemption* was universally praised. Critics gushed over an experience that not only successfully reimagined the Western genre but also pushed the aesthetic boundaries of open-world games. *The New York Times* enthusiastically named it "a tour de force" (Shiesel, 2010, May 16, para. 16), *Eurogamer Italy* proclaimed it "a masterpiece" (Facchetti, 2010, May 17, para. 1), and *Game Informer* described the experience as the "best video game Western of all time" (Bertz, 2010, May 17, para. 1). Additionally, *Red Dead Redemption* took home game of the year honours at the 2010 Spike Video Game awards (VGA, 2011, October 27). At the time of this writing, it is not only described as one of the best games of its hardware generation, but also held in company with the greatest games of all time.⁶⁸

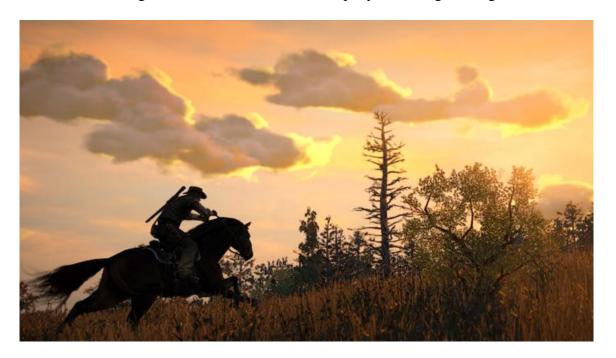


Figure 13. Concept art from $Red\ Dead\ Redemption$.

⁶⁷ Comparatively, *Shenmue* (Sega, 1999) is often described as the most expensive title of the previous generation, costing between 47-70 million dollars (Sheffield, 2011, March 2, para. 4).

⁶⁸ See Robinson (2013, April 11) and GamesRadar (2015, February 25).

On a formal level, *Red Dead Redemption* offers impressive scope without sacrificing depth, striking an uncommon balance in which every location feels unique. But on a political level, the game is not necessarily progressive, as underrepresented female characters are still treated poorly. Nonetheless, *Red Dead Redemption* did not elicit significant public outrage, although there was controversy related to the project's production phase. Expanding on this point, the next section will contextualize the franchise within Rockstar's chaotic history of pushing social and legal boundaries.

Neoliberal Production

According to Ong (2006), neoliberalism is not a "culture" or "structure," but rather a collection of mobile calculative techniques of governing that can be decontextualized from their original sources and recontextualized in "constellations of mutually constitutive and contingent relationships" (p. 13). Constitutive contingency has been a hallmark of Rockstar's production history, structuring the company's relations with employees, governments, and fans. Some of the controversies existing before *Red Dead Redemption* have their roots in *Grand Theft Auto*. While scores of politicians had already condemned the immensely popular open world franchise, it was reports of a secret sex mini-game that prompted governments to spring into action. At issue were several blocks of code hidden in *Grand Theft Auto: San Andreas* (Rockstar, 2004) that contained a slightly explicit interactive sex sequence. The motive behind the mini-game remains unclear: perhaps it was a joke or an abandoned surprise. ⁶⁹ Regardless of the original intention, Rockstar took steps to render the mini-game inaccessible, but stopped short of removing it completely.

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⁶⁹ Hidden features, commonly referred to as Easter eggs, have a long tradition in digital game design beginning with Warren Robinett's secret credit in *Adventure* (Atari, 1979).

After discovering the simulator, a well-known modder named patrickw devised and distributed a means for access. When news of the discovery reached the mainstream media, video game detractors were predictably outraged. Rockstar shifted initial responsibility to its fans, blaming the modding community for "significantly" altering the game's source code (Gibbs, 2010, July 25, para. 7). In response, patrickw (2005) issued the following statement in denial of the studio's allegations:

the scriptcode, the models, the animations and the dialogs by the original voice-actors were all created by RockStar. The only thing I had to do to enable the mini-games was toggling a single bit in the main.scm file. (Of course it was not easy to find the correct bit). The Nude models that are used as a bonus in the Quick action version of the mod, were also already present on the original disk. (patrickw, 2005, para. 8-9)

Upon investigation, the ESRB (Entertainment Software Ratings Bureau) agreed with the modder and updated the game's rating to adults only. The change was significant, prompting major retailers to placate parental concerns by removing *San Andreas* from stores (Glater, 2008, June 25, para. 14). Leading the charge was Democratic Senator Hillary Clinton, who issued a politically opportunistic, parentally conscious critique. In response, Rockstar released a new retail version with the offending, difficult to access code removed. The reissue also included a technological twist that forced the game to crash in the event of a modding attempt (Sa, 2005, July 14, A6). Instead of decrying censorship, or admitting to wrongdoing, the studio lashed out at

⁷⁰ The hot coffee mini-game is accessed by downloading a software patch and manually installing it into the game. For console versions, the mini-game requires an Action Replay or Game Shark modification device.

⁷¹ See Bone (2005, July 22).

⁷² According to the Senator "we should all be deeply disturbed that a game which now permits the simulation of lewd sexual acts in an interactive format with highly realistic graphics has fallen into the hands of young people across the country" (as cited in Bone, 2005, p. 45).

⁷³ Rockstar also created its own software patch blocking access to the mod (http://www.nomorehotcoffee.com/).

its fans, displaying an oppressive attitude that hinted at the authoritarian management techniques employed during the development of *Red Dead Redemption* (Rockstar, 2010).

On January 7th, 2010, Gamasutra published an anonymous blog post describing working conditions at Rockstar San Diego. According to Rockstar Spouse (2010, January 7), the staff working on *Red Dead Redemption* were being ruled with an iron fist. The following excerpt describes the working conditions and is worth quoting at length:

There are understandably times when crunching in work is needed and extended working time is expected. However; as with all systems known to man, there must always be an effort for balance. Ergo, where there are times of acceleration, there are other times of deceleration in order to recuperate. This is not being practiced though, and instead of valued employees, a sentiment grows that they have lost not only the sense of being valued but turned into machines as they are slowly robbed of their humanity. [...]

In the last years, there have also been many cuts on benefits despite the increasing demands on employees. After dedicated hard work on a project, weeks of comp time were offered as a reward and illustration of appreciation and understanding. Far from what is currently being met by the employees after nearly a year of constant strenuous activity. Little is there to motivate continuation as they also have lost a free vacation week between Christmas and New Year. Without time to recuperate and no efforts made to alleviate the stress of such conditions would procure on an employee after a period time, serious health concerns. Yet, now the health concern becomes another financial concern as the stripping of medical benefits surfaces to realization. It becomes rather worse rather than better as employees gain experience and become "senior". Instead of

appreciation, numerous non-exempt designers and artists have had their overtime pay cut as a result for being "too senior."

Yet and still, there is more to be said of the working conditions that Rockstar San Diego employees have had to suffer. While managing to endure through the trying times, they still were hit with more blows. Again balance is denied, as working conditions worsened with no appreciation. Working harder, longer, faster, yet there was never a guarantee of a bonus nor if there was any earned, when they will be received! Moreover, bonuses could significantly be reduced based on ANYTHING management comes up with, while the employee would have no way to know about it. (Rockstar Spouse, 2010, Jan 7, para. 3-6)

Contrary to a unified regime of labor disciplining, the post describes a stressful, constantly mutating workplace. Comprehended as an assemblage, neoliberalism produces such environments via a migratory, constantly calculating governmentality. "Policies are all about the recalibration of the capacity of groups in relation to the dynamism of global markets" (Ong, 2007, p. 4).

Rockstar Spouse also calls attention to a pattern of benefit reductions that shift risk onto employee families. Despite appearing to be gender neutral, neoliberalism often works this way by "forcing healthcare, child care and elderly care back onto traditional family forms and the unpaid work of women" (Broadie, 1996a, p. 388). While proponents of neoliberalism vocally reject gender bias, neoliberal assemblages can have the opposite impact—effectively turning women into "shock absorbers" (Broadie, 1996b, p. 127) for the precarious demands of the new economy.

While Rockstar refrained from addressing the blog post publicly, a former staff member confirmed the allegations in an anonymous interview with MTV, comparing Rockstar's New York office to the evil "eye of Sauron" (as cited in Frushtick, 2010, January 5, para. 7).⁷⁴ Following *Red Dead Redemption*'s release, working conditions became even more precarious with the laying off of 40 employees (Mcwhertor, 2010, July 15). Commenting on this action, Steve Martin defended the cuts as a normal part of industry practice:

As is typical with game development, our team sizes have always fluctuated over the course of the development cycle. As Rockstar San Diego transitions from the launch of *Red Dead Redemption* onto future projects, we are realigning our resources in order to continue to develop games as effectively as possible. (as cited in Mcwhertor, 2010, July 14, para. 8)

Such comments indicate a dehumanizing attitude exhibited toward the studio's staff, who are viewed as nothing more than a renewable, easily expendable labor source. By casting relationships with secondary characters as contingent networking opportunities, *Red Dead Redemption*'s narrative displays a remarkably similar disposition. Eschewing allegiances, John Marston walks the political spectrum by working with revolutionaries, families, and police. Conversely, the sprawling wilderness masks an intricately designed system that often exists in tension with the story.

Neoliberal Play

⁷⁴ Rockstar dismissed the allegations on its official website, describing the controversy as "a case of people taking the opinions of a few anonymous posters on message boards as fact" (as cited in Totilo, 2010, January 21, para. 4).

Central to *Red Dead Redemption*'s marketing campaign was an insistence that the game could actually simulate "what life in the west was like" (Rockstar Games, 2010). Humphreys (2012) picks up on this point, identifying the game's relationship with frontier mythology and corresponding connection to neoliberal thinking. Partly extending, but also complicating this analysis, ⁷⁵ I will show how *Red Dead Redemption*'s relationship with neoliberalism is complex and contradictory, relying on a political discordance between the represented narrative and the simulated ludic system. Debt is an overarching theme that structures relationships between characters, even though debt ceases to exist within the game's systemic economy. Like most "open world games," the wilderness is carefully composed of meticulously disseminated resources, with access to new areas—and items designed to extract value from those areas—serving as rewards for accomplishing specific tasks. Representationally, *Red Dead Redemption* is figuratively dripping with frontier mythology. However, from a systemic perspective, a ludic economy is already in place, resulting in an important disjuncture where there is no simulated frontier.

In *The Significance of the Frontier in American History*, Turner (1966) attributes the uniqueness of American identity to the experience of settling the West:

at the frontier the environment is at first too strong for the man. He must accept the conditions which it furnishes, or perish, and so he fits himself into the Indian clearings and follows the Indian trails. Little by little he transforms the wilderness, but the outcome is not the old Europe, not simply the development of Germanic germs, any more than the

⁷⁵ For Humphreys (2012), *Red Dead Redemption* "is part of the narrative apparatuses that dramatize neoliberalism" (p. 210), creating a situation in which representation subsumes simulation, rather than corresponding to or

conflicting with it.

first phenomenon was a case of reversion to the German mark. The fact is, that here is a new product that is American. (p. 2)



Figure 14. John Marston riding into the sunset.

It should be noted that the above passage was intended to be understood within a serious historical context. However, Turner's account proved to be more akin to psychological myth than recorded historical fact. As a seemingly true origin story, the frontier provides a powerful image of a uniquely American identity rooted in a rugged, non-European, and profoundly masculine sense of individualism. Embodying this myth, *Red Dead Redemption* opens with protagonist John Marston, a presumably modest man, exiting a river ferry and boarding a train. A high angled image shows a mechanical crane lifting a car into the air, calling attention to technology's encroachment upon the wilderness. In contrast, Marston is characterized as a man of the land mourning the inevitable loss of the frontier (Humphreys, 2012, p. 204).

As his train whizzes through the wilderness, Marston overhears multiple passengers engaged in conversation on the topic of the West. An elderly upper class woman insists they are "finally bringing civilization to such a savage land" admitting that although natives have lost

⁷⁶ See Slatta (2010).

territory, they have in return gained "access to heaven" (Exodus in America). A preacher, speaking to the young woman beside him, insists that they "have been brought here to spread the word." According to his reasoning, "the word and civilization [...] are (actually) the same thing" (Exodus in America). In many respects, Turner's frontier myth is embedded in the attitudes of these characters. Marston is differentiated, yet he avoids disagreement, preferring to stay out of politics.



Figure 15. John Marston deliberately ignoring a preacher's colonialist views.

Despite depicting a protagonist in the image of a classic cowboy, the narrative avoids romanticizing the frontier. After an unsuccessful attempt to cajole a surrender out of Bill Williamson, Marston is put to work at the MacFarlanes' ranch. On a supply run headed in the direction of New Austin, Bonnie MacFarlane corrects his highly romanticized, mediated view of the old west:

Marsten: New Austin, the last real outlaw country. Where the old ways still hold true. You do a man wrong, he'll shoot you for it. You do a man right...well, he still may shoot you for it. But at least you have an idea of what's right and what's wrong here.

Bonnie: Dear oh dear, Mr. Marston...What dreadful novel did you get that romanticized drivel out of? Those days are long gone, if they were ever here at all. According to Pa, those days were just people shooting each other because they lost at cards. We'll be lucky if our ranch survives another 5 years. Businessmen are the new cowboys. (This is Armadillo USA)

Bonnie's remarks deny aspects of frontier mythology, while also pointing to its influence on neoliberal thinking. Turner's conceptualization is espoused, questioned, and altered instead of being wholeheartedly rejected. On a representational level, Marston projects the dying image of a classic self-sufficient frontiersman, but on a procedural level he also networks like an entrepreneur operating a business. Alongside the protagonist, this discordance runs even deeper, separating a represented wilderness from a simulated economy.

According to Swartout and van Lent (2003), game designers cleverly exploit narrative to give "players the perception they have free will, even though at any time their options are actually quite limited" (p. 34). In a similar manner, *Red Dead Redemption* relies on disjuncture between narrative perception and systemic possibility. Players are free to explore, but only in specific areas; at any given time, choice is carefully constrained. The design communicates this process after the opening sequence, when control of Marston is finally obtained. Instead of being free to explore an untamed wilderness—initially too strong for "man"—players must begin their adventure by walking into a nearby saloon. Any attempt to deviate from this objective will trigger an on-screen prompt, specifically requesting a return to the aforementioned location. Ignoring the order for too long also results in mission failure, so the objectives must be followed if the player wants to proceed.

