

ALWAYS ALREADY MONSTERS—*BIOSHOCK'S* (2007) 'SPLICERS' AS COMPUTATIONAL OTHERS

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Abstract: *The article explores the manufacturing of monsters in video games, using the case of the influential 2007 first-person shooter BioShock, and 'splicers'—its most numerous, zombie-like enemies. I combine two methodological perspectives on the 'manufacturing' of splicers by analyzing [a] the title's developer commentary and other official paratexts to trace the design of splicers, and [b] the game's embedded narrative to reconstruct the diegetic backstory of splicers. I argue that video game enemies, including splicers, are 'computational others', who may appear human on the level of representation, but whose behavior is machinic, and driven by computational algorithms. To justify the paradoxical relationship between their human-like representation and machinic behavior, BioShock includes an elaborate narrative that explains how the citizens of the underwater city of Rapture were dehumanized and transformed into hostile splicers. The narrative of dehumanization, explored following Haslam's dehumanization theory (2006), includes [a] transforming splicers into atomized creatures by depriving them of political power and social bonds, [b] creating fungible and interchangeable enemies through splicers' masks and bodily disintegration, [c] justifying splicers' blindness to context and their simplistic behavior by portraying them as mentally unstable addicts. The article concludes that all video game enemies are inherently monstrous, and that critique of video game representation should focus on how games fail to make monsters human, rather than how games render humans monstrous or dehumanized.*

Keywords: *monsters; video games; first-person shooter; BioShock (2007); zombies; otherness; computational other; hauntology.*

Introduction

The backstory of the 2007 hit game *BioShock* (2K Boston 2007a) goes like this: In an alternate history mid-1940s, industry magnate Andrew Ryan set out to do 'the impossible'. He built a city on the ocean bed, called it Rapture, and invited industrialists, artists, and scientists to populate it. His dream was to create a paradise where man's ambition would be unchecked and free from government regulation, taxation and intervention. The biggest scientific achievement of Rapture was the discovery of ADAM, a substance that unlocked gene splicing, allowing humans to gain special powers, packaged as retail products called *plasmids*. In 1960, the game's protagonist, a silent character named Jack, enters Rapture after his plane crashes into the sea, and tries to help a man named Atlas, who gives him instructions over a portable radio. By that time, the city is already in ruins and embroiled in a plasmid-fueled civil war. Players set out to reconstruct the larger narrative of Rapture's demise piece by piece and explore whatever is left of the once prosperous city.

Early in the game, you wander through a dark hallway, and happen upon a distressing scene (see figures 1a–1b): You see a shadow of a woman with a baby carriage, and the

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woman sings a lullaby. For a moment, it feels as if you have encountered a fellow human. However, as you make your way toward her, you find out that the woman is pale and disfigured; and you see that there is no baby in the carriage—just a revolver. The woman starts attacking your character, screaming incoherently. You have no choice but to bash her with a wrench. The illusion of humanness has been shattered. Like most survivors in Rapture, that woman is a ‘splicer’—a decaying and deranged, monstrous ex-human. It is not only her tattered clothes and weird grin that gives it away, but also her relentlessly aggressive, repetitive behavior, which clearly puts her into the category of video game enemy, or more generally, a *computational other*—a non-human algorithm-driven agent.



Figures 1a–1b. The ‘mother’ splicer’s shadow on the wall (left), and her attacking the player (right). She is rendered using the ‘Lady Smith’ model, also seen in figure 2c and described in more detail below. Screenshot from *BioShock Remastered* (2K Boston/Blind Squirrel Entertainment 2016); taken by the author.

This special issue examines how media texts produce, define and ‘manufacture’ the other, the enemy, and the monster. Out of media forms and genres that build on antagonism and othering, first-person shooter (FPS) video games like *BioShock* are perhaps the most striking, as they rely on the mechanics of aiming, shooting, and eliminating large numbers of opponents. As Aarseth wrote of *Doom* (id Software 1993), one of the genre’s progenitors, “[t]he player must combat an endless stream of monsters, demons and ‘former humans.’ [...] The choice of actions is simple: explore, destroy, and protect yourself” (Aarseth 1999: 36–37). Although *BioShock* contains a significantly more sophisticated narrative and more intricate mechanics, it adheres to the genre’s basic principles. As succinctly summed up by Aldred and Greenspan (2011: 487), the majority of *BioShock*’s gameplay “consists of winning space by killing splicers and lumbering ‘Big Daddies’ while navigating the leaky tunnels and ruined businesses, dance halls, surgeries, and bars of Rapture’s grotesquely hedonistic cityscape”. To power up, the player collects ADAM, produced and carried by Little Sisters, girls specifically genetically modified for this task, who are guarded and protected by the Big Daddies, massive creatures in diving suits.

