"ONCE UPLOADED, THIS CANNOT BE UNDONE": OSMOTIC STUDIOS' ORWELL AS DYSTOPIAN SIMULATION OF PARTICIPATORY SURVEILLANCE.

"Once uploaded, this cannot be undone"
JUSTIN WIGARD

Taking place over the course of five days in an alternate version of the United States from April 12, 2017 – April 16, 2017, Orwell (Osmotic Studios, 2016) places the player in the role of a state operative monitoring suspects related to an antigovernmental terrorist plot through ORWELL: a digital security system that archives items of interest ("datachunks") related to ongoing investigations. At first glance, the game draws on George Orwell's Nineteen Eighty-Four in two ways: directly referencing the author's name, and creating a similar narrative concerning dystopia and surveillance. As play progresses, players move from reading public information to listening in on private conversations to invading personal computers, cell phones and other private devices. With this information, the player must make significant narrative decisions concerning which datachunks to upload to the authorities, how invasive is too invasive and ultimately, who to implicate in the originating terrorist plot, warranting critical investigation into the relationship between the game's surveillant play, the mode of surveillance in Nineteen Eighty-Four, and contemporary surveillance practices.

This essay will explore generic connections between George Orwell's *Nineteen Eighty-Four* and a recent video game spiritual successor, Osmotic Studio's aptly-named *Orwell*, as a means of understanding the player-character-role dynamic in the simulation genre. I argue that by participating in an ongoing confrontation with societal surveillance as grounded in *Nineteen Eighty-Four*, *Orwell* (Osmotic Studios, 2016) operates as a critical dystopia warning of the sociopolitical stakes in the governance of social media through the participatory concept of play. Here, play is invoked as a mode of participation in *Orwell* (Osmotic Studios, 2016), wherein the player's actions and choices concerning truth, privacy and reporting have narrative consequences. Because the player inhabits the role of a governmental security agent monitoring information sharing on the internet, the player enacts power through a surveillant assemblage, regulating the populace through digital infiltration. This power is enacted critically through play, forcing the player to confront the tension between digital privacy and digital security by reflecting on the pervasive and prevalent nature of social media in the digital age. Ultimately, it will be shown that the ludic and narrative elements of *Orwell* (Osmotic Studios, 2016) work in tandem to empower the player through participatory surveillance, encouraging an awareness of contemporary surveillant practices.

A working foundation of the dystopia is necessary to understand the generic connections between *Nineteen Eighty-Four* and *Orwell* (Osmotic Studios, 2016). Erika Gottlieb (2001) defines dystopia by its

relational status to its originating counterpart: utopia. She finds that utopia is "a well-run model of an ideal state of justice, [with] its nightmarish reversal as a systematic miscarriage of justice" being the dystopia (Gottlieb, 2001, p. 13). She argues that a key defining trait of the dystopia is to serve as a warning "of terror and trial in a world that is but should not be" (Gottlieb, 2001, p. i). This offers valuable insight into dystopic traits of literature (specifically George Orwell's *Nineteen Eighty-Four*), yet Gottlieb's conception of dystopia does not extend beyond literary novels to video game spaces, warranting further extrapolation. Building upon Gottlieb's foundation, Marcus Schulzke (2014) argues that dystopias reveal problematic aspects of society, highlighting "consequences of bad policies, flawed organizing philosophies, and unsustainable ways of life" manifest in fictional societies (p. 323). However, Schulzke (2014) highlights the unique power that stems from virtual dystopias, which "rely on a combination of engaging narrative elements and gameplay mechanics which come together to create dynamic worlds in which players are active participants" (p. 315). Because of this combination of play and narrative, dystopic video games allow for a uniquely critical mode of participation, which engenders players to critically reflect on the virtual world they're playing in.