Instead of having an "open world" to explore freely, spatial restrictions are obvious from the onset. Many actions are quantified by an elaborate scoring system, which divides the frontier into 94 distinct places. Travel distances, financial transactions, and instances of combat are tracked amongst a plethora of other in-game activities. Intriguingly, this system can often contradict the political logic established by the narrative.



Figure 16. An in-game map showcasing Red Dead Redemption's unlockable territories.

While it is easy to conflate systemic and representative meaning—especially when it comes to politics—*Red Dead Redemption* contains an interesting, difficult to notice disjuncture that reveals much about the game's relationship with neoliberalism. Inside the saloon, Marston is approached by Jake, an elderly guide tasked with escorting him to Fort Mercer. Once a military outpost, the structure houses a vicious gang led loosely by Wild Bill Williamson. Reaching out to his former partner, Marston advises Williamson to surrender to the federal authorities. In addition to laughter, the request sparks a violent exchange, leaving Marston lying wounded in the dirt.

Fortunately, Marston is found in the early light of morning by two ranchers who happen to stumble across his path. Luckily, the McFarlanes prove to be generous folk willing to pay fifteen dollars to treat a stranger's wounds. Upon awakening, Marston promises to repay the debt by helping Bonnie do work around the ranch (New Friends, Old Problems).



Figure 17. Bonnie McFarlane asking John Marston to repay his fifteen dollar debt.

Despite this pledge, Marston's wealth never falls below zero in the game's scoring system. Instead of repaying the McFarlanes, ranch work is rewarded with in-game capital, including upgrades and access to previously unexplored locations.⁷⁷ Marston's ludic status proceeds to steadily increase, diverging from a narrative that situates him in debt.

Dangerous Collectives

Notwithstanding its ludic absence, debt is a key theme that structures a significant portion of *Red Dead Redemption*'s narrative. To repay society, a reformed outlaw is tasked with

⁷⁷ For patrolling the ranch, players are rewarded with red dead eye targeting mode level 1; the repeater carbine; MacFarlane's Ranch Safe House; MacFarlane's Ranch Night watch job; the "Flowers for a Lady" side mission; and access to Tumbleweed, Twin Rocks, and Solomon's Folly.

bringing members of his former gang to justice. His repayment takes on a political significance through repeated allusions to an anarchist past. Following this logic, John Marston is depicted as a newly reformed, apolitical entrepreneur willing to network with various individuals of competing political persuasions.



Figure 18. John Marston's rag-tag posse preparing to storm Fort Mercer.

Between working jobs for the MacFarlanes, Marston seeks new acquaintances for the purpose of returning to Fort Mercer. His strategy involves the procuring of outlandish deeds so that those benefitting can repay him with favors. The plan begins with the rescue of Nigel West Dickens, a miracle cure salesman besieged by angry customers, who agrees to infiltrate Fort Mercer under the pretense of soliciting sales (Old Swindler Blues). With the aid of an alcoholic arms dealer, otherwise known as Irish, a machine gun is attached to Dickens' wagon. Further contributions come from an emaciated grave robber (Seth Briars) and a comparatively respectable local Marshall (Leigh Johnson), with the former providing a distraction and the latter providing cover.

As far as plans go, Nigel's is an overwhelming success, except for the fact that Wild Bill is no longer on the premises (The Assault on Fort Mercer). He left the previous morning to

rendezvous with Javier Escuella, a former political revolutionary and member of Jon's gang. In hot pursuit, Marston makes his way to Mexico, a country in the midst of a peasant uprising (We Shall be Together in Paradise). Initially, Marston remains neutral, doing deeds for both sides; however, the narrative the criticizes the government's coercive means, as made clear during the following exchange with Captain Vincente de Santa:

Vincente: You will hear a lot of words like "tyrant" and "oppression" here, words that the peasants have been taught, but do not understand. Meaningless words. The army is suffering...a crisis of reputation.

Marston: Even I've heard about the Colonel down here. He's not famous for his compassion.

Vincente: This is the point. Have you met Coronel Allende? Do you know him?

No, like a papagayo, you just repeat lies you heard.

Marston: Maybe.

Vincente: Allende is a good man, a strong man. He carries the weight of a million problems on his shoulders.

Marston: Am I supposed to pity him?

Vincente: You gringos are so quick to judge. You love to talk badly of other people because it makes you feel better about yourselves. Maybe you should look in the mirror.

Marston: You're the one talkin' about this. And I ain't here to make judgment on the way of your government. I got enough problems with my own right now.

Vincente: This isn't America, Señor Marston. We are poor. Kindness must take a

different form. What is better, to put your arm around a hungry man, or to beat him until he grows some food to eat?

Marston: I think you need to answer that question yourself. (Civilization at Any Price)

In many respects, the above dialogue is emblematic of a careful narrative negotiation in which government coercion is critiqued without endorsing systemic alternatives. Implicit in Marston's response is a general distaste for all forms of government, explicitly exemplified by his flexible, entrepreneurial nature. Neoliberalism, distinguished as an assemblage (Ong, 2006, 2007; Lazzarato, 2012; Gilbert, 2013), increases the probability of the above reaction via encouraging the likelihood of individual—as opposed to collective—forms of emergent social organization. By comparably condemning different forms of government, Marsten adheres to a cynical, apolitical discourse, which holds that neoliberalism is not necessarily as hegemonic as the belief in a lack of alternatives is (Fisher & Gilbert, 2013).

Diverging from Marston's initial impartiality, the game's scoring system subtly distinguishes between an authoritative Mexican government and citizens engaged in political dissent. Among other avatar attributes, honour⁷⁹ and fame⁸⁰ are ranked, with various ratings producing in-game changes. When completing missions that aid the Mexican government (The Demon Drink, Empty Promises, Mexican Caesar), honour can never increase. However, supporting the revolutionaries is comparably honorable (My Sister's Keeper, Must a Savior Die?, Father Abraham), in addition to increasing fame. Through this design, the game system

⁷⁸ The government problems that Marston is referring to involve the kidnapping of his family, a plot point revealed in the third act of the game.

⁷⁹ Honour measures Marston's level of social acceptance, influencing how people react to him. Having high honour results in various perks, such as discounts at most stores. Having low honour also results in perks, such as discounts at thieves landing.

⁸⁰ Fame measures how well Marston is known throughout the west; it contributes to perks, depending on honour levels.

criticizes the Mexican military regime by siding with the rebels without openly endorsing their political beliefs.⁸¹

Eventually, Marston follows suit, transferring his allegiance to the revolutionaries without explicitly supporting their cause. As the following dialogue indicates, his decision to help Luisa Fortuna is rooted in family reasons rather than political values:

Luisa: Mr. Marston, the movement is on the brink of a great victory. Allende knows this and has sent for reinforcements. Abraham Reyes asked personally that you stop them reaching Escalera. They are coming by the old trail. You must ambush them.

Marston: I have my own family to worry about.

Luisa: Mr. Marston. I have lost my father. My mother is in the United States. My sister has fled. I have no family, just the cause. Please. Good actions make you a good man.

Marston: Then I'm doomed, but I will help you, out of respect for your loss.

(Father Abraham)



Figure 19. John Marston shaking hands with Luisa Fortuna.

⁸¹ Players can still earn upgrades by lowing their honour level, so the critique is somewhat dependent on user choice.

In agreeing to help the resistance, Marston sidesteps politics, citing Luisa's right to seek revenge for her father. Like Margaret Thatcher, his reasoning is based on the neoliberal belief of nothing existing outside of one's duty to their family. Further depoliticizing Marston's decision is the narrative revelation of the Mexican government's close ties with Escuella. Instead of aiding the uprising, Williamson is co-operating with Allende, who is protecting him in exchange for payment (An Appointed Time).

When the military learns of Marston's actions, Vincente de Santa attempts to kill him (Cowards Die Many Times). Fortunately, Marston is rescued by Abraham Reyes, the revolutionary he saved from execution (Must a Savior Die?). At this point, Marston's apolitical leanings are framed as a prudent indicator of wisdom. For when Marston earns the trust of Reyes, he becomes acquainted with a hypocritical man who is conniving and corrupt. Abraham's camaraderie with the underclass has little to do with an interest in socialism and a lot to do with a desire for sex. According to Luisa, the two are engaged to be married (Must a Savior Die?); however, Abraham dismisses their relationship, insisting that a peasant is no match for a future leader of Mexico. Elaborating further, he justifies his promiscuity by way of noble rites, citing his desire to father an army of kings (The Gates of El Presidio). Such depictions bring an antisocialist preference into focus, portraying Luisa's devotion as foolishly naïve, a flaw that proves fatal when she sacrifices her life (An Appointed Time) to save a fiancé who forgets her name (An Appointed Time).

While exhibiting a sharp distaste for government corruption, *Red Dead Redemption*'s narrative is ultimately cynical, displaying a negative attitude toward alternatives to current political systems. Collective social action is futile, or dangerous, in a manner keeping with

capitalist realism (Fisher, 2009). Following this logic, the narrative is not geared toward the naturalization of neoliberal policies so much as it works to deny systemic alternatives. John Marston is not a proponent of Friedman or Hayek, but his apolitical stance denies alternative thinking, a point emphasized by his need to make amends for a seemingly anarchistic, utopian past.

After helping Reyes overthrow the Mexican government, Marston finally succeeds in killing Bill Williamson (An Appointed Time), but stopping his former partner is not enough. According to Edgar Wright, Marston also needs to apprehend Dutch Van Der Linde: the leader and sole remaining member of his former gang (Bear One Another's Burdens). Dutch is currently hiding out near Blackwater with a militant group of young aboriginals. Once again, the game briefly empathizes with a revolutionary stance, as the natives are also environmentalists upset over government development of their land. Sympathy is also depicted through the character of Nastas, an activist trying to stop native youth from joining Dutch's criminal organization (At Home with Dutch). Sadly, in a fate similar to Luisa's, Nastas is killed while trying to negotiate a peace treaty with the gang (For Purely Scientific Purposes).



Figure 20. Dutch's gang ambushing Marston.

After Dutch uses a peaceful meeting as a front for an attack, the narrative reiterates its cynical stance. Van der Linde progressed from "admiring the flower to shooting a man in the head because he doesn't like the flower," according to Edgar Wright (And You Will Know the Truth). Through this discourse, Dutch is framed as a former idealist who eventually slid into fascism. According to Hayek (1944), such is the tragedy of collectivist thought: "while it starts out to make reason supreme, it ends by destroying reason" (p. 180). Eventually, Marston confronts his former leader, accusing Dutch of creating his own "savage utopia" (And you will know the Truth). The narrative, from this perspective, alludes to the ecological impact of neoliberal policy while simultaneously naturalizing a widespread belief in a lack of politically viable alternative systems. Political dissent induces sympathy—though only briefly—before the same actions are framed as being dangerously idealistic and ultimately naïve.

Irrational Strangers

While *Red Dead Redemption*'s narrative is profoundly anti-utopian, the game's optional side quests reflect a similarly cynical nature. As players unlock new areas, they encounter various characters whom they can choose to help between story missions. Side quests presumably encourage players to come to the aid of strangers; however, events are often more peculiar than they initially seem. Systemically, players are helping themselves first and foremost, with each quest providing a means of obtaining powerful items, more money, and increased skills. In many respects, the Water and Honesty side mission serves as a quintessential example of this process by secretly rewarding selfishness over an honorable exchange.

When players encounter Andrew McAllister, they are given information about Pleasance House, an old property that is situated on top of an untapped water spring. Instead of telling the elderly owner about the well that he owns, McAllister suggests a dual purchasing and reselling of the land. If Marston asks about the property, its surly owner points a gun at his head. Players are subsequently given the option of purchasing the land or taking the deed by force. According to the game's system, the "honourable" choice is to maintain one's cool and proceed with purchasing the deed, while opting for force reduces the money earned from financing the exchange. Procedurally, the scoring seems to encourage honest entrepreneurialism, even though the owner is never told about the secret well. However, the Water and Honesty side mission also contains an interesting wrinkle in that double crossing McAllister leads to a larger reward. After selling the deed, players can shoot Andrew McAllister, loot his dead body, and claim the property for themselves effectively transforming the Pleasance House into a new save point.⁸² Following this logic, altruism is no longer a virtue in itself; it relies on individual greed.



Figure 31. An unfriendly stranger greeting Marston with a rifle.

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⁸² Throughout *Red Dead Redemption*, players can purchase property. Transactions are expensive, but also necessary because property provides save points. For these reasons, stealing Pleasance House saves a significant amount of money.

In addition to Water and Honesty, strangers encountered during other side missions are predominantly foolish, mentally ill, or corrupt. In New Austin, Marston encounters Jimmy Saint, a Manhattan writer seeking inspiration and adventure (Funny Man). Saint repeatedly finds his way into gang hideouts, where he is found hogtied and gagged. East of the MacFarlane's Ranch, Marston comes across Billy West, an elderly gentleman picking flowers for his wife (Flowers for a Lady). Upon returning with a meticulously chosen bouquet, Marston is politely invited to tea, where he is introduced to Annabelle: a corpse rotting in the heat. Inside Blackwater Chapel, Clara LaGuerta is seeking child support from a former employer who impregnated her (The Wronged Woman). Denying the relationship, Harold Thornton defends his honor by challenging Marston to a duel. Afterwards, Elizabeth Thornton is unable to understand the circumstances leading to her husband's death, or the presence of a strange woman laughing at his funeral.



Figure 22. Billy's decomposing wife, Annabel.