In video games, opponents like splicers and Big Daddies pose as challenges and objects of player agency, and therefore play an important role in the progression and segmentation of gameplay (see Zagal/Fernández-Vara/Mateas 2008). To morally justify

the carnage, enemies tend to be portrayed as monstrous—either metaphorically in the case of terrorists or enemy soldiers, or literally in the case of zombies, demons, and other fantastic creatures (see Asma 2012 [2009]; Kocurek 2015). The question of who the enemy is and how they are portrayed has consequently become a prominent subject of video game scholarship (Šisler 2014; Glas 2015; Valeriano/Habel 2016; Pötzsch 2017 [2015]). Critically examining war-themed shooter games, Pötzsch (2017 [2015]) has introduced the concept *character filter* to show that enemy combatants in FPSs tend to be uncharacterized and anonymous. He treats the character filter as a part of war games' *selective realism*—a mode of representation that is audiovisually realistic but selectively filters certain aspects of war and its impact on society. In an analysis of action adventure games, Glas (2015) has pointed out that enemies tend to play the role of *generic expendables*, who serve as cannon fodder for player action. Both analyses point to the fact that certain genres of video games heavily rely upon dehumanized enemies. Previous studies of video game representation have argued that the dehumanized portrayal of enemies draws from existing stereotypes, and relates to existing power configurations of race, class, and geopolitical power (Brock 2011; Šisler 2014; Valeriano/Habel 2016). In this article, I want to use the example of *BioShock* to offer a complementary point of view—to explore how monstrosity and dehumanization of video game enemies derive from their computational nature. The study follows up on my previous research on video game monsters, which has similarly emphasized their functional and mechanical aspects (Švelch [Jaroslav] 2013; 2018).

Dehumanization and Computational Otherness

Dehumanization can be defined as a “denial of full humanness to others”, which often leads to moral justification of indifference or violence to such others (Haslam 2006: 252). Haslam's influential model of dehumanization sketches out its two possible trajectories, each contrasting selected features of humanity to a non-human counterpart. The first trajectory is of *animalistic dehumanization*, which transforms a civil, refined, moral, rational and mature ‘full’ human into an uncultured, coarse, amoral, irrational and childlike animal. The other trajectory is of *mechanistic dehumanization*, which turns an emotionally responsive, interpersonally warm, cognitively open, agency-possessing, and deep ‘full’ human into an emotionally inert, cold, cognitively rigid, passive, interchangeable and superficial automaton (Haslam 2006).

While Haslam does not mention monsters explicitly, the growing body of monster scholarship (see Cohen 1996; Mittman/Dendle 2013) suggests that dehumanization can also result in representations of *monstrous* others. While embodying fears and anxieties of cultures and societies, monsters are—similarly to animals or machines—constructed as entities that “fail to fulfil[l] the criteria of human subjects” (MacCormack 2013: 293). Carroll has influentially operationalized monsters more specifically as beings that are “not believed to exist now according to contemporary science”, and that are “threatening and impure” (Carroll 1990: 27–28). The impurity rests upon being “categorically interstitial, categorically contradictory, incomplete, or formless” (Carroll 1990: 32). Represented as disintegrating, genetically altered ex-humans, splicers are also good candidates to be called monsters—although, as we will see, not all scholars of *BioShock* would agree.

There are affinities between the three categories of non-humans—monsters, machines, and animals. Luckhurst (2015: 8–9) argues that computers or systems “become zombified because they are marked by loss of agency, control or consciousness of their actual state of being: they are dead but don’t yet know it, living on as automata”. Brooks’ parodic *Zombie Survival Guide* compares a zombie brain to “a computer programmed to execute one function [...] until its power source eventually shuts down” (Brooks 2003: 15; see also Perron 2018). This affinity owes in part to the lack of humanity in both monsters and computers, and pertains not only to computers as technological artifacts, but also to computationally simulated beings, who may likewise appear zombie-like.

Users of digital media tend to interact with artificial agents that employ computational algorithms and databases. I will refer to these as *computational others*. This category includes non-player characters (NPCs) and enemies in video games, but also computer operating systems, or social media bots. My conceptualization of this category has been partly inspired by Kearney’s work on monstrosity and otherness, in which he focuses on the instances of “intercommunion between distinct but not incomparable selves” (Kearney 2002: 18). A computational other is thus more than a computational object or process; it is recognized as a partner in interaction. Many computational others have qualities that enable them to communicate with humans—they may use human language, appear human, or even exhibit simulated emotional reactions. At the same time, human users or creators acknowledge the computational nature of such others. Despite the advances in artificial intelligence and the rising tendency to see computational agents as human-like or post-human subjects (see Carter 2007; Wolfe 2010), they tend to be clearly recognizable as machinic.