Surveillance theory finds its roots in the image of the panopticon, a striking concept in its original construction. Jeremy Bentham (1995) conceived of a circular security building containing an indefinite number of open prison cells with "a spot from which, without any change of situation, a man may survey, in the same perfection, the whole number, and without so much as a change of posture, the half of the number, at the same time" (p. 43). For Bentham (1995), then, "the persons to be inspected should always feel themselves as if under inspection, at least as standing a great chance of being so, yet it is not by any means the *only* one," with the Panopticon deriving its strength from the apparent omnipresent surveillant gaze of the singular inspector within the structure (p. 43-44). Michel Foucault (1979) looks to the Panopticon as a theoretical underpinning to disciplinary societies, in which surveillance acts as a mode of discipline, and therefore, as a mode of power. Under his theory of panopticism, Foucault (1979) argues that the state maintains control over the populace through surveillance, holding the threat of disciplinary power over the governed subjects even if such power is not publicly used or directly asserted (p. 215). From the Foucauldian perspective, then, surveillance imbues the observer with a latent power over the observed.

To understand the role that surveillance takes in *Orwell* (Osmotic Studios, 2016), one must trace its prevalence in the game's antecedent, George Orwell's *Nineteen Eighty-Four*. Telescreens are ubiquitous in Oceania, appearing in citizens' homes, on the streets and in the workplace. These telescreens embody the Foucauldian notion of panopticism: because the telescreen "received and transmitted simultaneously...there was of course no way of knowing whether you were being watched at any given moment" (Orwell, 1949, p. 3). Further, members of the Party are encouraged to surveil one another, with children spying on adults and shopkeepers reporting any anti-Big Brother news to the Party. Here, the watcher of the Panopticon is not a single person, but an entire state. Surveillance is integral to the Party's control over its people, coming to a head when Winston is captured and made aware of the depths of the Party's surveillance. Often noted for being emblematic of Foucault's panopticism,[i] *Nineteen Eighty-Four* also serves as a foundational dystopian novel, as Gottlieb (2001) notes that the totalitarian Party only came to power due to the people's compliance, acceptance, even justification of said ruling power (p. 79). She emphasizes the strategy of warning endemic to the dystopia novel, pointing to Oceania as a signpost of warning "so that we realize what the flaws of our own society may lead to for the next generations unless we try to eradicate these flaws

today" (Gottlieb, 2001, p. 4). These similarities in dystopian warning derived from *Nineteen Eighty-Four* influence *Orwell*'s (Osmotic Studios, 2016) narrative, particularly through the prominence of surveillance within the novel.

These themes of surveillance found in Nineteen Eighty-Four become the mode of play in Orwell (Osmotic Studios, 2016), with players taking an active role in assisting a similarly-named "Party" in monitoring potential threats to the nation-state through the computer system, ORWELL. According to Johan Huizinga (1949), play is an essential function of culture, particularly as the primary mode of interaction within video games, as he articulates the idea that "all play means something" through analyses of play in war, poetry, philosophy and law (p. 1). Because play is such a pervasive and nebulous concept, Eric Zimmerman (2004) suggests that "Play is the free space of movement within a more rigid structure. Play exists both because of and also despite the more rigid structures of a system" (p. 159). Therefore, one key facet to note about the power of play as a ludic construct is the specific form it takes and the structure that it housed within; in the case of Orwell (Osmotic Studios, 2016), play manifests through in two ways: simulation and role-playing. Sherry Turkle (1995) envisions the simulation as a "sophisticated social criticism...its goal the development of simulations that actually help players challenge the model's built-in assumptions...as a means of consciousness raising" (p. 71). In other words, simulations act as spaces for players to reflect on ideological assumptions. Multiple levels of simulation emerge in Orwell (Osmotic Studios, 2016), from "Timelines" (the standin for Facebook) to the text-messaging conversations between in-game suspects, not counting the ORWELL system itself as a system simulating governmental security monitoring.