As in the primary narrative, stranger side missions provide an overwhelmingly cynical take on the political potential of collective social action. Strangers are foolish, delusional, and profoundly untrustworthy, reinforcing Marston's preference for independence. In the context of these experiences, Marston's distaste for partisan politics—easily inferred as being wise—works

to obscure a strong correlation with neoliberal political thinking. Understood as an assemblage (Ong, 2006, 2007; Lazzarato, 2012; Gilbert, 2013), neoliberalism contributes to apolitical reactions, despite not being invoked directly through discourse, by encouraging the likelihood of individual as opposed to collective social action.

Marston further exemplifies his independent nature by confronting Dutch single-handedly, even though the government has offered support (And the Truth Will Set You Free). Afterward, Marston finally returns home to his family, ⁸³ where he still owes a debt to his estranged son. In his father's absence, Jack dreams of becoming "a government man" (The Outlaw's return) when he eventually grows up. Marston has other ideas, so he teaches his son the skills that are needed to live off of the land without having to rely on the government's support. Eventually, their relationship is no longer strained; Jack decides that he wants to be just like his dad. Sadly, the wish proves to be prophetic after the government finally comes for Marston (The Last Enemy That Shall Be Destroyed).



Figure 23. Federal marshals dueling with Marston.

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⁸³ At this point, most players will have acquired significant in game wealth. In contrast, Marston is still depicted as a struggling farmer.

Just as life finally begins to approach a semblance of normalcy, a militia descends upon Marston's ranch (The Last Enemy That Shall Be Destroyed). Marston ensures the safe escape of his wife and son and retreats into his barn, before being surrounded by marshals standing patiently with guns drawn. Players are given the opportunity to target the entire militia, but the enemies cannot be killed in time. After being hit by multiple bullets, Marston takes his final breath, while Edgar Ross looks on, slowly shaking his head.



Figure 24. Edgar Ross watching Marston die.

The game does not end with John Marston's untimely end, as Jack Marston is given the opportunity to avenge his father's death. Amazingly, the son retains all of his father's in-game wealth, including items collected and achievements earned, even though Jack did not acquire any of these himself. As a result, *Red Dead Redemption*'s ludic economy supersedes narrative continuity with players retaining everything they earned, despite Marston's death.

Representationally, the narrative officially ends with a repayment of sorts, with Jack getting revenge by killing Edgar Ross (Remember My Family); however, the metaphoric repayment diverges noticeably from the game's ludic system. By narratively depicting debt anxiety and

systemically modelling its absence, *Red Dead Redemption* relies on a profound political dissonance.



Figure 25. Jack Marston confronting Edgar Ross.

Red Dead Redemption's relationship with neoliberalism is both complex and contradictory. While production and narrative are deeply entangled in neoliberal thinking, the design also produces a sharp disconnect. Representationally, repayment exists as an overarching theme that structures the relationships between major characters. But in terms of gameplay, the exact opposite proves to be true, with most actions increasing in-game wealth. Although John Marston ultimately pays his debts by sacrificing his life, according to the game's system the player is always debt-free.

When considering *BioShock* and *Red Dead Redemption*, ludonarrative dissonance clearly provides meaningful insight into the contradictions created by the rise of financialization (Martin, 2002; Krippner, 2005), in which profits accrue primarily through financial channels rather than through the production and trade of commodities. According to Deleuze (1992), computers played a central role in this process by ushering in a new form of capitalism that is

institutions gradually lose their effectiveness, although discipline does not necessarily disappear; instead, individuals are increasingly blamed for broader systemic problems. As the following discussion of *Call of Duty* shows, players can exhibit similar behaviour, particularly when the neoliberal logic represented in a game's narrative aligns with the emergence of play. Story design cohesion, from this perspective, does not necessarily reinforce neoliberal ideology; however, it can still deny the reality of broader social arrangements, prompting players to threaten individuals instead of blaming the problems that emerge from systems.

CHAPTER 6

Battle on the Metric Front:

Call of Duty's Neoliberal Fog of War

As mentioned previously, ludonarrative dissonance can provide insight into the unravelling of anti-utopian sentiments (Chapter 4) and the desire for economic systems in which debt does not exist (Chapter 5). Story/design cohesion, on the other hand, may not provide a more engaging play experience as much as it contributes to conflicts that stem from the contradictions characterizing contemporary capitalism. To expand on this point, this chapter insists that ludonarrative harmony (Chapter 3) is not necessarily a good thing, particularly in the case of *Call of Duty*. When considering the production, representation, and design of the franchise, *Call of Duty* is marked by the persistence of a neoliberal assemblage that works in multiple ways: through the institution of a highly competitive development environment, the narrative reinforcement of new patterns of inclusion and exclusion (Ong, 2006), and a design emphasis on individual achievements. As a result, the franchise is imbued with a capitalist form of realism (Fisher, 2009) that denies the reality of broader social arrangements and, correspondingly, contributes to the blaming of systemic failures on the behaviour of individuals.

Let the Losers Drown

On February 9, 2009, Rick Santelli made one of his regular appearances on CNBC Business News. Speaking from the floor of the Chicago Mercantile Exchange, Santelli issued a response to the announcement of the homeowner stability plan, a government cash infusion designed to stem the recent tide of property foreclosures. In the wake of the credit crisis, the plan was created to subsidize monthly interest payments so that struggling citizens could hold on to their homes. A Taking exception to the approach, Santelli challenged the government to hold an online referendum asking regular Americans if they really wanted "to subsidize the losers' mortgages". In response, the traders surrounding Santelli erupted into cheers, and the tea party movement was born.

Imbedded in Santelli's rant was a common strategy employed in responses to the 2007 global credit crisis, as multiple commentators contextualized the event as an aggregate of individual failures. According to Allon (2010),

as the crisis played out spectacularly and unpredictably, these weaknesses were ascribed in varying degrees to a versatile cast of characters: greedy investment banks and Wall Street financiers; irresponsible traders and their financial weapons of mass destruction; unscrupulous lenders and mortgage brokers; imprudent and delinquent borrowers; lax regulators; overpaid captains of industry, and even the deluded captain of the American financial system and Federal Reserve himself, Alan Greenspan. (p. 366)

85 See Sullivan (2009, February 19).

⁸⁴ See Andrews (2009, March 4).

Blaming the losers unable to pay their mortgages deflects attention from a "much larger assemblage of political and cultural rationalities that combine with economic factors in complex and highly unpredictable ways" (Allon, p. 375). Operating in precisely this manner, neoliberalism denies the contradictions that characterize contemporary capitalism by blaming recurring crises on the ethical failure of individuals.

Unsurprisingly, a narrow focus on individualism is not unique to Rick Santelli's rant, as members of some gaming communities have demonstrated similar tendencies. The propensity to blame individuals for systemic problems can be seen in *Call of Duty* (2003-Present), which provides an important example that should not be ignored. Initially designed as a World War II first-person shooter that was intended to compete with Medal of Honor (1999-2010), Call of Duty has grown to embrace the online gaming experience. An increased focus on multiplayer evolved the franchise into a widely recognized household name; however, the changes have not been received without a fair share of controversies. In terms of development, neoliberalism can be linked to a series of lawsuits that emerged from a paranoid and competitive working environment. Representationally, campaign narratives also demonstrate new forms of inclusion (Ong, 2006) that distinguish worthy global citizens from dangerous collectivist groups. Finally, multiplayer is explicitly designed to reward extremely selfish forms of play, privileging individual achievements over the combined efforts of teams. Inherent in these processes is an implicit sense of pessimism among publishers, developers, and fans, who engage in highly individualistic behavior at the expense of collective social action.

Neoliberal Production

Before *Call of Duty* became a household name, a lot of first-person shooters were set during World War II, with Electronic Arts generating impressive sales from the *Medal of Honor* franchise. Initially conceived by Steven Spielberg, *Medal of Honor* (Dreamworks Interactive, 1999) was designed as a companion piece to the film *Saving Private Ryan* (1998). Integral to the vision was a focus on historical accuracy that had yet to be seen in a first-person shooter, with Spielberg even bringing in retired Marine Captain Dale Dye, a Hollywood military consultant (Edge Staff, 2015, March 30, para. 12). Released in 1999, *Medal of Honor* was both a critical and commercial hit that drew favourable comparisons⁸⁶ to the immensely popular *GoldenEye* (Rare, 1997).

In evaluating a steady stream of sequels, critics were particularly enthusiastic over *Medal of Honor: Allied Assault* (2015, Inc., 2002), Jason West and Vince Zampella's first large scale game. According to Wolpaw (2002, January 23), *Allied Assault*'s skillful recreation of the storming of the beach at Normandy "is quite likely the most intense and well-executed set piece in shooter history" (para. 5). Recognizing the production's potential, Activision launched a coup: "the chance to strike back with the very team that helped to build one of their competition's defining moments was too much to pass up (Fahs, 2009, November 6, para. 8).

As a brand, *Call of Duty* emerged from the desire to cash in on the popularity of World War II themed first-person shooters, in addition to co-creators Jason West and Vince Zampella's desire for greater autonomy over production (McWhertor, 2010, December 22, para. 7). An initial press release described *Call of Duty* as a "new brand of first person action games" produced by a studio including "22 of the individuals who previously developed *Medal of Honor: Frontline Assault*" (Activision, 2003, April 8, para. 2). From this viewpoint, Infinity

⁸⁶ See Perry (1999, November 18).

Ward is not a collective unit, but rather a loose aggregate of personalities competing to produce the best game possible.

Call of Duty was also widely praised upon its release, but not so much for being unique. As many critics noted, it borrowed elements from other World War II games, although managed to combine them in a skillful manner. According to Kasavin (2003, October 29), Infinity Ward delivered "an all-around excellent game that confidently challenges, head on, all the other WWII-themed shooters out there and comes out on top" (para. 18). Key to this success was a fast-paced, run and gun style of play, threaded meticulously through large battle sequences.

To ensure the annual release of a new *Call of Duty* title, Activision enlisted the help of Grey Matter, a secondary developer tasked initially with working on the United Offensive expansion pack for Infinity Ward's first *Call of Duty* (2003) game. The team was eventually restructured into Treyarch studios and given the task of designing *Call of Duty II: Big Red One* (Treyarch, 2005). "Big Red One didn't sell nearly as well as its flagship counterpart, but it earned respectable reviews, and Activision was happy to have found a quality second-string team to help support their franchise" (Fahs, 2009, November 6, para. 23). The establishment of a second studio did not sit well with Infinity Ward, however, and the studio refused to cooperate with Treyarch. This situation created a rivalry that erupted into a series of high profile firings and multiple lawsuits.

Tensions between the studios began to emerge publicly during the marketing campaign for *Call of Duty: World at War* (Treyarch, 2008), when employees at Infinity Ward deliberately distanced themselves from Treyarch's creation. During promotion, Activision's Joe Heller insisted that "bolt-action rifles in *Modern Warfare* were not one-shot kill weapons, as they are in World at War" (as cited in Good, 2008, November 8, para. 1), prompting Infinity Ward's

community manager, Robert Bowling, to issue an expletive-laden response that lambasted the executive for spreading misinformation about a game he knew nothing about. In keeping with this pattern of disregard, Infinity Ward repeatedly described *Call of Duty 4: Modern Warfare* (2007) as the franchise's third instalment, ⁸⁷ purposely dismissing Treyarch's *Call of Duty 3* (2006).

Despite the massive success of *Call of Duty: Modern Warfare 2* (Infinity Ward, 2009),⁸⁸ Activision was growing tired of Infinity Ward's unruly behavior, and Jason West and Vince Zampella were eventually fired for insubordination. The two men immediately filed a lawsuit alleging an "Orwellian" investigation designed to manufacture a legal basis for their dismissal (as cited in McWhertor, 2010, December 22, para. 1). In response, Activision filed a cross-complaint (Activision Publishing Inc. v. Jason West, Vince Zampella & Electronic Arts, Inc. 2010), accusing Electronic Arts of conspiring with their former employees, in addition to accusing West and Zampella of purposely undermining Treyarch in a deliberate plan to damage the *Call of Duty* brand.

Activision's cross-complaint paints West and Zampella as stubborn narcissists refusing to cooperate with fellow studios, while court documents also indicate careful planning carried out by Activision before their dismissal. A series of emails released to the *Los Angeles Times* reveal management's fear of the possibility of other staff members leaving Infinity Ward to form a rival studio with their co-directors (Pham, 2012, May 21a). A particularly notorious message sent by Mike Griffith ranks the salary and projected bonus compensation for key Infinity Ward

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⁸⁷ Call of Duty 4: Modern Warfare is referred to as the franchise's third installment in the song playing over the closing credits, and the executable files for the personal computer version were deliberately named CALL3.EXE (Fahs, November 6, para. 36).

⁸⁸ Modern Warfare 2 was renumbered to distinguish Modern Warfare titles from Treyarch's forthcoming Black Ops series.

employees for the primary purposes of retaining specific individuals (as cited in Pham, 2012, May 21b, para. 2). This correspondence⁸⁹ indicates a perceived opportunity to retain bonus payments from defectors leaving to join West and Zampella's new studio. Far from being treated as equal, employees were valued for their economic worth using criteria visually similar to the leaderboards structuring their game.