Many video game characters (or social media bots, for that matter) are hybrids—they appear human on the level of audiovisual representation, but they are clearly computational on the level of rule systems. As Juul (2005) has observed, the connection between rules and fictional (audiovisual and verbal) content is often tentative and arbitrary. Consider, for example, Dr. Steinman, one of the unique ‘boss’ enemies of *BioShock*. He looks like a human (or an ex-human), and the game equips him with a backstory of pride and hubris, told mostly through non-interactive means. But as a simulated agent within the game world, he is just a stronger splicer with a machine gun, repetitively attacking the player—exhibiting machinic behavior that can be more readily ascribed to a monster than a human. Although Carroll’s (1990) concept of impurity originally applied to contradictions on the level of representation (such as zombies being dead *and* alive in their fictional worlds), we may argue that Dr. Steinman is monstrously *impure* due to the contradiction between his representational and mechanical features. This impurity of computational others makes them always ready to be represented as monsters, regardless of their appearance.

Material and Methods

There are multiple reasons to study computational otherness on the example of *BioShock*’s splicers. First, *BioShock* is a best-selling, well-received, and influential FPS; a part of the video game canon (Parker 2017 [2015]). Second, the splicers’ design process is well documented through interviews, developer commentary and other

paratextual materials.¹ Third, *BioShock* is a very carefully constructed game: as Parker notes, the game “is designed from the ground up to invite sustained reflection, debate, and criticism” (Parker 2014: 134; see also Parker/Aldred 2018b: 12). Its explanation of the splicer phenomenon is, correspondingly, rich and elaborate. To justify the enemies’ in-game behavior, a large part of the game’s backstory chronicles their dehumanization.

My two main research questions are the following: How does the game justify the role of splicers as generic expendables? And how does their representation relate to genre conventions, underlying technology, and production processes? I combine two main methods: first, I analyze the *production narrative* to understand how the team’s design paradigm and production process shaped in-game representation of enemies. The information about the process has been collected from the game’s official paratexts, such as the *BioShock* art book [AB] (2K Boston 2007b), the Director’s Commentary [DC], and the interactive ‘Museum of Orphaned Concepts’ [MOC], the latter two of which are included in the 2016 ‘remastered’ version of *BioShock* (2K Boston/Blind Squirrel Entertainment 2016).² Second, I conduct a textual analysis of the game’s *embedded narrative*, a narrative that is “pre-structured but embedded within the mise-en-scène awaiting discovery” (Jenkins 2004: 126). Shards of this narrative are revealed to the player by means of environmental storytelling, diegetic promotional films, and—most importantly—audio diaries [AD] recorded to reel-to-reel dictaphones.³ I use these to reconstruct the splicers’ backstory and analyze it using the lens of dehumanization theory. Following the recommendations for video game close reading outlined by Bizzocchi and Tanenbaum (2011), I also compare the embedded narrative with my observations of splicers’ in-game mechanical behavior, collected during a playthrough of the game.

The combination of these two methods allows me to focus not only on those representations of splicers that made it into the game, but also their previous iterations. Akin to the method of *hauntology*, first suggested by Derrida (2006 [1993]) as a way of accounting for what is absent from political discourse, I will thus try to uncover how absent and deprecated content still fundamentally shapes and ‘haunts’ the final game artifact.⁴

***BioShock*’s Forgotten Enemies**

Soon after its release in 2007, *BioShock* became a part of the video game canon, and its creative director Ken Levine a respected auteur (Parker 2017 [2015]). Judging by the volume of scholarship, *BioShock* has also captured the minds of game scholars. It was used as a showcase of video games as art (Tavinor 2009b); as an example of the video games’ ability to convey political and philosophical messages (Packer 2010; Cuddy 2015); as a commentary on biopolitics and genetic enhancement (Peaty 2012; Ledder 2015; Henthorn 2018); and as an intriguing dystopian narrative (Aldred/Greenspan

¹ My usage of the terms *paratextual* and *paratexts* follows Švelch [Jan] (2016).

² I refer to material in [DC] using episode numbers (based on the order in the game’s menu) and timestamps, to [AB] using section titles (the book is not paginated), and to [MOC] using names of the presented 3D models.

³ For an overview of environmental (and indexical) storytelling, see Fernández-Vara (2011).

⁴ The concept of hauntology has been previously applied to games by McCrear (2009) and Janik (2015), although both focus on diegetic ghosts, apparitions and traces of the past, rather than traces of the production process.

2011; Schulzke 2014; Lizardi 2014; Maziarczyk 2015). It has inspired a monograph on forced choice and propaganda (Jackson 2014), a volume of popular philosophy essays (Cuddy 2015), and a media studies-oriented academic anthology (Parker/Aldred 2018a).