As mentioned earlier, this form of simulation works in conjunction with another key component of the game: role-playing. When the player takes on the role of a security monitor, the player has to create a name and choose a profile picture, but is never shown what they truly look like. Orwell's (Osmotic Studios, 2016) feature of the unseen protagonist marks it as a first-person video game where the player sees only that which the character sees, corresponding to an increase in the level of immersion. This is compounded by the governing mode of play: simulation. Because the player's mouse movements correspond directly to the character's mouse movements, "Interactive and narrative elements merge in the actual experience and realization of the interactive event inside the game world" of Orwell (Nitsche, 2008, p. 65). In typical first-person video games, the player is able to move through the game world in a physical manner, jumping over objects or visibly aiming down a gun's sightlines at an enemy. Orwell (Osmotic Studios, 2016) instead allows movement digitally through the space of the internet. Instead of physically retracing one's steps to old areas, the player digitally returns to old spaces of the internet to uncover new information, revisiting the Party's website on the Safety Bill or Cassaundra Watergate's 'Timelines' page for new updates, all without physically moving their character avatar who is presumably seated at a computer, much like the player. Majid Yar's (2014) concept of the internet as a space embodied by its virtual utopias and dystopias bears analysis here. Drawing upon the concept of the social imaginary of Cornelius Castoriadis and Charles Taylor, Yar (2014) finds that a society's modes of governance and existence manifest in its cultural production, and extending this further, looks to the internet as a space of this cultural imaginary (p. 2). To understand a society's views or fears in the 21st century, then is to examine its views of the internet as cultural imaginary, which is distilled in simulated form through Orwell (Osmotic Studios, 2016). He finds the virtual utopia not as a restoration of the past, but the product of human logic and technological development, an "outcome of human contrivance"

and social engineering (Yar, 2014, p. 8). This conception of the virtual dystopia is narrower than Schulzke's, emphasizing "the loss of privacy and autonomy," individual alienation, and the perils of online terrorists or thieves (Yar, 2014, p. 58). In this regard, the player role-plays as a security monitor simultaneously taking part in a utopic technological development and a dystopic invasion of privacy through this simulated exploration of the internet.

Orwell (Osmotic Studios, 2016) enters into a tradition of dystopian video games, with precursors like 2K Games' Bioshock (2007) and Naughty Dog's The Last of Us (2013), alongside the upcoming We Happy Few (2017) from Compulsion Games. Bioshock (2K Games, 2007) has recently garnered much critical attention as a dystopic video game, due in no small part to its immersive first-person ludic elements and its narrative of an underwater utopia gone awry with the advent of individualistic power and a lack of ruling laws. William Gibbons (2011) cites the popular music in *BioShock* (2K Games, 2007) as reflective of the game's atmospheric environment, commenting on the dystopian narrative through ironic lyrics and affective melodies, whereas Rowan Tulloch (2009) finds *BioShock*'s (2K Games, 2007) manipulation of play (in which it is revealed that the player's choices, movements and actions are not wholly their own) that renders the game a "uniquely postmodern dystopia" in its ludic machinations (n.p.). However, the dystopia takes on new significance in *The Last of Us* (Naughty Dog, 2013), Gerald Farca and Charlotte Ladevéze (2016) argue, due to its affective aesthetic "which might result in a call to action in the real world," an actionable aesthetic that marks The Last of Us (Naughty Dog, 2013)as a critical dystopia (p. 1). Farca and Ladevéze (2016) distance the critical dystopia from the classical dystopia (Nineteen Eighty-Four, Yevgeny Zamyatin's We, or Aldous Huxley's Brave New World) "in that it leaves its diegetic characters room for contestation and revolt against the dystopian regime," particularly finding interesting purchase within critical dystopian video games that leave hope within the agency of the player (p. 3). Thus, critical dystopia is marked by a final opportunity for revolt, and an air of utopian hopefulness amidst the narrative element, generic traits that are embedded in Orwell (Osmotic Studios, 2016). To further understand whether players are presented with such an opportunity, and what the significance of an opportunity might be, one must examine the primary dystopic trait within Orwell (Osmotic Studios, 2016): the theme of surveillance.