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10	Viece	Zennesta	Studio Head	40	16,1%	\$420,000	\$3,099,542	\$2,461,146	\$6,980,988		
11	dosot	West	Co-Studio Head/CTO	37	16.1%	\$420,000	\$3,099,842	\$2,461,146	\$5,900,989		
12	Robert	Eleid	Senior Software Engineer	37	3,1%	\$156,000	\$603,067	\$614,291	\$1,373,358		
13	Francesco	Gioliotti	Load Software Engineer	32	3.1%	\$145,704	\$603,067	\$614,297	\$1,363,066		
14	Zited	Bisha	Lood Game Designer	35	3.1%	\$120,803	\$603,067	1614,297	\$1,328,167		
15	Steve	Fukuda	Lead Game Designer	33	3.1%	\$118,030	\$603,067	\$614,291	\$1,335,388		
16	Enirfex.S	Mccandish	Lead Scripter	33	3.1%	\$115,170	\$600,067	\$614,297	\$1,332,534		
17	Richard	Dater	Lead Sollware Engineer	38	3.1%	\$164,736	\$603,067	1609,292	\$1,277,095		
18	Kerin	Akteman	Lead Game Designer	31	3.1%	\$115,610	\$800,067	\$535,197	\$1,253,874		
19	Robert	Daines	Lead Artist	35	2.9%	\$127,606	\$556,972	\$535,197	\$1,219,777		
20	Biotone	Kriegles	Art Director	63	1.7%	\$172,848	\$334,104	\$408,046	\$915,078		
21	Ead	Hammos	Sexior Software Engineer	33	2.3%	\$145,600	\$445,578	\$235,336	\$826,513		
22	Mads	Griothy	Lead Ariesator	34	1.5%	\$110,460	\$278,486	3460,547	\$849,493		
23	Asho	Messedy	Leid Arimstor	35	1.7%	\$111,406	\$322,659	\$250,546	5004,012		
24	Joel	Emsle	Load Artist	35	1.5%	\$108,014	\$278,486	\$155,695	\$543,398		
25	Chad	Grenier	Game Designer	25	1.5%	\$88,990	\$278,486	\$190,001	\$557,567		
26	Joq	Shiring	Software Engineer	21	1.5%	\$120,750	\$275,486	\$74,650	\$473,886		
27	-Se1600	Sees	Software Engineer	22	1.5%	\$120,750	\$276,435	\$74,650	\$473,886		
28	Ched	Barb	Software Engineer	28	1.5%	\$115,605	\$278,486	\$32,236	\$426,326		
29	Eric	Electric	Animator	33	1.5%	\$71,500	\$278,486	\$25,388	\$375,373		
30	Mohammad	Almi	Game Designer	29	1,5%	\$74,900	\$278,406	\$0	\$383,386		
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Figure 26. Activision's internal ranking of Infinity Ward Employees.

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⁸⁹ See Pham (2012, May 21a).

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Figure 27. A screenshot of a leaderboard taken from Call of Duty 4: Modern Warfare.

The battle between Activision and Infinity Ward is intrinsically linked to the incongruities created by neoliberal management techniques, which introduce competitive individualism into cooperative working environments. The resulting tensions are often ubiquitous, but they occasionally erupt into a crisis, as seen in the dismissal of West and Zampella. Such incidents are also connected to capitalist contradictions that neoliberalism denies repeatedly by blaming the behaviour of individuals, as opposed to considering the problems that emerge from systems. Interestingly, parallel dynamics shape the games in surprisingly similar ways, which questions whether story/design cohesion is always desirable, particularly when a neoliberal emphasis on competitive individualism leads to conflicts between players and developers.

Neoliberal Play

According to Smicker (2010), contemporary military games are closely aligned with a "new military" discourse focusing on "individual or small groups of Special Forces soldiers conducting clandestine missions" (p. 113). Initially differentiating the *Call of Duty* brand from this trend, Infinity Ward sought to highlight World War II's collaborative effort by highlighting the contributions made by multiple countries. Emphasis on cooperation is particularly evident in *Call of Duty*'s (2003) opening narrative framing: "In the war that changed the world, victory was not achieved by one man, but by the lives of many."

Call of Duty's seemingly progressive narrative framing sidesteps American nationalism, which is not necessarily surprising during an era of financialization (Martin, 2002; Krippner, 2005) in which international markets are intrinsically linked. Appropriately, neoliberalism no longer provides a nationalist basis for governing citizen-subjects: instead of organizing government around an imagined nation, states rediscover sovereignty in the "existence and practice of economic freedom" (Foucault, 2008, p.85). Expanding on this development, Ong (2006) recognizes "new forms of inclusion, setting apart some citizen-subjects, and creating new spaces that enjoy extraordinary political benefits" (p. 5). Call of Duty: Finest Hour (Spark Unlimited, 2004) provides an interesting example of this process by putting players in the role of a young Russian watchmaker.

Finest Hour opens with Alexander Sokolov heading toward the front lines in a boat packed with Russian soldiers. In the midst of his Commissar's motivational speech, a low-flying German plane opens fire. Panicking, two soldiers quickly abandon ship, prompting the Commissar to fire in their direction. Far from elite, the Russian army is in momentary disarray—a theme further investigated when Sokolov reaches the shore.



Figure 28. Russian Forces distributing weapons outside Stalingrad.

To accomplish the game's first objective, players proceed to a series of supply tents where Sokolov is initially refused a weapon. Due to limited equipment, half the men are given rifles and the others are ordered to follow with a supply of ammunition. Lacking a weapon, players follow Sgt. Puskov through a twisting section of heavily bombarded trench. Ducking, crawling, and pausing for the occasional artillery shell eventually accomplishes the task, while falling too far behind Puskov leads to mission failure. Aggressively attacking enemies also leads to death in a manner that is quite uncommon for a first person shooter from the time period.

Finest Hour's opening sequence is unique within both the genre and the franchise.

Representationally, players aid a non-player character; procedurally, an objective needs to be accomplished in order to proceed. Sokolov is not engaged in a Special Forces mission: as an everyday soldier, he is far from elite. Conversely, his supervisors are borderline fascists relying on intimidation to control their troops. As a result, the game carefully distinguishes good working Russians from their oppressive, domineering superiors. Instead of being reinforced, new military discourse is gently negotiated using new forms of inclusion and exclusion (Ong, 2006).

In an effort to showcase diversity, *Finest Hour also* introduces Tanya Pavelovna: the franchise's first female playable character. Assuming the role of Tanya, players are required to hold off the German onslaught and protect Sokolov until reinforcements arrive (Eastern Front Mission 4). Western Front Mission 4 adopts a similar strategy by introducing Sergeant Sam Rivers, the leader of an all-black tank regiment who dispels racist stereotypes by capturing the town of Tillet. Tanya and Sam both accept the military system, embracing risk in an effort to prove themselves. Consequently, discrimination is not represented as a systemic issue, but as an individual hindrance that can be overcome through hard work and persistence. Understood as an assemblage, neoliberalism works in precisely this way by increasing the odds of individual as opposed to collective action.



Figure 29. Tanya Pavelovna.



Figure 30. Sam Rivers.

Throughout *Finest Hour*, new military discourse is neither reinforced nor denied; instead, the game engages in a careful negotiation. Players assume the roles of ordinary soldiers, and the contributions of Sam and Tanya are emphasized, but the game avoids systemically critiquing the United States by ending with an American victory (Western Front Mission 7). Following this

⁹⁰ Other female characters have been introduced at the time of this writing; however, Tanya is still the only one playable in a campaign mode.

pattern, the franchise can be critical of war, but only within highly selective contexts, with collectivist unease structuring multiple depictions of the Russian military.

Representing Russia



Figure 41. The Russian army storming the beach at Stalingrad.

In *Call of Duty* (Infinity Ward, 2003), the American military is introduced using a personal diary entry. Conversely, Russia is introduced using an official order written by Joseph Stalin, which forcefully insists that soldiers who retreat will "be exterminated on site" (Soviet Campaign Mission 1). Soviet Campaign Mission 4 follows a similar pattern by distinguishing the Russian military from other allied forces. To avoid sniper fire, Junior Sergeant Alexei Ivanovich travels through Stalingrad's sewers, where the German military is broadcasting propaganda:

Comrades of the Soviet Union. We have nothing against the common soldier. It is your leaders we are fighting, who send you into battles you cannot win. Can you truly trust your own commander who shoots you for taking cover or falling back? The German army is not your enemy. Surrender and you will be treated with compassion and respect. (Soviet Campaign Mission 4)

In these examples, *Call of Duty* carefully distinguishes regular Russian soldiers from their fascist military commanders, while simultaneously collapsing fascist/collectivist distinctions.

Subsequent editions of the franchise expand upon this correlation in repeated depictions of the Russian military.

Set during World War II, *Call of Duty: World at War* (Treyarch, 2008) provides a darker take on the conflict. In Mission 10: Eviction, players assume the role of Private Dimitri Petrenko: a young Russian soldier fighting at the end of the war. The level begins with a voiceover providing explicit details of Petrenko's orders: "The Fuhrer demands all to shed their last drop of blood in its defence: the old, the young, the weak. If they stand for Germany, they die for Germany. Building by building, room by room, one rat at a time" (Mission 10: Eviction). As the mission opens, Petrenko encounters a German soldier begging for mercy; however, most of his comrades are unsympathetic. A lone dissenter favors interrogation, but the others disagree, so the German is abruptly shot.



Figure 32. A surrendering German soldier moments before his execution.

After making his way through a series of crumbling buildings, Dimitri emerges in Berlin's streets, where he finds three German soldiers with arms raised in the air. Reluctant to

deny his men revenge, the Commissar (Reznov) gives Petrenko the option of accepting their surrender, or executing the men on site. However, the game's system deliberately ignores the choice, and players must shoot the prisoners to proceed.

While *World at War* amplifies the franchise's self-reflexivity and shows the darker side of the Allied effort, the criticisms made by the game are carefully selected. The Russian military is represented as being systemically corrupt, minus a few exceptional soldiers. The American military, in comparison, is less problematic so its solders are criticized individually. Capitalism, in this sense, lacks the problems that link communist systems to fascist forms of government. This pattern also persists in editions of the franchise set in modern and future scenarios, as fascism continues to emerge in collectivist political contexts.

Modern Warfare

Set in contemporary times, *Call of Duty 4: Modern Warfare* (Infinity Ward, 2007) refreshed the franchise without deviating too far from its initial roots, as design continues to simulate hot war scenarios. No longer celebrating the Allied Forces, *Modern Warfare* pits counter terrorism units against an international network of 'ultranationalist' terrorists.

Notwithstanding attempts to insulate the franchise from contemporary militarism (Payne, 2012), globalization is still depicted as a form of freedom worth defending.

Mission 3 (The Coup) opens with a satellite surveillance system tracking the transportation of a hostage. Perspective suddenly shifts to point of view of Al Fulani, president of an unnamed Middle Eastern country. After being knocked unconscious, Fulani finds himself tied to a post supervised by an older, intensely serious European. Beckoning in the president's

direction, the captor passes a weapon to a man dressed in fatigues. Moving purposefully, Al Asad quickly points the gun and squeezes the trigger.



Figure 33. Al Fulani's Execution.

Al Fulani's death is a key catalyst for the *Modern Warfare* trilogy, but the leader's ethnicity remains a mystery. The omission is curious given Infinity Ward's previous attention to historic detail, but it is not necessarily surprising. Fulani is, first and foremost, a non-cultural, economic depiction that encourages players to identify with a pro-market rationale. By relying on new forms of inclusion and exclusion (Ong, 2006), neoliberalism often works in this way, valuing international citizens on economic as opposed to cultural criteria.

While *Modern Warfare* puts players in the position of a pro-Western, pro-market foreign leader, it also extends a neoliberal logic of exclusion that distinguishes good Russians from radical extremists. Fulani's mysterious captors are later identified as Imran and Viktor Zakhaev, leaders of an ultranationalist international terrorist organization. Because they lack cultural specificity, the extremists are differentiated via their refusal to accept the inevitability of global

economic expansion, resulting in a deeply paradoxical depiction of an international ultranationalist group that lacks a specific state.

Throughout *Modern Warfare*, neoliberal forms of inclusion also contribute to complex depictions of the former Soviet Union. This time, collectivist anxieties are negotiated through the pretense of a Russian civil war, in which some former Soviets are friendly and others pose a serious threat. As the plot commences, the Ultranationalists commandeer Russian nukes in an effort to target the United States, but the Russian government sends the launch codes needed to disarm the missiles (Mission 19, No Fighting in the War room).

Notwithstanding initial cooperation between Russia and the United States, *Call of Duty: Modern Warfare* 2 (Infinity Ward, 2009) raises collectivist anxieties to their logical conclusion when Russia wrongly responds to a terrorist attack by invading America (Mission 6, Wolverines).

Modern Warfare 3 (Infinity Ward & Sledgehammer Games, 2011) continues to distinguish good Russians from their terrorist counterparts, particularly in the case of Russian President Boris Vorshevsky. On his way to negotiate a peace treaty, Vorshevsky is kidnapped by the same group of terrorists (Mission 5, Turbulence) who staged the attack that was blamed on the CIA. Nonetheless, he is eventually rescued by an international fighting force that includes members from the United States (Mission 15, Down the Rabbit Hole). Through this treatment, citizens deemed economically valuable are afforded extraordinary political benefits, including security provided by the nations that they are presumably fighting against.

⁹¹ After the war, Price pursues Makarov to seek revenge (Mission 16, Dust to Dust) for the murder of Soap (Mission 13, Blood Brothers), his former partner and primary playable character from the first *Modern Warfare*.

Black Ops



Figure 34. Alex Mason confronting Fidel Castro.

In a similar fashion, Treyarch's franchise update relies on neoliberal forms of inclusion and exclusion (Ong, 2006) to differentiate good citizens, who embrace global markets, from fascist collectivists. *Call of Duty: Black Ops* (Treyarch, 2010) opens with players assuming the role of Alex Mason who is flanked by his partner, Frank Woods (Operation 40). Both men are CIA operatives sent to kill Fidel Castro, who is holding a young woman hostage. Luckily, Mason fires accurately, hitting Castro above the brow. But instead of running away, the woman attacks. After shooting her, Woods questions the woman's sanity, prompting Mason to explain her behavior as an example of the fanatical devotion that Castro incites.



Figure 35. The collectivist conspiracy: Castro, Menendez, and Steiner, a former Nazi.

Following this strategy of exclusionary grouping, *Black Ops* concocts a cold war conspiracy uniting Russia and Cuba with former members of the Third Reich, which corresponds with an anti-utopian pattern of equating communism and socialism with fascist behavior.

However, in a manner reminiscent of the *Modern Warfare* series, criticisms are carefully negotiated, particularly regarding the depiction of Raoul Menendez, the anti-capitalist terrorist leader.

In *Call of Duty: Black Ops* II (Treyarch, 2012) Menendez, who is otherwise known as the "Messiah for the 99%" (Activision, 2012, July 10), hacks into the United States military, turning American drones against multiple affluent nations. Menendez specifically targets G20 leaders, including the American president, in an effort to "cripple capitalist governments across the world." Via this depiction, the Occupy Wall Street movement and G20 protests are grouped alongside terrorist activities.