Some of the critical praise and academic interest stemmed from the game's critical engagement with the 'objectivist' worldview of the writer Ayn Rand (1905–1982). In her novels—such as *The Fountainhead* (1943) and *Atlas Shrugged* (1957)—and essays, Rand praises laissez-fair capitalism and attacks collectivism, taxation, and government that “seem designed to punish the effective and benefit the incompetent” (Packer 2010: 212). Rapture is clearly an echo of Galt's Gulch, a utopian project founded by John Galt, the hero of *Atlas Shrugged*; and the character of Andrew Ryan is an amalgamation of John Galt and Rand herself [DC: E1 0:05:00]. However, *BioShock* is a *parody* of *Atlas Shrugged*, turning its utopian vision into a dystopia (Tavinor 2009a; Schulzke 2014). Although this fact is rarely pointed out in its academic interpretations, *BioShock* teems with irony and hyperbole, portraying possible outcomes of the objectivist ideology in a grotesquely exaggerated manner, and employing tropes from horror and comics.⁵

Unlike Rand's fiction, *BioShock* includes literal monsters. Big Daddies and Little Sisters became the iconic signifiers of the *BioShock* franchise—and have been analyzed from the point of view of gender, biopolitics, and fatherhood (Stang 2018; Henthorn 2018; Vanderhoef/Payne 2018). However, the player spends a larger portion of the game combating splicers. Despite the volume of literature about *BioShock*, very few authors dwell on splicers for more than a couple of sentences. As Mejeur—whose detailed queer reading of splicers is an exception—points out, they are “an ever-present invisibility” throughout *BioShock* (Mejeur 2018: 134), making them generic expendables par excellence.

According to the game's backstory, all splicers used to be inhabitants of Rapture, but lost their humanity due to societal collapse, addiction to ADAM, and mind control. Existing literature lacks consensus over what kind of creatures splicers really are. On the one hand, they are, despite their condition, still considered *citizens* of Rapture, although they are “violent, genetically modified citizens” (Peaty 2012: 156), “violent and erratic citizens” (Henthorn 2018: 208), “enraged/deranged Rapture citizens” (Lizardi 2014), or “citizens of Rapture disfigured by their repeated use [...] of ADAM” (Mejeur 2018: 114). Other authors, however, emphasize splicers' monstrosity. They are described as “mutant zombies [...] ruined by their own lust for perfection” (Aldred/Greenspan 2011: 482), “zombies who have become slaves to their drug addictions” (Schulzke 2014: 326), “mindless horrors” (Weise 2008) and “ghoulish once-human splicers” (Vanderhoef/Payne 2018: 54). Although individual authors may disagree on the exact proportion of humanity that the splicers have maintained, they all implicitly suggest that splicers, as portrayed in the finished game, are *in transition* from humans to monsters. This makes them a fitting case for the analysis of how games dehumanize people and manufacture monsters.

⁵ Ken Levine explicitly mentions inspiration by Batman and by the work of Stan Lee [DC: E5 0:08:54–0:09:00; E9 0:01:28–0:01:35]. For an example of a scholarly analysis of *BioShock* that does focus on irony, see Gibbons (2011).

A Complete World Without Humans

It is well documented that *BioShock*'s game design preceded the writing of its story (Jackson 2014). *BioShock* had not been advertised as a political commentary, but rather as an innovative FPS, or a “genetically enhanced shooter” (Peaty 2012: 154). It offered a playground for fast-paced gameplay with customization and progression options, and for creative combinations of weapons and special abilities to battle a diverse set of enemies. The game's narrative changed several times in the development process and was built to fit the gameplay mechanics and technological constraints.

In terms of its gameplay design, *BioShock* follows a design tradition of the *Ultima Underworld* and *System Shock* series (Blue Sky Productions 1992; Looking Glass Technologies 1993; *ibid.* 1994; Looking Glass Studios/Irrational Games 1999)—which is unsurprising given that Levine directed *System Shock 2*. As Jackson discusses in much more detail, this line of games aimed at computationally simulating as much of the game world as possible, at the expense of pre-scripted events and conversations. They focused on creating immersive, “sealed off and ‘complete’ environment[s]” such as *Ultima Underworld*'s Stygian Abyss or *System Shock*'s Citadel Station (Jackson 2014: 49). Like those titles, *BioShock* is set in an enclosed, isolated space, in part because of technical limitations of the game's engine. As Levine puts it, the team's philosophy was to “focus on an area that you can really bring to life” [DC: E1 0:00:56–0:01:14].

An important obstacle to the creation of such complete environments is the difficulty of simulating people. The designer of the first *System Shock* game, Warren Spector, has recounted that his team was dissatisfied with the interaction with NPCs in the preceding *Ultima Underworld* games: “So the team designed around the unsolvable problem—we killed everyone off. The inhabitants of Citadel station would exist, for the player, only through e-mail and video logs” (Spector 1999). Bringing a place to life thus paradoxically means removing humans. In this approach to world-building—which Weise (2008) has called the “dead world concept”—only *monsters* are left alive. *BioShock*'s dystopian tone therefore stems not only from its critical engagement with Rand's utopias, but also from this particular game design tradition. Although there are a few encounters with sentient humans in *BioShock*, these are carefully orchestrated so that the player can listen to or watch the characters but cannot directly interact with them until they die or become foes in a battle. This way, the game avoids the challenge of simulating a two-way conversation. Even the support roles usually occupied by human NPCs were assigned to machines. Levine illustrates this notion with the example of a vending machine: “If we had a shopkeeper sitting there, you can't shoot him, he sits there, he doesn't say anything and, all of a sudden, he feels fake. Whereas a vending machine [...] could feel a hundred percent authentic” [DC: E3 0:08:11–0:08:23].