Surveillance has evolved and transformed due to significant advancements in technology since Foucault's initial foray into surveillant power, warranting new interventions in surveillance theory. With the shift of data moving from the textual to the digital, a new mode of surveillance emerges not explicitly hingent upon discipline (Foucault) or prison structures (Bentham), but instead driven by data. Roger Clarke (1988) terms this mode "Dataveillance," highlighting the "systematic use of personal data systems in the investigation or monitoring of the actions or communications of one or more persons," built around the visible and invisible data trails people leave through commercial activities, biometrics and all things internet-related (p. 499). ORWELL is built on a foundation of dataveillance, monitoring not just suspects' activities but building a portfolio-like database concerning every major and minor interaction or piece of information connected to the suspect.

Within *Orwell* (Osmotic Studios, 2016), players must make careful decisions about which piece of information to upload by following characters' data trails through dataveillance. ORWELL was created under direction from the Safety Bill, "a collection of safety-centered laws and statutes created with the ultimate goal to protect the freedom of The Nation's citizens" in a "simplified, sped-up process of taking investigative measures against criminal suspects and their prosecution." In other

words, the Safety Bill allowed for, and authorized creation of, ORWELL. The Reader tool allows the player to pore through, mostly, public pieces of information, tracing the paths that characters and suspects leave as they traverse digital spaces. Early in the game, the player's advisor on ORWELL the system gives verbal affirmation for factually correct information (birthdates or addresses), and chides the player when inaccurate or false information is uploaded (say, that a character's address is in "Rainbows and Clouds"). These intermingled and connected databases of information (social media sites, blog posts, public websites and private communication channels) embody David Lyon's (2001) concept of leaky containers, databases that are porous enough to allow the free movement of data. Anders Albrechstlund (2008) extends this leaky container concept to illustrate the pervasive nature of surveillance networks, as private organizations (law enforcement) examine the movement of leaky data in public spheres (social networking). Each choice the player makes in Orwell (Osmotic Studios, 2016) involves interacting with these leaky containers through database selection and monitoring, particularly through the Reader tool. This method of watching others' online activity, uploading datachunks and researching is the most benign form of participatory surveillance the player engages in as it involves taking advantage of freely available information databases and placing them into one's own secure container of the ORWELL system. Before uploading a datachunk to ORWELL, the player is warned that "Once uploaded, this cannot be undone," suggesting a tighter security measure than those of the public's leaky containers.

Yet, this same permanence to the uploading process raises the ethical stakes of both the system and the game. Rather than placing the protagonist in the role of the observed, as in the case of *Nineteen Eighty-Four*'s Winston, *Orwell* (Osmotic Studios, 2016) provides the player with panoptic power. Stakes are raised from simple data collection to ethical dilemma when the player is asked to determine a character's involvement with a terrorist bombing attack, and if so, to what degree. Symes reminds the player that "What's in ORWELL is [always] in ORWELL, and acting upon it is mandatory," no matter the ramifications. Foucault's notion of panopticism comes to fruition as the player takes on the role of warden through this participatory surveillance, though not to the degree that Foucault discusses. As this bombing takes place in a fictional city called Bonton, a small leap in letters might remind players of a similar historical bombing: the Boston Marathon bombing on April 15, 2013. *Orwell* (Osmotic Studios, 2016) calls attention to the societal connections between the city-wide manhunt in the aftermath of the Boston Marathon bombings and the Bonton bombing at Freedom Plaza, particularly through the similarity in location naming and in dates (the fictional bombing takes place on April 12th, 2017, eerily similar to the very real bombing date of April 15th, 2013). The simulation aspect of play becomes evermore critical given the player's role as both monitor and judge.