Figure 36. A still from the promotional trailer for *Call of Duty: Black Ops 2*.

Notwithstanding the exploitation of collectivist anxieties, there are also moments when the game's narrative sympathizes with Menendez. Mission 4 (Time and Fate) opens with players assuming the role of Menendez examining a gold pendant in the shape of a heart, as the terrorist leader watches his little sister sleeping silently. Interrupted by knocking, he tentatively opens the door to discover one of his guards staring in shock. Suddenly, a bullet passes through the man's head and soldiers burst into the room.

Menendez's capture was initiated by Manuel Noriega, a military dictator who ruled Panama between 1983 and 1989, who, surprisingly, grants him an immediate release. Pursuing Menendez's sister, players fight their way back into the compound, arriving in time to watch it burst into flames. Sympathy is subsequently encouraged on a personal level, ignoring the broader politics contributing to civil unrest. Wealth inequality is suggested later, though only briefly, when CIA agent Salazar blames an extravagant city for contributing to Menendez's support (Mission 6, Karma).

⁹² Josephina is presumed to have died in the fire ignited by Wood's grenade, but in certain endings she is revealed to have survived.



Figure 37. Manuel Noriega, from the perspective of Carlos Menendez.

Anti-capitalist empathy is further complicated by the multiple endings offered by the narrative's interactive branching structure: vengefully killing Menendez triggers widespread civil unrest, while letting him survive transforms his legacy into a joke. As a result, the game cynically reinforces neoliberal anxieties while occasionally laughing at them in a self-reflexive manner. Subsequent franchise offerings magnify this oscillation, presenting more pointed critiques targeted at individuals who embrace neoliberal ideology.

Future Wars

Call of Duty: Ghosts (Infinity Ward, 2013) is set in an alternate future in which the United States has been transformed from a global superpower into an empire in decline. Following the nuclear destruction of the Middle East, oil producing nation states join forces to form a new military alliance known as the Federation. Led by Venezuela, Brazil, and Chile, the Federation is waging a global war to gain control over the planet's diminishing natural resources.



Figure 38. A screenshot from Call of Duty: Advanced Warfare.

While *Ghosts* deviates from a pattern of collectivist fearmongering, *Call of Duty: Advanced Warfare* (Sledgehammer Games, 2014) goes even further to provide the franchise's most explicit criticism of neoliberal ideology. The campaign focuses on Jake Matthews, a former US soldier discharged for losing his arm in a combat accident. Instead of becoming an ordinary civilian, Matthews agrees to a contract with Atlas, a private military contractor operating in New Baghdad. Atlas exists as a "superpower for hire [...] more effective than the governments who hire us," according to its CEO, Jonathan Irons (Mission 2: Atlas). Explicit in this pronouncement is a neoliberal belief in the superiority of free markets compared to the inefficiencies inherent in uncompetitive government services.

After a series of events, Atlas is welcomed into the United Nations Security Council, prompting Irons to accuse it of incompetence and a corresponding state of perpetual global war. Instead of lobbying governments, Atlas seeks to eradicate the United Nations, citing the goal of securing world peace. Explicit in this representation is a particular ideological interpretation that views neoliberalism as fundamentally opposed to large governments. Rejecting this view,

assemblage approaches (Ong, 2006, 2007; Lazzarato, 2012; Gilbert, 2013) identify complex patterns in which governments can remain large to better serve the interests of economies.



Figure 39. Jonathan Irons denouncing the United Nations Security Council.

Implicit in *Advanced Warfare*'s critique is a discursive strategy stemming from confusion over what neoliberalism actually means. Via the game's depiction, Irons is represented as a free-market radical who embraces neoliberal thought wholeheartedly. Neoliberalism is thus critiqued on a conscious, representational level, but not on a procedural, systemic level. Instead, neoliberalism is represented as a problem of individual behaviour as opposed to biases inherent in systems. Conversely, Fisher and Gilbert (2013) describe how few people actually believe in neoliberalism as much as they believe in a lack of better alternatives. As a result, *Advanced Warfare* demonstrates an awareness of macro political problems, but concludes by blaming individuals. Capitalist realism (Fisher, 2007) often works in this manner by denying the contradictions that characterize contemporary capitalism and blaming systemic problems on the behavior of individuals.

Battle on the Metric Front

While *Call of Duty* campaigns demonstrate new forms of inclusion and exclusion on a representational level, a similar, more procedural process structures the governance of online play. Before *Modern Warfare* became a huge hit, big budget first-person shooters were predominantly played on personal computers. Console titles like *Halo 2* (Bungie, 2004) and *SOCOM: US Navy SEALs* (Zipper Interactive, 2002) drew impressively large multiplayer audiences; however, PC titles like *Counterstrike* (Valve Corporation, 1999), *Quake III: Arena* (id Software, 1999), and *Unreal Tournament* (Epic Games & Digital Extremes, 1999) dominated competitive online play. Reversing this trend, *Call of Duty 4: Modern Warfare* (2007) had a profound democratizing effect, bringing a fast-paced, big budget online experience to the more affordable home console. Players unable to invest in a cutting edge gaming PC could now afford one of the most advanced titles on the market.

As multiplayer grew in popularity, emerging tactics created tensions within the *Call of Duty* community. Friction was further exacerbated by multiplayer's systemic recognition of individual accomplishments at the expense of highlighting cooperative, team-based achievements. Before *Modern Warfare*'s massive success, popular shooters like *Counterstrike*⁹³ were heavily geared toward co-operative play. Conversely, although *Call of Duty: Modern Warfare* (2007) pits teams against each other, instead of limiting competition to squad vs. squad, the game provides special in-game advantages for players accomplishing a series of kills without dying.

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⁹³ According to Breslau (2011), one of the most popular competitive gaming matches of all time was a Counter-Strike 1.6 World Cyber Game finals match where team AGAiN was down 15-11 with 16 rounds required to win (para. 15).

In *Modern Warfare*, kill streaks of three receive a radar (UAV) scan that reveals the locations of enemy players, kill streaks of five result in an air strike launched at a target of choice, and kill streaks of seven produce a helicopter that rains bullets from above. Subsequent editions add customizable streaks, allowing players to combine them (stacking). In *Modern Warfare 2* (Infinity Ward, 2009), killing 25 enemies rewards a tactical nuclear strike that guarantees victory even when the team is behind.



Figure 40. A tactical nuclear strike triggered by a kill streak of 25.

Although they initially contributed to *Call of Duty*'s online popularity, kill streaks also cause problems. Arguments between teammates erupt over attacks; players quit when squad members cost them a streak. While neoliberalism views competition as "a better way of guiding individual efforts than any other" (Hayek, 1944, p. 85-86), cooperation can also cease as a result. Technically, players are supposed to be playing together, but many are more interested in earning achievements. Tensions emerging from this style of play eventually contributed to a series of death threats that were trigged by a seemingly innocuous software update.

On July 23, 2013, Activision released an update for *Call of Duty: Black Ops II* (Treyarch, 2012). While the patch fixed mainly reported bugs, community managers also made adjustments to the multiplayer mode that targeted the statistics of various weapons. Based on data derived from monitoring online play, the update reduced the AN-94 assault rifle's damage, slowed the DSR-50 assault rifle's rate of fire, and slightly reduced the Ballista sniper rifle's rate of fire (Mathes, 2013, para. 5). These changes were not well received.

In particular, a subset of the sniper community self-identifying as "quick scopers" felt unfairly targeted by the patch (Drift0r 2013, July 26). Using social media to express their frustration, some players tweeted death threats to David Vonderharr, a community manager presumed to be responsible for the changes. While many dismissed the incident as a case of trolling, the controversy exposed underlying tensions at the core of shifting player/industry relationships. Encouragement of audience participation was once touted as an industry strength that other cultural producers should follow (Jenkins, 2006). Unfortunately, a cultural climate of fear, distrust, and paranoia is on the rise. As an assemblage, neoliberalism contributes to this progression by increasing the likelihood of individualistic reactions—a process implicit in the developer's reluctance to listen to its audience, and the audience's inability to protest peacefully.

In many respects, furor over the *Black Ops II* software update is linked to the industry's embrace of metric testing, a process where design is tweaked based on the data derived from monitoring online play. Ignoring the insights of participatory audiences, metric testing embraces a neoliberal consumer welfare model where "judges and economists decide what is good for consumers" (Crouch, 2011, p. 55). Instead of protesting, disgruntled players lash out, blaming individuals instead of systems. Further contributing to these incidents are ongoing divisions between players that create increasingly divisive forms of self-identification. The next section

will expand on this point to describe how quick scoping developed into an identity that an update was presumed to be targeting.

Quick scoping

As a learned tactic, quick scoping was not designed intentionally, but rather emerged from complex assemblages of play (Pearce & Artemesia, 2009; Taylor, 2009). In *Call of Duty*'s *Quake* (id Software, 1996) based engine, players are supposed to either shoot from the hip or aim down each weapon's sight. Hip firing is generally reserved for "running and gunning," where accuracy is increased by an auto-aim mechanic. Depending on weapon selection, targeting can be quite forgiving, given the close proximity of enemies. Likewise, aiming down the sight is reserved for long-range shooting when players are usually stationary. If an enemy is far away, hip firing often misses, making it necessary to aim.

Hip firing and sight firing are supposed to be two separate mechanics, but players discovered a collusion between the two. According to Drift0r (2013a, January 18), *Black Ops II* contains a delay with regard to the transition time between hip firing and sight firing: auto-aim does not disappear until the zooming animation completes. Quick scoping takes advantage of this delay, leaving opponents vulnerable to a sniper rifle's auto-aim. To quick scope, players stop moving and line up the enemy in the middle of the screen. Aiming is activated, but a shot is fired quickly, before the animation completes. If timed properly, auto-aim ensures hits even when the bullet misses the target (Drift0r, 2013b, January 18).



Figure 51. The zooming animation delay that permits quick scoping.

As an emergent practice, quick scoping exploits a glitch in *Call of Duty*'s combat system. Detractors seize on this point, citing a lack of realism implicit in a tactic that would never work on an actual battlefield. Central to these disputes is the franchise's commitment to realism, inherent in a broader "military entertainment complex" (Lenoir & Lowood, 2002) persistent in war games. According to Huntemann and Payne (2010), "there is no media artifact that better illustrates the convergence of interactive media and national defense interests than the military video game" (p. 3).

Quick scoping undermines military realism, prompting some practitioners to differentiate themselves from traditional snipers. As the technique grew in popularity, tensions ensued. A popular definition in Urban Dictionary reflects ongoing debate:

The tactic is helpful for snipers while they're on the run, in close quarters, in place of a weaker secondary weapon. However, abuse of the tactic as a primary method of fighting has led many to view it as the "cheap" preference of noobs. Many who rely on quick scoping have furthered this stereotype by abusing it repeatedly, even going as far as

ridiculing those who snipe in more traditional fashions (often calling them "hard scopers" in a derogatory manner). (ShootThemByProxy, 2010, para. 5).

Popular online tutorials raised awareness of the tactic, prompting some players to begin self-identifying as quick scopers. Competitiveness also grew, amplifying hostilities between players racing to accomplish kill streaks. Recognizing this problem, *Black Ops* II replaces kill streaks with an updated score streak system. Experience points, which were previously gained for assisting teammates, now apply to in-game rewards. While the changes demonstrate an effort to encourage cooperative play, kill streaks are still celebrated in thousands of online videos. Titles predominantly highlight individual accomplishments, often forgetting to acknowledge teams. Fast-paced run and gun styles garner millions of views (Ali-A, 2012, November 12), but sniping traditionally necessitates a slower approach. Players often hide, waiting to ambush unsuspecting enemies who sometimes complain aggressively. The joint emphasis on speed and kill streaks keeps snipers moving, which is why it is unsurprising that a software update made some feel singled out.

In terms of design, *Call of Duty*'s multiplayer mode privileges assault rifles and submachine guns. Players like to run around, quickly racking up streaks of multiple kills. As a minority, snipers often feel discriminated against and thus defend quick scoping from accusations of cheating. According to 9lives (2014, January 25), the tactic is both fair and necessary due to the design privileging other players.

When considering the frenetic play styles that multiplayer promotes, sniper rifles need to be unrealistically fast. Before the update, the DSR-50 assault rifle was a good option for quick scoping, but the Ballista sniper rifle's faster reload time was favored (Drift0r, 2013, July 26). When the speeds of both weapons were subsequently reduced, snipers, who already felt

persecuted, suddenly became enraged. Some quick scopers interpreted the update as a personal attack, lashing out at an individual deemed responsible. For those unfamiliar with the game, the changes appear to be minimal. Overall, the DSR was only thirteen milliseconds slower, a slight delay few would notice. Snipers disagreed, citing the blistering speed of gun battles, often decided in fractions of a second. Decrying bias, some players left the game. Others were more aggressive, threating Vonderhaar's family. Reasonable snipers still oppose the patch (9lives, 2014, January 25), but the issue was never open to debate in the first place. According to youtubedude (2013, July 23), Vonderhaar did not listen to the community when applying the update, but preferred to make adjustments based on numbers, which consequently rendered the DSR-50 incapable of earning quad feeds (1:32–2:08).

Quad feeds are achievements awarded for quickly killing four enemies in a row. Speed is necessary, since bodies disappear after a few seconds. In this scenario, a thirteen millisecond delay adds up to over half a second, creating a situation where the achievement was no longer possible.

Why were quad feeds so important? According to youtubedude (2013, July 23), there is a small portion of "montage makers" in the *Call of Duty* community who like to share online videos of achievements (1:42–2:03). After the update, the DSR-50 was too slow to earn quad feeds, an achievement quite popular in videos. Drift0r (2013, July 26) reiterates this point, confirming that it is no longer possible to show off with the gun, forcing those who have become good at quick scoping to relearn the timing all over again (7:29–8:35).