Early in the development process, both NPCs and enemies in *BioShock* appeared significantly less human than in the finished product. Their gameplay behavior, or—in game developer parlance—their AI, was inspired by animal rather than human behavior.⁶ Ken Levine remembers that the idea came to him while watching nature TV shows: “We didn't have the ability to do a lot of smart AI. So I said, what if their

⁶ In game developer discourse, the term ‘AI’ is often used to denote any computer-controlled behavior, even if it is rigid and does not aim to be ‘intelligent’.

behaviors are just very primal and we can model those behaviors?” [DC: E8 0:01:48–0:01:53].⁷ The design featured three categories of simulated entities—*gatherers* (future ‘Little Sisters’) who collected resources, *protectors* (later known as ‘Big Daddies’) who behaved like animals protecting their young, and *aggressors* (the most traditional FPS enemies) who went on to become ‘splicers’. Originally, gatherers looked like slugs, and aggressors resembled B-movie science-fiction monsters (see figures 2a–2c).⁸ Protectors were the only ones whose visual design remained in place.



Figures 2a–2c. Concept art for one of the initial, unused *BioShock* monsters (left), and for the ‘Steinman’ (center) and ‘Lady Smith’ (right) splicer models that were included in the finished game (*AB: Enemies*).

While the initial goal was to create fun mechanics, designers were also trying to create spaces and characters to which players can emotionally relate. According to the game’s lead animator Shawn Robertson, the space was to feel “lived in” [DC: E1 0:08:05–0:08:18]. In this respect, he admits that the original gatherer slug had “horrible design [...] because you don’t care about slugs” [DC: E8 0:03:48–0:04:00]. In the end, the slugs were not removed entirely, but instead implanted *in* the bodies of the girls. The evolution of splicers’ visual design followed a similar trajectory. At first, they were more akin to conventional sci-fi aliens and mutants. Robertson had thought of the original mutants as ‘Scooby-Doo monsters’ because they were “too inhuman to invoke

⁷ This story is corroborated by designer Alexx Kay on the development team’s blog (*Irrational Games* 2010).

⁸ These labels (*gatherers*, *protectors*, *aggressors*) are still present in the game’s file structure, but with the exception of the label *gatherers* (which is used as a synonym of ‘Little Sisters’), they do not appear in the game’s narrative or representations.

empathy” [*MOC: Missing Link Model*]. In the finished game, they are deformed but recognizable as humans, still wearing the clothes they had before Rapture collapsed. As the *BioShock* art book tells it: “Once more fantastical monsters, you can see the progression as Rapture came to life and the enemies turned from horrors into things that clearly once were people with lives—lives that went very wrong” [*AB: Enemies*].

Despite these changes, Little Sisters still behave like gatherers, and splicers like regular FPS enemies. There are five categories of splicers in the original game, based on movement and attack styles, but all of them are aggressive. They are capable of pathfinding, shooting, and using health stations when their health is running out. You cannot parlay with them, they do not collaborate or self-organize, and, although they come in groups, they fight as atomized individuals.

We can observe a paradox here: on the level of game mechanics, non-player characters and enemies are clearly machinic, modelled after a simplified and abstracted ‘primal’ animal behavior; they marry the two prototypes of a non-human (machine and animal) presented in Haslam’s model of dehumanization. They possess as much humanity as a vending machine or a fighter drone. On the other hand, to maintain affective connection, they were made to *appear* human on the level of audiovisual representation. *BioShock*’s answer to this conundrum was to present splicers as *former* humans and Rapture as a place that was not currently, but *formerly* ‘lived in’. To give a human face to the non-human, the fictional characters of splicers had to be dehumanized. The following three sections will outline three aspects of dehumanization that splicers went through: their atomization into anti-social aggressors, their bodily disintegration and deindividuation, and finally, loss of agency and context awareness.

Aspects of Dehumanization (i)—Atomized Mutants

The first aspect of dehumanization I will discuss is the loss of “restraint and civility” that turns a human into an “uncultured, coarse and amoral” being (Haslam 2006). In the game’s backstory, the splicers’ aggressive, anti-social behavior—as well as their mutant powers—result from the failure of Rapture as a social experiment. In line with Schulzke, we can consider the game a *critical dystopia*, as it “continually emphasizes the political conditions that led to Rapture’s collapse” (Schulzke 2014: 326). Ryan’s project of Rapture was informed by his Randian worldview, summed up by Waldron (1986: 464) as a belief “that selfishness is a virtue and therefore that the good man is the one who does not respond selflessly to the abject predicament of others”. Ryan’s ideology combined an extreme form of laissez-fair economics with a disdain for social and political institutions, and, as time progressed, with stubborn isolationism. This ideology turned out to be fundamentally flawed when put into practice.