Albrechtslund (2008) challenges the prevalent thought that surveillance always disempowers, instead emphasizing that certain models of surveillance are imbued with potential for empowerment. Because social networking finds its roots in sharing and making information public, it affords social networking users the opportunity to participate in their own surveillance, a trait which Albrechtland (2008) finds can be empowering (n.p.). This argument finds purchase in *Orwell*, as it becomes apparent that one member of the rebellious organization, Juliet, uses her social network to expose problematic aspects of ORWELL the program, rather than succumbing to the surveillant state she finds herself in. Juliet purposefully posts incorrect or faulty information in Episode 2 to her social media profile in order to call attention to morally circumspect practices of surveillance. Juliet's actions begin to question the ethics of ORWELL: just because one has access to leaky containers, should one take

advantage of said freely available information? further on surveillance tools within video games, T.L. Taylor (2006) finds that participatory surveillance allows players to work more collaboratively in massively-multiplayer online role-playing games (MMORPGS), such as *World of Warcraft* (Blizzard, 2004 – present). With certain modifications (mods), players can monitor the status of other members in the given party, affording them more information than the game's limited user interface normally offers through additional powers of surveillance. In this fashion, modes of self-monitoring and co/surveillance "intersect with playfulness [but] within the context of games and play, being watched (or watching)" constitutes entertainment for games, articulating ideals found in the play mechanics of *Orwell* (Osmotic Studios, 2016) (Taylor, 2006, p. 329).

In contrast to the Reader function, the Listener tool allows the player to listen in on synchronous conversations between at least one suspect and another person via text messaging, phone calls, or email, enacting this play through the feeling of observing (or in this case, listening) to others.. Each of these modes of communication are intended to be used within the private sphere, meaning that in order to "Listen" in on these conversations, the player must breach the privacy of the individuals involved. These intrusions have been clandestine in nature, as one such suspect learns of the invasion during an interrogation procedure, loudly exclaiming "Have you been spying on me, you dirty little Government Fucker?!" However, the player's immediate advisor, Symes, notes that all information gathered through ORWELL is "acting based on the Safety Bill. It's all legal and official." Returning to the surveillant concept of leaky containers, the Party shows that they must view most data containers as leaky enough to observe, track and investigate. It is also impressed on the player that all datachunk uploads are at their discretion, such that the authorities act on whatever information is uploaded, factual or otherwise. This comes to fruition later in Episode 3, during an observed conversation between a hacker and the primary suspect of the Bonton bombings: the hacker mentions that they are going to hack the government's website, and by the end of the conversation, have actually done so. If the player uploads the datachunk after the fact, they are chided for uploading information "when it's no longer useful" and for sitting on time-sensitive information. Returning to Juliet's manipulation of digital information, this exposes a problematic aspect of ORWELL: there is no discretion of truth, as all information is considered 'factual' until it is proven incorrect. Deduction comes to the forefront of the play experience in Episode 2, as players must decide where the next terrorism attack will take place: a government building or a local university campus. If they upload the correct information, the bomb is defused and the authorities are one step closer to catching the rebellious group, Thought; the other option leads the authorities further away from the group at the expense of human lives.

Lastly, in Episode 3 of *Orwell* (Osmotic Studios, 2016), players gain access to the Insider tool which allows them to remotely hack personal computers and mobile devices if they have the "UID" of a device, or its unique identification code. The aforementioned Safety Bill requires that all electronic devices created in the Nation have a UID, and to access one, the "device must be running and have an online connection." Players must use this new tool to investigate suspects' private devices to obtain information not shared on the internet; in other words, players must ultimately open the once-leaky containers of secure data, violating any sense of digital privacy in the process. With this UID, players gain access to any files on the suspect's desktop or device, including saved emails, photographs, browser history and personal documents. However, at certain points in the narrative, the player learns that suspects often have security applications and programs that notify and even defend against outside intrusion. Clarke (2005) notes that even if no action is taken by agencies, "the mere suspicion

by the public that 'they' are watching reduces people's freedom to think, discuss, argue, and act" (p.10). In the same vein, if one of the suspects, Nina, learns that she is being surveilled, she begins panicking about her lack of options as the Party's agents begin pursuing her, leading to a violent shootout where Nina is killed.