Fans do many things that metrics fail to catch. In *Call of Duty*'s community, popular achievement videos generate advertising revenue. After the update, DSR-50 snipers were no longer afforded this luxury, an outcome that testing data could not have captured.

In response to criticism, Activision community manager Dan Emrich (2013, July 23) also defended the data:

Weapons are designed with pros and cons; they perform in specific ways for specific reasons. But if, in the course of millions of hours of gameplay and the data to go with it, weapons are found to be more effective or less effective than they should be to keep that performance balanced, they are adjusted. (para. 8)

Implicit in these responses is an unacknowledged emphasis on consumer welfare, a particularly confusing term considering the way it is defined in anti-trust law. While the phrase sounds like it refers to preserving the buyer's well-being, in the United States, the term is legally applied using Bork's (1978) trickle-down microeconomic definition. According to Orbach (2010), Bork equated "consumer welfare" with "the wealth of the nation" (p. 148), insisting on a definition that holds that consumer welfare is really just "economic efficiency" (p. 151).

As a result, standard anti-trust analysis equates "low prices with consumer welfare" (Orbach, 2010, p. 153), even though consumers may not prefer lower prices in all cases. From this perspective, not only is it unnecessary to respond to consumer requests, but it may also be necessary to undermine them because "consumers will eventually receive an appropriate share of the increased social wealth created by the subordination of their immediate interest" (Brodley, 1987, pp. 1038-1039). Following this logic, community feedback is no longer trusted because an audience can respond irrationally. For Whitson (2013), metric testing echoes the same belief: players are no longer trusted because numbers tell the real truth.

According to Stenros and Sotamaa (2009), the game industry is currently moving away from product-based business models toward more service-oriented models in which players continually pay for content via subscriptions, in-game purchases, and episodic releases. In

addition to avoiding piracy and limiting the second-hand market, this model also blinds itself to "aspects of game play that do not produce a tangible commodity that players are still interested in" (p. 4). Outrage over the update is a symptom of this shift: as a player activity, achievement videos were overlooked.

As a popular franchise imagining the past, present, and future of military conflict, *Call of Duty* is cohesively marked by the persistence of a neoliberal assemblage that operates through the institution of a highly competitive development environment, the narrative reinforcement of new patters of inclusion and exclusion (Ong, 2006), and a design emphasis on individual achievements. Consequently, the franchise is imbued with a capitalist form of realism (Fisher, 2009) that denies the reality of broader social arrangements, creating a situation in which ludonarrative harmony (Chapter 3) does not facilitate a more engaging play experience so much as it facilitates individualistic behavior.

While *Call of Duty* exhibits a lower threshold of political dissonance when compared to *BioShock* (Chapter 4) and *Red Dead Redemption* (Chapter 5), the franchise does not naturalize a neoliberal ideology as much as it points to conflicts emerging from transitions to societies of control (Deleuze, 1992), where games are increasingly sold as services instead of stand-alone commodities. These changes are contributing to shifting capitalist contradictions—and the resulting political struggles—coalescing around the design of simulations. In consideration of these dynamics, *Minecraft* provides fascinating insight into new opportunities for critique that arise from capitalism's inability to completely control the development of digital technology.

CHAPTER 7

Water, Sand, and Boolean Logic:

The Politics of *Minecraft*

While story/design cohesion may lead to conflicts stemming from the persistence of neoliberalism (Chapter 5), ludonarrative dissonance can provide insight into new forms of critique linked to capitalism's inability to completely control the development of digital technology. The previous discussions of *BioShock* (Chapter 4) and *Red Dead Redemption* (Chapter 5) have demonstrated how the emergence of play can unravel anti-utopian sentiments and stoke the desire for systems in which debt does not exist. Building on these arguments, this chapter uses the unique case of *Minecraft* to demonstrate how gameplay is not limited to resistance when digital design affords fresh opportunities for critique.

Humbly beginning as Markus Persson's part-time hobby, *Minecraft*'s pioneering gameplay in which players mine blocks to build structures grew from an obscure experiment into an international phenomenon. However, the game's rise in popularity was far from smooth.

Early production exhibited a tenuous commitment to broad user rights, but developers repeatedly reasserted their control, resulting in conflicts with player-run servers that developed on their

own. On a representational level, neoliberalism is present in the game's mythologizing of computer programming, which characterizes source code as a form of magic (Chun, 2011). However, instead of reinforcing this process, the design critiques it through the affordances that "redstone" provides. "Redstone" is a magical polymorphous element that can be used to create a variety of electronic devices, including computers with fully functioning capabilities. When building with it, players create and link the logic gates that high level programming languages obscure, developing a computational literacy that capitalist realism denies, primarily by reducing source code to a form of private property cut off from broader socio-technical relations.

Consequently, ludonarrative dissonance in *Minecraft* provides insight into emerging political struggles, as digital technologies are increasingly used to expand the profitability of financial institutions.

The Machines Broke Down

On May 6, 2010, financial markets opened amidst fears over potential instability caused by the debt crisis in Greece. Throughout the morning, the Dow Jones fell in a manner that was not unusual, until it began dropping rapidly at 2:42 pm, losing over 600 points in a five minute span (Lauricella, 2010, May 7, para. 2). As stocks tumbled, television analysts expressed a mixture of astonishment, confusion, and fear. Reacting to Procter and Gamble's sudden price drop, totaling 25 percent of the company's worth, Jim Cramer insisted that the price could not be real (bullmove, 5:14–6:49). Seconds later, when the stock magically regained 7 points, Cramer could only provide a technical explanation, concluding that the market's machines had "obviously broke[n] down" (bullmove, 8:20–8:35).

By 3:07 pm the market had regained the majority of the drop, but no one could explain why the "flash crash" had happened. A popular theory disseminated by mainstream media outlets blamed the crash on a single trader, who "erroneously typed an order for billions instead of millions" (Whitman, May 7, 2010). When the feeble-fingered phantom proved to be nonexistent, further analysis pointed to a host of variables. An initial joint study conducted by the U.S. Commodity Futures Trading Commission and the U.S. Securities & Exchange Commission "portrayed a market so fragmented and fragile that a single large trade could send stocks into a sudden spiral" (Lauricella, Scannell, & Strasburg, 2010, October 2). Key to the investigation's findings was the execution of a single trade using a customized algorithm, designed to sell "75,000 EMini contracts (valued at approximately \$4.1 billion)" (U.S. Commodity Futures Trading Commission & U.S. Securities & Exchange Commission, 2010, p. 2). Following this logic, flash crashes are partly linked to the rise of high frequency trading, a process where financial managers use customized software to rapidly exchange investments.

Seeking to restore investor confidence, the financial industry immediately defended the technological integrity of the system, going so far as to credit high frequency trading for contributing to the market's recovery. ⁹⁴ The United States Justice Department eventually filed criminal charges against a single rogue trader, accusing Navinder Singh Sarao of creating an order imbalance that contributed to the crash. ⁹⁵ Under neoliberalism, such responses are a frequent political occurrence: systems do not fail, but individuals certainly do.

Flash crashes clearly demonstrate capitalism's paradoxical relationship with digital technology, as programs designed to generate massive wealth suddenly contribute to massive

⁹⁴ See Simmons as cited in Corkery (2010, September 13).

⁹⁵ Goelman (as cited in Brush, S., Schoenberg, T. &, Ring, S., 2015, April 21, para. 12).

losses. Appropriately, simulations are becoming an important domain of socio-technical struggle linked to the rise of financialization (Martin, 2002; Krippner, 2005). Under neoliberalism, capitalism is attempting to control the development of software and the corresponding ways that digital devices are used. *Minecraft* (Persson, 2009) provides a fascinating example of the political struggles that emerge from this process, specifically in relation to production, representation, and design.

Lego 2.0

As a digital game, *Minecraft* is unique in terms of what players can do. While the term "sandbox" is often applied to open-world games, few provide the customization, interaction, and impressive degree of control that *Minecraft* affords. The game is played in a three-dimensional environment composed entirely of blocks, all of which can be moved into brand new compositions. Arrangements can be as simple as a tiny hut for shelter, or as elaborate as a fully functioning computer. Due to this scalability, *Minecraft* facilitates the emergence of randomized play, as opposed to a more linear gameplay experience. However, the game still includes fantasy and roleplaying elements for those who want to perform their own narratives.

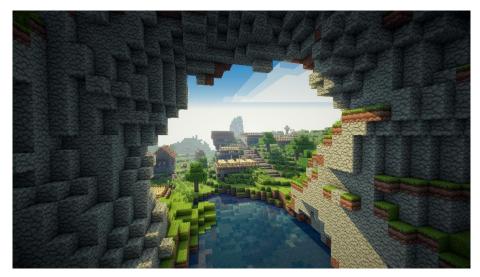


Figure 42. A *Minecraft* cave depicted in a popular fan-created wallpaper.

At its core, *Minecraft* is all about building with blocks, yet its possibilities extend far beyond Lego. Significant to the experience is the depth provided by mixing in-game elements, a process referred to as crafting. Each block is composed of a specific element, the most common being earth, sand, and stone, which can be broken down and refashioned into a wide assortment of parts. With the aid of a crafting table, parts can be recombined into a wide variety of objects – players are not limited to using the blocks in their environment; they can also create their own.

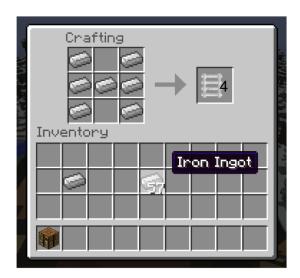


Figure 43. Four ladders assembled using a crafting table.

When considering the building options that *Minecraft* affords, redstone famously unlocks a plethora of capabilities. It is a magical substance that also has practical uses, including the simultaneous generation and conduction of electricity. Redstone, at a very basic level, can act as a generator, transmitter, or mechanism: it can be used as a power source (in blocks and torches), transmission wire (red stone dust), repeater (objects refreshing the strength of redstone signals), or piston (blocks that can move other blocks around). Advanced use involves the linking of logic gates into circuits that can be used to create computational devices, affording real programming directly within the game. Using redstone, players began to build elaborate electronic devices and

expanded the realm of what was believed to be possible. Inspired by these creations, developers responded by adding more options for using the element, thus increasing the educational capacity of the game.

Redstone's popularity created a perfect storm, drawing widespread attention to fancreated content. *Minecraft* is appropriately not known for a general playing experience so much as for the projects that players create. For these reasons, the game is often conceptualized as a platform facilitating the peer-to-peer distribution of user-generated content (Lastowka, 2012; Duncan, 2012; Leavitt, 2013) in a manner similar to Instagram, Facebook, and YouTube.

Despite growing into one of the most financially successful games of all time, *Minecraft*'s impact persists beyond commercial entertainment, particularly in terms of its usefulness for teaching a wide variety of subjects. According to Short (2012), *Minecraft* has a functional ecology that "can be used to develop the scientific literacy of players" (p.55). Echoing a similar sentiment, Brand and Kinash (2013) describe how redstone "can become a teacher's best friend by allowing models and systems to be illustrated graphically and dynamically" (p. 58). Impressively, *Minecraft* is also being used in an international project launched by the United Nations, where youth participate in urban development by redesigning their neighborhoods (Owen, 2012, September 5).

Minecraft's distinctiveness is also not limited to its cultural impact, given that the game's production was radically unique. As the franchise developed, the popularity of user-generated content raised complicated monetization issues, eventually leading to convoluted player/producer relations. Early development initially demonstrated a tenuous commitment to broad user rights, allowing popular community members to earn revenue from their content; however, things changed when for-profit servers developed controversial free-to-play models.

The following section provides insight into these changes by charting the franchise's development and corresponding oscillation between supporting audience participation and reinstituting developer control.

Open Development?

For a game that would grow into a billion dollar franchise, *Minecraft*'s launch was inconspicuously brief, with the first alpha version appearing for free in a TIGSource forum (Persson, 2009, May 17). After the demo was met with positive feedback, Persson announced plans for a final retail version via his blog (2009, June 10). Players willing to pre-purchase were promised a steady stream of updates, while players already content with the prototypes were permitted to keep playing for free. Taking a cue from free/open source software production, Persson also created his own terms of service agreement: "Once you've bought the game, it's yours. Do whatever you want with it!" (2009, June 10, para. 5).

Minecraft was produced using a self-described "open development" process that Persson explained in an interview with *Game Developer* (2011):

From the start, I was very open about Minecraft's development. I talked about it on forums, primarily those of TIGSource, and told people what I was doing and where I wanted to take the game. Fairly soon, we set up an IRC channel (live interactive text messaging) for Minecraft for more rapid discussion, and after a while, I set up a Tumblr blog in order to get information out to more people more easily.

Discussing with the players and listening to suggestions, I learned a lot about how the game could be played and what directions were more interesting to others. Usually, people played it in a completely different way than I did. (p. 26)

Incorporating opinions derived from play testing has always been an important aspect of game development, but *Minecraft* opened up this process to its broader fan community. Persson continuously incorporated fan feedback from a variety of sources, including live discussions, emails, and informal polls, ⁹⁶ allowing players to have significant input into multiple stages of the design process. Most games go through multiple prototypes before retail, but AAA developers traditionally prefer to guard development, limiting public information to meticulously planned demos and marketing campaigns. Persson did the opposite, letting non-paying users keep free prototypes in exchange for providing feedback.

Giving players access to free prototypes would be dangerous in the case of traditional linear games; luckily, *Minecraft* is far from straightforward. By generating random environments procedurally, the game eliminates the problem of accustoming players to repetitive level designs because each world is distinct. A steady stream of updates also provided new building opportunities, allowing for the development of complex fan creations. Correspondingly, *Minecraft*'s community expanded alongside the game's development, with fans sharing new information after each update.

In addition to a flexible sales model, *Minecraft* was also aided by flexible coding, which split the game into two programs: a client application running on the player's computer and a server application hosting the world created. This type of design facilitates large-scale collaborations hosted on unofficial servers allowing players to connect from all over the world. Subscription-based MMOs are programmed in a similar manner, but server applications are closely guarded by the companies developing the games.