We have seen that some authors have described splicers as ‘citizens’. But although they were inhabitants of *a city*, they were not citizens in the political sense. Marshall’s classical typology of modern citizenship breaks it down to three components: *civil citizenship*, which entails equality before law and freedom from arbitrary arrest; *political citizenship*, which entails the right to vote; and *social citizenship*, which includes access to social and economic welfare (Bealey/Johnson 1999: 53). From the scant information about the legal and political arrangements of Rapture, we can deduce that there were no laws (save for the ban on contact with the outside world instated by Ryan several years after Rapture’s construction), and that the city was nominally

overseen by a Council, but its powers were mostly advisory and it was probably unelected.⁹ Civil and political citizenship of the inhabitants were therefore next to non-existent, and social citizenship was sacrificed in exchange for lack of taxation. There was no gun control, and Ryan Security is portrayed as the dominant enforcer of order.¹⁰

In the hyperbolic legal and political void, the well-being of Rapturites depended solely on the benevolence of Ryan and his fellow industrialists. Ryan's adversary Frank Fontaine gained significant power through capitalizing on Rapture's deficiencies. First, he became rich through his smuggling operations—lucrative due to Ryan's isolationist policies. He used the funds to control the ADAM and plasmid industry through his Fontaine Futuristics company [*AD: Fontaine's Smugglers*; *AD: Kraut Scientist*]. Second, he gained support of Rapture's underclass through ostensibly charitable institutions like Fontaine's Homes for the Poor and Little Sister Orphanages. In fact, both were increasingly used as sites of genetic experiments on non-consenting subjects [*AD: Rapture Changing*]. Fontaine made the clients of his institutions into his army of splicers who were "burping fire, spitting ice" [*AD: Fontaine's Army*]. Recognizing the threat, Ryan built an army of his own, and, after some hesitation, took a 'desperate measure' in the form of enhanced plasmids with pheromones that allowed him to mind-control large parts of the population, who had by now turned into ADAM addicts [*AD: Desperate Times*]. This is a reason to dispute Packer's (2010) and Schulzke's (2014) readings, both of which assume that splicers unquestioningly adopted Ryan's objectivist ideology. The aforementioned evidence shows that many of them had been disenfranchised and turned into addicts or mind-controlled drones. Rather than active supporters of an ideology, they were atomized individuals that could neither organize nor resist.

Here, *BioShock*'s dystopian narrative parallels Agamben's critique of contemporary biopolitics. Agamben argues that historically, the political life (*bios*) and biological life (*zoé*) of an individual have been distinct, but they are becoming more and more interlaced due to reasons that include prolonged states of exception and the medicalization of society. As a result, political power directly decides matters of biological life (Agamben 1998). Ryan and Fontaine's growing power over the biological lives and genetical make-up of Rapture's inhabitants, unchecked by either law or institutions, is one of the key points in the splicers' story.¹¹ Unable to participate politically, they were reduced to what Agamben calls *bare life* (biological life disconnected from politics) and molded into monstrous weapons.¹² As a character in the game's backstory puts it: "There's an arms race on here in Rapture, but it's not about who can build the best guns and the biggest bombs. It's about who can become less of a man and more of a monster..." [*AD: Genetic Arms Race*]. As the society collapsed, the

⁹ The subservient role of the Council can be deduced from [*AD: Death Penalty in Rapture*] and [*AD: Ryan Takes F Futuristics*]. The only mention of elections comes from a recorded, but unused propaganda radio play in *BioShock 2*. Its canonicity is therefore debatable.

¹⁰ For example, in public service announcements.

¹¹ To an extent, we can see Ryan and Fontaine's actions as a reflection of the developers' design choices. Like Ryan and Fontaine, the team created the game world, separated it from its surroundings, instigated the conflict within it, and 'designed' its monsters. Levine and Robertson recall that the character of Ryan was an answer to the question "What kind of person would want to do this"; *this* meaning the creation of Rapture [*DC: E1 0:04:10–0:04:20*].

¹² For an analysis of zombies as *bare life*, see Stratton (2017).

overwhelming majority of survivors turned into fierce, dehumanized mutants that could be believably rendered as computational others, i.e. artificial agents driven by algorithms and stored in databases.