Much like Winston in *Nineteen Eighty-Four*, the protagonist/player of *Orwell* (Osmotic Studios, 2016) is given the illusion of freedom and choice within a dynamic social system, only to have that illusion shattered towards the end of the narrative. For Winston, this freedom is carefully crafted by Big Brother and the government, "that for seven years the Thought Police had watched him...no physical act, no word spoken aloud, that they had not noticed, no train of thought that they had not been able to infer" (Orwell, 1949, p. 175). Within the video game, Juliet reveals that all of her machinations and manipulations have been for one purpose: to expose the flaws of ORWELL, specifically to the player. In *Nineteen Eighty-Four*, there is no potential for rebellion as Winston's mind is broken down and converted; conversely, Juliet's revelatory act not only places the potential for rebellion in the unnamed protagonist but with the player in *Orwell* (Osmotic Studios, 2016). This integral juncture between narrative and ludic play entrenches *Orwell* (Osmotic Studios, 2016) in the realm of the critical dystopia, as the player is left with power over the narrative. Schulzke's (2014) conception of the critical dystopia factors in here, as *Orwell* (Osmotic Studios, 2016) offers players the opportunity for rebellion through narrative choices reflected in the games multiple endings.

At the end of *Orwell* (Osmotic Studios, 2016), depending on what narrative choices players have made throughout the game, they can earn as many as four different endings, particularly based on the three fundamental actions offered to players concerning ORWELL: a) incriminate the rebellious party, Thought; b) incriminate the Secretary of Security and Advisor of ORWELL; or c) incriminate themselves. Each of these options corresponds to a different ending to the game, similarly resulting in unique personal and organizational ramifications.

Upon further analysis, these endings also correspond to varying degrees of utopia and dystopia, in equal measure. Perhaps the worst ending, if there is a metric, is titled "A Half-Hearted Attempt," in which players attempt to incriminate the senior official, Delacroix, but fail to gain access to her phone; this results in the unintended consequence of turning in all members of Thought as terrorists, with ORWELL being announced publicly, and with the player being promoted to the role of ORWELL advisor. Similar to the ending of *Nineteen Eighty-Four*, the player is left without hope for rebellion, as the power of surveillance remains with the Party and ORWELL is publicly revealed as successful due to the capture of Thought, and the protagonist is ultimately compliant with the Party's institutional brainwashing. The most utopic ending, however, involves incriminating oneself by manually uploading datachunks of the player's own involvement with ORWELL, particularly once the player confirms that the Party was monitoring their own record. This triggers ORWELL's mandatory follow-up investigation; in doing so, the system of ORWELL is shut down by the government. The Party suffers a tremendous blow to their power while Thought becomes a major political party, challenging the totalitarian leadership of The Party. Regardless of the player's chosen ending, the game's final opportunity for rebellion is the same: the player is confronted with their personal record and must choose which one piece of information to upload to an ORWELL-like system. This implies two points of significance: that systematic surveillance may never truly perish, but that the player has individualistic power through controlling what information they upload to the internet.