⁹⁶ See Persson (2010, February 6).

By letting players host their own servers, Persson nurtured the emergence of a vibrant modding culture; however, the strategy was fraught with tensions. Persson was initially afraid of a modified version becoming more popular than his official Mojang release, so he created a social contract with his fans. Server customization was permitted, but only if players agreed not to distribute modified versions, effectively limiting all client and server downloads to official files (Persson, 2009, July 8). Mods written to customize appearances were encouraged, and mods altering key game components were frowned upon, although Persson did little to enforce his rules, citing his belief "in the user's right to [...] modify games they've bought" (as cited in Handy, 2010, para. 34).

Implicit in Persson's social contract was a desire to maintain control of the project while still incorporating input from the game's community. A similar individualist/collectivist tension persists in free/open source software development, despite widespread recognition of collective production. According to Coleman (2013), hacking communities redefine originality, instead of eschewing it, along functional and aesthetic parameters (p. 118). Following this logic, popular player mods have influenced subsequent *Minecraft* releases, with some code being included in official updates.⁹⁷

Minecraft's open development process was immensely successful, but the process also contributed to multiple conflicts, including attacks from fans upset over the direction of the project. After selling a significant amount of copies, Persson was able to quit his job and begin working on Minecraft full time. The process necessitated the founding of a production company, called Mojang, which naturally led to development delays. While most fans were understanding of Persson's hectic schedule, fan interference also caused Minecraft's official server to go down.

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⁹⁷ See http://minecraft.gamepedia.com/Horses and http://minecraft.gamepedia.com/Pistons.

The interruption was caused by a Distributed Denial of Service (DDOS) ⁹⁸ attack launched on October 20, 2010 by several angry fans who were upset over a perceived lack of promised updates (Crescente, 2010).

While the DDOS attack passed quickly, other problems were already brewing. As
Minecraft grew in popularity, running a dedicated server became a popular pastime.

Communities flourished, and the labour needed to maintain them increased dramatically,
prompting popular hosts to start soliciting donations from regular users. Recognizing an
opportunity, entrepreneurially-minded players began exchanging in-game content for monetary
support, eventually implementing free-to-play sales models to develop full-time businesses.

As a sales strategy, free-to-play models rely on micro transactions to generate revenue from a variety of sources, including the purchasing of in-game currency or additional content. Writing on his blog, Persson (2011, October 24) expressed distaste for the process, criticizing developers for exploitative design that results in games more akin to "a slot machine than half-life 2" (para. 2). His dislike would eventually create a rift in the *Minecraft* community and contribute to the franchise's sale.

While Persson initially endorsed the development of for-profit severs, the company began to receive complaints about donations being exchanged for in-game items. In response, Mojang updated its terms of service agreement, ⁹⁹ specifying what owners were and were not allowed to charge for. Instead of restricting all sales, players were permitted to receive payment for access and cosmetic items, as long as purchases had no effect on play (Owen, 2014, June 12,

⁹⁸ According to McLaurin (2011), attacks generally rely on information overload occupying a server's resources to prevent it from replying to other users (p. 216): "A real world example would be running up to the cashier at a super market and paying in small coins, counting every single one really slowly, then finding out at the end you didn't have enough in the first place" (Persson, 2010, October 21, para. 1).

⁹⁹ See https://mojang.com/2014/06/lets-talk-server-monetisation/.

para. 8). Unsurprisingly, server owners were upset and proceeded to protest loudly, defending existing sales models as the only means of ensuring economic viability. According to Gregory Bylos (2014, n.d), Mojang's new terms of service were poised to "kill innovation in the multiplayer space" (para. 17).



Figure 44. Subscription fees for *Mineplex*, a for-profit player run server.

Central to this debate was a dispute over the terms of the original end user license agreement. For Persson (2014, June 14), making money was always frowned upon, except in the case of YouTube videos. Bylos (2014) countered this position, citing an old terms of service agreement that granted permission to create and sell plug-ins (para. 5). As multiple server owners threatened to shut down their communities, Mojang was accused of selling out, prompting Persson to tweet his frustrations: "Anyone want to buy my share of Mojang so I can move on with my life? Getting hate for trying to do the right thing is not my gig" (10:11 PM, 16 Jun 2014). Three months later, Microsoft acquired Mojang for 2.5 billion dollars, and *Minecraft* became the property of the biggest software company in the world. At the time of this writing, the game's future remains in flux, and free-to-play sales models continue to operate.

In addition to fueling anxieties among *Minecraft* fans, Microsoft's purchase demonstrates capitalism's paradoxical relationship with the development of digital technology, given that a self-described open development process created a lucrative brand. According to Coleman

(2013), hackers tend to eschew broader political relations, preferring to focus on a narrower software politic (Coleman, 2013, p. 159). While such strategies lead to the widespread adoption of open source development practices, they can also obscure relations to broader sociotechnical processes in a manner not unlike capitalist realism (Fisher, 2009). For Nafus (2014) the paradigm relies "on a steadfastly closed epistemological frame that not only constitutes technology as apart from persons, but shapes this separatability in such a way that code is more than just outside the realm of the social: it is downright freed from it" (p. 681).

While open, Minecraft's development was definitely not free from the shifting technological contradictions that characterize contemporary capitalism, as players and developers continue to fight over the franchise's future. Following this line of thinking, Chun (2011) criticizes free/open source software movements for assuming that software does not already participate in structures of knowledge and power while simultaneously ignoring the institutional and technical "structures needed to ensure the coincidence of source code and its execution" (p. 21). *Minecraft* contributes to this process, though only on a representational level, by depicting redstone as a mystical, programmable substance. Understood as a form of magic, redstone is ontologically separated from broader socio-technical processes, until players begin using it to construct digital devices. For redstone computers visually critique the political amplification of source code by revealing the broader socio-technical infrastructure through which information flows when computation occurs. In this context, ludonarrative dissonance can provide a powerful political critique that emerges from the affordances provided by game design. To expand on this point, it is necessary to describe how the affordances of redstone diverge from *Minecraft*'s loose narrative structure by constraining programming into a practice that is very slow.

Water, Sand, and Boolean Logic

As a key element introduced to expand *Minecraft's* constructive possibilities, redstone was curiously absent from Persson's initial cliché fantasy vision (Persson, 2009, June 14), which eventually grew to incorporate a loose narrative structure. Survival mode narratively adopts Turner's (2008) frontier mythology (Chapter 5), with players struggling to tame a wild landscape by mining for precious resources and crafting powerful tools. In keeping with a philosophical aversion for collectives, players encounter indigenous mobs seeking to destroy their creations, and a host of supernatural entities guarding the depths of each mine. Consequently, *Minecraft's* survival mode simulates a hostile wilderness and challenges individuals to overcome it.



Figure 45. Fan art depicting *Minecraft*'s survival mode.

Conversely, construction requires guidance from *Minecraft's* player community, as most versions of the game were distributed with relatively few instructions. ¹⁰⁰ Throughout *Minecraft*'s development, a steady stream of software updates added new possibilities and hinted vaguely at

 $^{^{100}}$ It should be noted that the PlayStation and Xbox versions contain in-game guides. On PC, players are forced to consult the game's community for guidance.

what could be discovered, creating a recursive loop in which fans pooled information and pushed the limits of what could be built. Redstone's development was contingent on this process as Mojang introduced new building capabilities designed to push the limits of projects already created by fans.



Figure 46. A glowing block of redstone.

In January 2010, matthew102000 started "The logic gate *Minecraft* computer thread", a conversation dedicated to fan creations implementing the basic building blocks of computation (Matthew102000, 2010, January 18). Logic gates, upon being linked together, form integrated circuits, like the computational infrastructures etched onto microchips. When the thread began, construction was limited to simple devices, like adders¹⁰¹ and seven-segment digital displays,¹⁰² but as experiments they hinted at more complex designs that could be possible with additional features. Players began to tinker with Boolean logic to create unconventional logic gates using available in game elements including earth, sand, and stone. The limitations quickly became evident: connecting gates was cumbersome, and carrying an output into an input proved to be exceptionally difficult. Snowman (2010, January 21) suggested a diode and CanadianOverlord

 $^{{\}color{blue}^{101} See \ \underline{http://www.minecraftforum.net/forums/minecraft-discussion/creative-mode/classic-creative-mode/369848-\underline{deadlys-simple-adder}}$

¹⁰² See https://www.youtube.com/watch?v=k2m-foPXSps

(2010, January 21) proposed a transistor, but both required extensive terrain to function. Recognizing the setback, Jacob hypothesized a possible solution, imagining a wire connecting outputs to inputs (para. 2). Wires did not exist inside *Minecraft's* cliché fantasy realm, but Persson (2010, January 20) read the thread and became inspired by the problem. Nearly six months later, the hypothesized "wire" became a reality, after an update inviting players to "dig deep" (2010, July 3, para. 2).

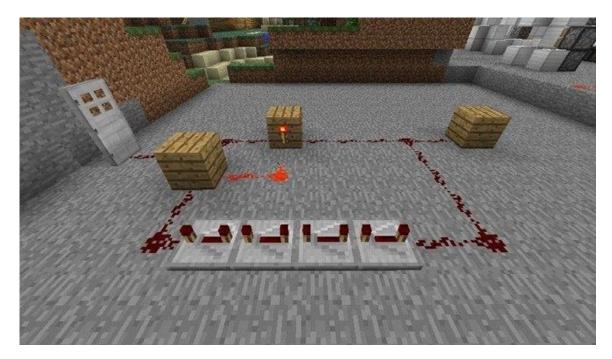


Figure 47. A simple circuit built using redstone.

On a representational level, the presence of a polymorphous electromechanical substance caught some off guard, as electricity is often absent in fantasy worlds. Persson defended the changes by alluding to his fascination with the study of cellular automata (July 7, 2010), an area of research known for viewing computational algorithms as life-creating forces. According to cellular automatists, every material and immaterial system stems from a comparatively sophisticated computation (Wolfram, 2002, p. 4); instead of being entangled in complex

sociotechnical assemblages, programming literally creates all known systems. ¹⁰³ Intriguingly, *Minecraft*'s software works in this way by generating a unique landscape for every in-game world. Default settings do this randomly, but players can also manipulate the function by inputting an algorithmic "seed" into a world generator. Code is subsequently represented as a pseudo-biological force that gives life to each *Minecraft* world.



Figure 48. Minecraft's seed generator.

By depicting redstone as a mystical, electromechanical substance, *Minecraft* presents source code as a form of magic completely cut off from broader socio-technical processes.

According to Chun (2011), the aforementioned depictions effectively erase the processes of execution, and the broader institutional and technical "structures needed to ensure the coincidence of source code and its execution" (p. 21). Such representations correspond with a capitalist form of realism; however, they also conflict with the aesthetic creations that *Minecraft*

¹⁰³ Unsurprisingly, this argument has not taken the scientific community by storm. According to Weinberg (2002), such speculation, likely stemming from Wolfram's background in programming, is "akin to a carpenter looking at the moon and supposing it is made of wood" (para. 21).

affords, specifically when players program slowly by building the infrastructure through which information flows when computation occurs.

Redstone reveals the messy, complicated processes that high level programming languages conceal by forcing players to build their own computational infrastructure.

Consequently, *Minecraft* affords the creation of slow technologies that eschew efficiency, as a means of aesthetically privileging the contemplation of what an object is. According to Hallnäs and Redström (2001),

The design should give us time for reflection through its slow form-presence and invite us to reflect through its clear, distinct and simple material-expression. It is a combination of simplicity in material with a subtle complexity in form focusing on time as a basic element of composition. (p. 210)

Minecraft's implementation of a slow technology philosophy provides fresh opportunities for critiquing neoliberalism, specifically by forging new aesthetic connections between computational infrastructures and broader socio-technical assemblages. Contradicting an industrial push toward smaller, faster, legally protected digital devices, redstone devices provide the visual experience of witnessing computation in action, as demonstrated by Ben Craddock's Minecraft computer.

Slow programming

On September 28, 2010, Ben Craddock uploaded a video to YouTube of a project built in *Minecraft*. ¹⁰⁴ In under ten minutes, the clip tours an arithmetic logic unit (ALU): a basic building block of computation found in all microprocessors. Due to their micro nature, contemporary

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¹⁰⁴ See https://www.youtube.com/watch?v=LGkkyKZVzug

material processors cannot be demonstrated visually; luckily, Craddock solved this problem.

Built using redstone, the logic unit is impressively large, stretching for many miles. The design is far from pragmatic, but it clearly privileges the contemplation of infrastructure over the speed and ease of use.



Figure 49. Ben Craddock's Arithmetic Logic Unit—one of *Minecraft*'s first computers.

Craddock's ALU is not only visually impressive; it also provides a unique opportunity to witness the process of computation in action. Humbly demonstrating simple addition, Craddock calculates 2+1 in binary notation (0:55–2:16) by manually walking through his ALU. Performing the operation is cumbersome, requiring the placing of multiple torches; however, instead of compressing time, the delay adds it, providing Craddock with an opportunity to showcase the processor's bus.

Further demonstrating the educational advantages of slow programming, Craddock proceeds to reveal the aesthetic wonders of ripple carry adding (4:18–7:35), a process that contemporary micro-processors render invisible. Once again, numbers are entered by walking

through the ALU and placing torches manually. Upon reaching the output, a result is already visible, but Craddock thinks quickly, negating one of his control bits. Seconds pass and the redstone lights up, visually demonstrating an answer rippling down.





Figure 60. Craddock's answer, in binary notation, flowing through redstone dust.

Privileging form over function, Craddock's ALU visually demonstrates the technical infrastructure through which information flows when computations are performed; an experience that was previously rare given the size and speed of contemporary computer processors. As a result, redstone affords the creation of slow technologies that intermix logic and aesthetics: "key factors in creating something that can serve as an incitement for reflection" (Hallnäs & Redström, 2001, p. 209). Instead of magically appearing on a calculator display, addition is rendered visually, creating time for contemplating the seemingly innocuous processes that functionalist design obscures. Programming is no longer separated from sociotechnical processes: information flows visibly through material and immaterial systems.