Aspects of Dehumanization (ii)—Fungible Bodies

Another relevant aspect of dehumanized entities is *fungibility*—the quality of being interchangeable while performing the same function. According to Haslam (2006), fungibility is typically associated with automata. As the computer can easily (and almost endlessly) copy virtual objects and entities, replication from a limited pool of assets is a typical feature of computational others. Fungibility also pertains to fictional creatures like zombies. Presumably, they had all once been human, but they are disfigured enough that their individualities do not matter anymore—they have been transformed into a deindividuated mass (see Lauro/Embry 2008). Similar to zombies, splicers are disfigured due to adverse effects of ADAM addiction—bleeding, hair loss, hormone imbalance, jaundice, lesions, spider veins, swollen gums, tooth loss, and tumors.¹³

As is common in FPS games, *BioShock*'s enemies become the player's targets and playthings. One can enjoy killing splicers in entertaining ways, for example by catching dynamite in mid-air and hurling it back at enemies. Animation and sound effects are designed to enhance the visceral experience of damaging splicers' bodies. Splicers can take plenty of damage, resembling a crash test dummy, but when hit, they jerk and convulse in an exaggerated, slapstick manner. Upon death, they fall to the ground, often comically, as ragdoll physics take over their animation. As Phillips (2018: 139) has noted, "ragdoll physics literally objectify a body, bypassing its agency to subject it to the physical forces of the game world".

Game scholars have previously linked video games' strong focus on the body and its disintegration to the aesthetics of *grotesque realism* (Klevjer 2006; Majkowski 2015; Mejeur 2018). Introduced by Bakhtin to describe the work of Rabelais, grotesque realism builds on the "exaggeration of the improper" (Bakhtin 1984 [1965]: 307) and "turns the vulgarity of excrement, orifice and bodily dismemberment into a joyful affirmation of the materiality of the body" (Klevjer 2006). Despite its somber narrative and the designers' focus on creating emotionally resonant characters, *BioShock* follows many tenets of grotesque realism. It celebrates destructive action and abounds in macabre imagery of violence, gore, and deformity, which is—despite the painstaking diegetic explanations—gratuitous and excessive. At the same time, this aesthetic emphasizes the fungibility of splicers. While focalizing the materiality of their bodies as objects of player action, it erases individuality. Except for bosses and a few scripted scenes, splicers are presented as a mob of indistinguishable enemies. Moreover, they perpetually respawn to keep up the challenge, echoing Majkowski's observation that grotesque realism shows the body as "constantly connected to the world and other bodies, always unready, becoming, giving birth, dying, and being recreated" (Majkowski 2015: 31).

Especially in the opening sections of the game, the player will encounter splicers who wear carnival masks. In the game's diegetic world, the story of the masks goes back to

¹³ These symptoms have been abridged from a longer list on the *BioShock Wiki* (FANDOM 2018).

the New Year's Eve celebration of 1958. For the occasion, numerous guests gathered for the masked ball at Rapture's Kashmir Restaurant.¹⁴ Just after the midnight toast, the gathering was invaded by Frank Fontaine's insurgent army, marking the start of the civil war. Now, splicers find themselves at a carnival that never ends. Employing Bakhtin's notion of the carnivalesque, Mejeur (2018: 133) points out that "[by] assuming their masks, splicers take on a collective identity that effaces their individual identities". The masks hide their lack of distinctive features, and expose the repetitiveness and replicability of splicers as computational others.

To paint Rapture as a believable city, *BioShock* attempts to give splicers a set of personalities that reflect the town's social structure. Similar efforts to infuse computational others with personality often turn out comical or uncanny. That was the case of the infamous *The Elder Scrolls V: Skyrim* line "I used to be an adventurer like you, then I took an arrow in the knee", which was repeated so many times by so many different NPCs that it became an online meme (Bethesda Game Studios 2011; Rosenberg 2017). In *BioShock*, however, splicer models are essentially *caricatures* of Rapture's inhabitants, which fit the title's grotesque realist aesthetics and its satirical take on Randian utopia.

Examining the game's data file structure, fans discovered nine splicer *models*, each consisting of a 3D character model and a set of over a hundred voice acting lines (*2K Forums* 2009).¹⁵ From the lines and the appearance, one can reconstruct a coherent backstory for each model. The one codenamed 'Dr. Grossman'—a germophobic, paranoid surgeon—became a fan favorite thanks to over-the-top comedic one-liners such as "There's semen on everything! EVERYTHING!" or "Bacteria are microscopic... Heh, that's what they want you to think". Others models include 'Baby Jane', a failed aspiring actress, or 'Lady Smith', a xenophobic upper-class matron.¹⁶ However, despite the generous amount of content, the re-humanization of splicers can only go so far. The population is represented by nine models, realized as a potentially infinite number of in-game specimen. One may encounter multiple 'Dr. Grossmans' and 'Baby Janes'. Moreover, *models* do not relate to in-game behavior, following the designers' decision that "splicer models could fill any behavior role" [*MOC: Hooker*]. Splicers' personality (or their story) is thus ultimately separate from their behavior (or their rules), highlighting the fungible, interchangeable nature of computational others.

Aspects of Dehumanization (iii)—Controlled by Addiction

On top of what I have discussed in the previous two sections, dehumanization also renders its targets irrational, childlike, and lacking agency. In Rapture's backstory, these features are justified by the splicers' addiction and the resulting mental disorders. The theme of addiction highlights Rapture's portrayal as a caricature of a Randian utopia built on individualism and unbound capitalism (see Muniz 2015). An important feature of capitalism is the deep contradiction between—on the one hand—the consumerist ethic of hedonism and instant gratification, and—on the other hand—the values of self-

¹⁴ While not all inhabitants of Rapture were present, the event is portrayed as having symbolic importance for the whole city.