Orwell's (Osmotic Studios, 2016) narrative, while following the fictional account of a contracted security agent, mirrors the narrative of Edward Snowden in 2013. A former National Security Agency (NSA) contractor, Snowden disclosed vital information concerning the NSA's mass surveillance procedures, including programs such as the BOUNDLESSINFORMANT program and PRISM collection software (Electronic Frontier Foundation, 2013, n.p.). In an interview, Snowden revealed the driving motivation behind his public release of information was that he couldn't "in good conscience allow the US government to destroy privacy, internet freedom and basic liberties for people around the world with this massive surveillance machine they're secretly building" (Greenwald, 2013, n.p.). Much like the characters within Orwell (2016), Snowden had an online moniker, "The True HOOHA" that he used in his digital communications, and like the narratives of Cassandra, Juliet and Abraham, Luke Harding (2014) reports that "in 2009, the entries fizzle away. In February 2010, TheTrueHOOHA mentions a thing that troubles him: pervasive government surveillance" (n.p.). Returning to Yar's (2014) concept of the cultural imaginary, it can be surmised that Orwell (Osmotic Studios, 2016) allows players to consider the ethical ramifications of government surveillance in contemporary society, and that contemporary society may fear such pervasive hierarchical surveillance, much like in Nineteen Eighty-Four. Further, Snowden exposed the section of the Patriot Act, that the NSA relied on the "business records' provision of the Patriot Act, 50 USC section 1861" in order to carry out its record-gathering and domestic surveillance of cell phone information and associated metadata (Harding, 2014, n.p.). This vague facet of the Patriot Act resonates most strongly with the exploitation of the Safety Bill in Orwell (Osmotic Studios, 2016), drawing more parallels between the breach of ethics by the NSA and the digital invasion of the ORWELL system.

With the prevalence of social media users, digital modes of communication and infrastructure of invisible data trails left all throughout the internet, the play of *Orwell* (Osmotic Studios, 2016) affords users the opportunity to simulate choices and ramifications of dystopic surveillance: they're able to place themselves in the virtual position of a whistleblower like Snowden, and decide what they might do. In this fashion, *Orwell* (Osmotic Studios, 2016) is elevated from a simulation of data invasion and digital privacy into a simulation of national surveillance and the ethics of whistleblowing, a simulacrum of Snowden's dilemma in 2013. Returning to Gottlieb's (2001) definition of dystopia, *Orwell* (Osmotic Studios, 2016) serves as a reminder and a warning of recent trends in governmental surveillance and the invisible, insidious nature of surveillant power.

However, what may be more indicative of the societal fears that *Orwell* (Osmotic Studios, 2016) taps into are independent companies like Dataveillance (not explicated connected to Clarke's theory of dataveillance, but a corporation that puts the theory into practice nonetheless). Dataveillance's position towards net neutrality and open source intelligence is that "Social media and mobile applications are unexploited sources of data" for law enforcement agencies to "proactively patrol and investigate crime." Given the existence of outside contractors like these that work with law enforcement agencies as well as the reality of online hackers that target databases of corporations and banks, danah boyd (2007) notes that fears of digital information are governed by four characteristics: persistency of data stored online; easy searchability of this stored data by anyone; that data can be replicated anywhere in any context; and that the audience of the internet is invisible, potentially including anyone with internet access (p. 2-3). *Orwell* (Osmotic Studios, 2016) confronts these fears through the simulation of a contracted security corporation, one in which the player actually plays

through each of these four characteristics. The player mines suspects' social data, even old and archived blog posts that were thought to be deleted; searches stored data using three different modes of monitoring; replicates that data by uploading it to the ORWELL system; and is primarily invisible and untrackable due to the clandestine nature of ORWELL's tools.

Ultimately, *Orwell* (Osmotic Studios, 2016) exposes players to the fragility of their perceived digital privacy and security through simulation, suggesting that dystopian times certainly on their way, if not already happening. Like other critical and virtual dystopias, the video game offers a means of empowerment to the player through this critical awareness. Though the player doesn't control of a government-affiliated digital security system, players have access to similar levels of technology in the very device they're using to access the game: the computer. By calling attention to the surveillant forces at work within the very real spaces of the internet through simulated play, *Orwell* (Osmotic Studios, 2016) suggests rebellion through awareness: being mindful of one's internet practices, of what one puts online and of the precarious balance between digital privacy and digital invasion. Just as George Orwell's *Nineteen Eighty-Four* has been noted for since its publication in 1949, *Orwell*'s (Osmotic Studios, 2016) critiques systemic surveillant power and governmental control, calling for individuals to take control of their digital practices and rights, before the internet becomes a true digital panopticon.