As Hallnäs & Redström (2001) explain, "Slow technology is not about making technology invisible, but about exposing technology in a way that encourages people to reflect and think about it" (p. 201). The neoliberal amplification of source code works in the opposite way by obfuscating the technical infrastructure on which computation relies (Chun, 2011). For Craddock,

there is not just a disconnect between regular people. Even programmers just usually take it on faith that they click a button and now all the stuff they wrote can be run. [...]There's definitely this class of machines we have now that are tantamount to magic[...] and that's just where it stops and you don't say...ok...how does this work. What are we really doing? (as cited in Owens, 2012, 1:01:25–1:02:40)

By revealing unacknowledged socio-technical processes, Craddock's ALU creates new aesthetic experiences that visually ritique the neoliberal externalization of information. In this sense, although redstone computers are immaterial, they provide a political opposition that is very real.

Minecraft affords fresh critical opportunities stemming from emergent socio-technical relations, but capitalist realism refuses to acknowledge these realities. Due to this problem, it is necessary to turn to affordance theory and subsequent iterations of the concept's use. Developed by Gibson (1977, 1979), affordance theory offers a radical ecological ontology that challenges human-centered theories of perception by insisting that humans and animals develop an understanding of environments by interacting with present objects. In the theory of affordances, organisms cannot be defined separately from their habitats, nor can habitats be defined separately from organisms: meaning is co-determined, with objects playing a part by permitting certain actions and prohibiting others.

Affordance theory grew into a branch of ecological psychology that is still widely debated. One area of argument is concerned with pinning down the ontological nature of the concept in relation to what counts specifically as an affordance (Jones, 2003). In *The Psychology of Everyday Things*, Norman (1988) introduced affordance theory to design communities, describing affordances as "the perceived and actual properties of a thing; primarily those fundamental properties that determine just how the thing could possibly be used" (p. 5).

Norman's book was very popular, prompting digital designers to incorporate the concept, but expanded usage led to theoretical accusations of misuse (Norman 1999, 2008). The main criticisms are concerned with maintaining real world/virtual world distinctions, in addition to different perspectives on what learning actually entails. According to Norman (1999), digital designers misuse the label of affordance when referring to design elements described more usefully as constraints, otherwise known as artificial cultural conventions limiting the way an item can be used (Norman, 1988, p. 55). Instead of naturally inspiring action, constraints require

learning and social consensus, while an affordance is supposedly perceived without prior knowledge.

Within a utilitarian design context, this distinction is practical: when affordances are taken advantage of, instructions are no longer needed. In contrast, game studies uses the term in an educational context (Gee, 2007; Lindroth & Bennerstedt, 2007; Lindroth, 2010, 2013), refusing to distinguish the perception of affordances from the act of acquiring knowledge. Alongside assemblage approaches to the study of emerging online communities (Pearce & Artemesia, 2009; Taylor, 2009), digital affordances are understood as being real, situating redstone computers as actual examples of slow technologies that provide powerful political critiques.

Under neoliberalism, digital technologies increase speed, leading to demands for increased productivity. Slow advocates critique this dynamic, encouraging steadier pacing in multiple areas of life. Speed is not rejected but questioned, pointing to areas where reduction is beneficial (Honoré, 2004, p. 4). Contradicting an industrial push toward smaller, faster, and legally protected devices, *Minecraft* computers participate in this process by being big, open, and slow, while also providing the visual opportunity to witness computation in action. Instead of disappearing from sight when code is compiled, programming is transformed into a sociotechnical, ecological relation, one inherently more complex than a magical thing.

According to Jameson (2005), the crisis of socialism has created a cultural break in which "traditional utopian production seems to have come to a halt" (p. 216). Such changes are not surprising, for the shifting contradictions that characterize contemporary capitalism are creating new socio-technical struggles that coalesce around the design of simulated systems. Fortunately, *Minecraft* profoundly demonstrates the utopian impulse's migration into digital

design through ludonarrative dissonance's (Hawking, 2007) intrinsic link to the desire for alternative techocultural relations. Correspondingly, popular gaming franchises demonstrate capitalism's inability to hold complete control over the development of digital technology, particularly when games symbolically reinforce neoliberalism while simultaneously simulating its absence.

CONCLUSION

Over the course of this dissertation, I have investigated four popular digital game franchises and their unique relationships with neoliberalism. To build a methodology, part I situated this study within assemblage approaches to play before proceeding to apply the ontology to neoliberalism and digital game criticism. Part II investigated four popular digital game franchises using the aforementioned framework to highlight political correlations and contradictions. Based on these case studies, the complex and contradictory relationship between neoliberalism and digital games can be further conceptualized as involving three circuits of struggle: the production of commodities, the representation of identities, and the design of simulations.

In keeping with the above model, *BioShock, Call of Duty*, and *Red Dead Redemption* were all developed under quarrelsome production conditions. While *Minecraft* was produced through a more open process, the formula was not without political tensions. Representationally, the narratives of all four franchises are tinted by a neoliberal political lens, with *Call of Duty* demonstrating tight political coupling due to the emergence of individualistic styles of play. In a related manner, *Bioshock* and *Red Dead Redemption* are narratively structured around the anxieties produced by debt, although both games rely on a political dissonance where the state is

systemically absent. In comparison, neoliberalism contributes to *Minecraft*'s narrative mythologizing of coding's mystical strength; however, instead of reinforcing this process, design critiques it through the affordances that redstone provides.

In light of these case studies, gaming provides a fascinating insight into the contradictions that characterize 21st century capitalism, particularly in relation to the rise of financialization (Martin, 2002; Krippner, 2005) and transitions to societies of control.

Unfortunately, there has yet to be an organized labor movement, and more diverse perspectives need to be reflected through play. Still, awareness of both problems is increasing, and a variety of new practitioners are beginning to create games. In terms of new developments, simulation is also becoming a site of critique and resistance, although neoliberalism still has the ability to influence play. Appropriately, gaming typifies the shifting state of popular digital culture through the persistence of long-standing struggles and the ongoing development of new conflicts.

As mentioned in the introduction, this dissertation can only survey a cross-section of digital game culture, as the industry changes rapidly in response to new technologies. Taken together, the case studies discussed focus on different aspects of play, reflecting the fact that each franchise is popular in different ways: *BioShock* is often praised for exquisite audiovisual design; *Red Dead Redemption* is known for scope and depth; *Call of Duty* is set apart by its multiplayer mode; and *Minecraft* is valued for fan content. To better conceptualize these differences, the next section describes the journey that this project had to take before concluding with some final thoughts on the politics of play.

From Hegemony to Utopia

When this dissertation began, the interdisciplinary study of neoliberalism was ascending in popularity; luckily, the concept proved to be more than a passing fad. At the time, Shaw (2010) was also applying critical theory to game studies while criticizing the theoretical tendency to distinguish game culture from a broader mainstream culture. Armed with a clear understanding of a gap in the scholarship, I set out to fill it as best as I could, only to discover that it was not only wider than anticipated but also piquing the interests of other scholars.

Like most graduate students, I initially believed that I was working on a unique project until I discovered existing scholarship asking similar questions. Harvey's (2005) brief history of neoliberal hegemony served as an integral starting point, as an ideological approach conceded nicely with my background in cinema and media studies. However, I soon discovered that Barrett (2006) had already written a highly cited ideological piece on neoliberalism and *Grand Theft Auto: San Andreas* (Rockstar North, 2004), while Baerg (2009) had composed a slightly different critique based on governmentality. Both papers made interesting points, but I was struck by a lack of attention to game studies literature, so I sought to develop a more nuanced approach. Meanwhile, the scholarship on neoliberalism was also changing in response to interdisciplinary debates that pointed to the limitations of hegemonic methodologies. Such critique prompted me to tweak my theoretical paradigm by turning to assemblage perspectives (Ong, 2006, 2007; Lazzarato, 2012, 2015; Gilbert, 2013).

At this point, I was deep into my first *Call of Duty* case study, and the research was taking a lot of time. A mass media hegemonic approach could be applied to campaign narratives, but the game's community was clearly more enthralled with online play. *Call of Duty*'s multiplayer mode fit nicely within a neoliberal managerial paradigm, but this approach was more procedural than discursive. Players were also politically divided over emergent styles of play,

which were viewed as unrealistically cheap when compared to actual combat. Unfortunately, my current theoretical window was ill-equipped to provide insight into these phenomena, so I returned to contemporary neoliberal theory and anthropological approaches to play.

Fortunately, MMO¹⁰⁵ scholars were adopting assemblage theory (DeLanda, 2006; Deleuze & Guattari, 2009) alongside neoliberal scholarship (Ong, 2006, 2007; Lazzarato, 2012, 2015; Gilbert, 2013). This approach provided a more flexible means of conceptualizing in-game politics, particularly in terms of highlighting contradictions. By this stage in the project, I was deep into *Red Dead Redemption*, where I discovered an intriguing quirk: protagonist John Marston was figuratively dripping in debt, but players were always debt-free. This realization made me contemplate the ways in which popular games are often designed to simulate the consistent acquisition of in-game wealth, even when characters are depicted in circumstances where they are presumed to have little money. Such disconnects, conceptualized by Hawking (2007) as ludonarrative dissonances, characterize many playing experiences; however, existing political criticism had yet to account for them.

It was at this point that the dissertation began to find its legs, resulting in even more research that needed to be done. Bolstered with a fresher theoretical perspective, I read everything that I could find on debt, ludonarrative dissonance, and digital game criticism (Chapter 3). Meanwhile, in the midst of all this tweaking, the industry was undergoing change, predominantly due to the financial success of independently produced games. My next case study was slated to be an analysis of *Mass Effect* (BioWare, 2007), but *Minecraft*'s rise in popularity was too intriguing to ignore. As a unique case, *Minecraft* posed a challenge, as there was no shared play-through experience to speak of; instead, the game's success was rooted

¹⁰⁵ Massively multiplayer online games.

primarily in the popularity of player-generated content. For these reasons, Chapter 7 exemplifies the shifting state of digital play by discussing Ben Craddock's *Minecraft* computer.

After adopting an assemblage framework, the dissertation reached a crossroads in terms of which final direction it would take. I could emphasize the encroaching logic of neoliberal corporate capitalism spreading through production, representation, and design, or opt for a less cynical utopian processual approach. I chose the latter due to the limitations of a Marxist passive audience perspective, particularly in relation to *Minecraft*'s extremely active fanbase. In doing so, it became necessary to theorize the ways in which popular games can be said to transcend, resist, and even critique neoliberalism—a point frequently acknowledged but woefully under investigated in existing critical scholarship.

Conceptualizing the utopian impulse implicit in popular games proved to be the most challenging and rewarding aspect of this project. In order to better articulate the politics of redstone, I drew upon affordance theory (Chapter 7). Levitas' (2013) *Utopia as Method* proved to be an equally indispensable means of connecting the desire for grace to the systemic absence of debt (Chapters 4 & 5). While I hoped for a more formally balanced analysis, utopian desire is difficult to discuss, as it can often be affectively emergent and unconsciously non-discursive. Political representation is comparatively easier to illustrate, which is why a large portion of part II is devoted to critical analysis.

Beyond popular franchises, neoliberalism is influencing gaming in a variety of ways that turn the medium into a key site for political struggles, both old and new. As mentioned in Chapter 7, *Minecraft*'s popularity has a lot to do with the sharing of fan content, which can achieve millions of views on sites like YouTube. In addition, Markus Persson sold Mojang to Microsoft because his company did not have the capacity to regulate player run servers,

including some that were implementing free-to-play sales models. At present, free-to-play games are a hotly contested issue and "Let's Play" videos are becoming widely popular, creating a situation in which both topics exhibit evolving tensions regarding the design of simulated systems.

Due to the lack of an agreed-upon critical vocabulary, a significant portion of this project has been dedicated to developing an ontologically clear methodology, with the goal of offering a sharper means of conceptualizing resistance. As such, this dissertation is intended to provide a clear methodological starting point that can be further refined though practice. From a utopian methodological perspective (Levitas, 2013), play cannot be separated from the desire for alternative political systems, though such processes are always provisional, dialogic, and reflexive. As a result, further criticism necessitates ongoing attention to the shifting contradictions that characterize contemporary capitalism, so that fresh methodological frameworks can be built on the shoulders of existing theories.

Shifting Sites of Struggle

As the above case studies and examples show, the ongoing cultural ascendancy of digital games is characterized by increasing political tensions, particularly in relation to the production of commodities, the representation of identities, and the algorithmic design of simulations. However, most academic game criticism stemming from formal or political traditions tends to emphasize internally consistent meaning. Nevertheless, the discussion is expanding both inside and outside of academia, with critics and scholars considering a "diverse range of game making practices" (Parker, 2014, p.171). Given these developments, game criticism will undoubtedly

undergo further change in response to the influence of blogs and the popularity of online "Let's Play" videos.

At present, bloggers are promoting a more diverse cross-section of games, but clearer methodologies are needed for more in-depth inquiry. Hawking's discussion of ludonarrative dissonance has been widely influential, although the term has also been misinterpreted and dismissed. From this perspective, the video game blogosphere is helping to advance a new critical vocabulary, but it also contains voices that are far from progressive. ¹⁰⁶ Fan writing is important, but it can also be ephemeral and opaque; therefore, academics still have an important role to play.

Beyond the scope of this project, the politics of digital games will undoubtedly continue to change, creating further jostling over the direction of the medium. Today, gaming is rising in popularity, creating new dream jobs for a select few and poor working conditions for many more. Political tensions are also rising, not only between producers and fans but increasingly between players. Consequently, neoliberalism continues to linger due to the persistence of capitalist realism, resulting in both the intensification of old battles and the creation of new conflicts. Some fights will be lost, but others can still be won, as change is often slow. Another digital and material world is still possible, if more players are willing to accept the actual political economic alternatives that can emerge from gaming systems.

¹⁰⁶ A blog post also played an important role in stoking the hatred that continues to circle around #gamergate.

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