References

2K Games. (2007). Bioshock. [Xbox 360], Boston, USA: 2K Games.

Albrechtslund, A. (2008). Online social networking as participatory surveillance. *First monday*, 13, 3, n. pag. Retrieved May 6, 2017

Bentham, J., & Bozovic M. (Ed.). (1995). The panopticon writings. New York, NY: Verso Books.

Boyd, D. (2007). Social network sites: Public, private, or what? *Knowledge tree* 13, pp. 1-7. Retrieved May 30, 2017.

Clarke, R. (1988). Information technology and dataveillance. *Communications of the ACM*, 31, 5, pp. 498-512. Retrieved May 30, 2017.

Clarke, R. (2005, 06). Have we learnt to love big brother? *Issues*, 71, pp. 9-13. Retrieved May 30, 2017.

Compulsion Games. (2017). We happy few. [Xbox One].

Electronic Frontier Foundation. (2013, June 8). BOUNDLESSINFORMANT: Describing mission capabilities from metadata records. Accessed May 6, 2017.

Farca, G. & Ladavéze, C. (2016). The journey to nature: *The last of us* as critical dystopia. *Proceedings of the 1st International Joint Conference of DiGRA and FDG*. Dundee, Scotland. Retrieved May 30, 2017.

Foucault, M. (1995). *Discipline and punish*: The birth of the prison. (A. Sheridan, Trans.) New York, NY: Vintage Books. (Original work published 1975).

Gibbons, W. (2011). Wrap your troubles in dreams: Popular music, narrative, and dystopia in Bioshock. *Game studies* 11, 3, n.p. Accessed May 30, 2017.

Gottlieb, E. (2001). *Dystopian fiction east and west: Universe of terror and trial*. Kingston, Ontario: McGill-Queen's University Press.

Greenwald, G. (2013, June 6). NSA collecting phone records of millions of Verizon customers daily. *The Guardian*. Accessed 6 May 2017.

Harding, L. (2014, Feb 1). How Edward Snowden went from loyal NSA contractor to whistleblower. *The Guardian*. Accessed 6 May 2017.

Huizinga, J. (1949) Homo Ludens: A study of the play-element in culture. London: Routledge.

Lyon, D. (2001). Surveillance society: Monitoring everyday life. New York, NY: McGraw-Hill Education.

Naughty Dog. (2013) *The last of us.* [Playstation 3], San Mateo, CA: Sony Computer Entertainment.

Nitsche, M. (2008). Video game spaces: Image, play, and structure in 3D game worlds. Cambridge, MA: The MIT Press.

Orwell, G. (1949). Nineteen eighty-four. New York, NY: Houghton Mifflin Harcourt.

Osmotic Studios. (2016). Orwell. [PC], South Melbourne, Victoria, Australia: Surprise Attack.

Schulzke, M. (2014). The critical power of virtual dystopias. *Games and culture*, 9, 5, 315-334.

Taylor, T. L. (2006). Does *Wow* change everything? How a pvp server, multinational player base, and surveillance mod scene caused me pause. *Games and culture*, 1, 4, 318-337.

Tulloch, R. (2009). Ludic dystopias: Power, politics and play. *Proceedings of the Sixth Australasian Conference on Interactive Entertainment*. New York, NY: ACM Publications.

Turkle, S. (1995). Life on the screen: Identity in the age of the internet. New York, NY: Simon and Schuster.

Yar, M. (2014). The cultural imaginary of the internet: Virtual utopias and dystopias. New York, NY: Springer Publishing.

Zimmerman, E. (2004). Narrative, interactivity, play, and games. In N. Wardrip-Fruin & P. Harrigan (Eds.), *FirstPerson: New media as story, performance, and game* (pp. 158-166). Cambridge, MA: The MIT Press.

[i] See also: Strub, Tyner, Yeo