¹⁵ Some accounts include a tenth model, which is used to portray immobile statues.

¹⁶ Model names are never explicitly used in-game, although they appear in some paratexts such as [*MOC*]. Otherwise, the names can be deduced from the game's file structure.

control associated with the Protestant work-ethic (Bell 1976). As the sociologist of addiction Gerda Reith points out, neoliberal societies tend to define addict identities in terms of loss of control, which results in the inability to make reasonable consumer choice (Reith 2004). The addict is seen as “overtaken by the daemonic force of addiction” (Reith 2004: 297), controlled by a substance that “is attributed with influential powers—no less than the ability to overwhelm the individual and transform them into something else entirely—an addict” (Reith 2004: 286).

As *BioShock*'s backstory tells it, splicers are invariably ADAM addicts. Some were forced to use it by Fontaine or Ryan, others descended into addiction on a quest for self-enhancement, or simply by using plasmids to improve their odds of survival.¹⁷ Due to addiction, they transformed from ‘good’ capitalist consumers into deviant consumers, scouring the city and killing for ADAM. By the time the player character enters Rapture, this change has been compounded by outright mind control exercised by Ryan, who, ironically, robs splicers of the freedom of choice that his ideology used to extol.

With ADAM addiction came mental deterioration. In social theory, dehumanization and exclusion through the category of mental illness has been described in much detail by Foucault (1988 [1961]), who showed how medical discourse had been constructing the mentally ill as non-citizens. In contemporary media, people with mental illnesses keep being portrayed as either dangerous or childish (Wahl 1997; Harper 2009). In line with its satirical tone and grotesque realist aesthetics, *BioShock*'s portrayal of mental illness favors impact over nuance. Splicers display the most over-the-top, sensationalist indices of mental affliction, which seem to disqualify them from any kind of reasoned, civilized behavior.

Following the 2013 *Diagnostic and Statistical Manual of Mental Disorders* classification, splicers could be said to bear symptoms of at least two major disorders. The first is the *paranoid personality disorder*, as they assume that other people will “exploit, harm or deceive them” (*American Psychiatric Association* 2013: 650). In some of their monologues, they accuse the player character of fictional crimes. Lady Smith cries “You’re stealing! I know it”, while Baby Jane blames anyone she attacks for her plight, insisting: “You did this to me! You!” Even more importantly, their paranoia justifies the fact that they attack on sight, which is an important part of the aggressive behavior of FPS enemies.

Splicers can also be said to suffer from *dissociative identity disorder*, characterized by “disruption of identity” that involves “discontinuity in sense of self and sense of agency, accompanied by related alterations in affect, behavior, consciousness, memory, perception, cognition and/or sensory-motor functioning” (*American Psychiatric Association* 2013: 292). Judging from their lines, splicers live in a delusion that the world around them has not changed since the outbreak of the civil war, underscoring Rapture’s state of perpetual corrupted carnival (see Mejeur 2018). When ‘Baby Jane’ splicers are idling, they say, for example: “Who needs to make it on Broadway when you can make it here?” When they are attacking, they bark phrases like “Give me the part, you bastard!” or “He’s standing in the wrong place!”

¹⁷ The use of ADAM in plastic surgery is documented in [*AD: Limits of Imagination*]. The use of plasmids (which require ADAM) for self-defense is shown in several in-game promotional films that serve as tutorials.

These symptoms justify both the splicers' aggressive behavior and the fact that their utterances barely fit the context. Some of the lines match gameplay situation (attacking, being attacked, being on fire, player death), but many are triggered randomly. What may initially sound like chatter among splicers are in fact monologues—a bundle of decontextualized non-sequiturs that echo splicers' lost humanity. This cognitive rigidity and emotional inertness are among the prime features of mechanistic dehumanization. After all, computational others may be good at following specific, clearly defined goals, but usually fail to account for the wider context.

Jack—Not Your Ordinary 'Splicer'

The narrative of addiction and dehumanization is mirrored in the story of the main protagonist, Jack. To battle splicers, he is—like them—driven to hoard and abuse ADAM. He, too, respawns; he has very little individual identity; and is shown to lack agency (Aldred/Greenspan 2011). This mirroring is not too surprising if we consider that players often succeed in gameplay by internalizing the game's mechanics and algorithms, such as the patterns of enemy behavior. As Manovich (2001: 222) has noted, “the similarity between the actions expected from the player and computer algorithms is too uncanny to be dismissed”. Jack's behavior—largely controlled by the player—thus also echoes the game's computational principles.

However, Jack's narrative trajectory deviates from that of splicers in many crucial aspects. He is no ordinary Rapturite, but neither is he a random plane crash victim. In a famous plot twist, Atlas (Jack's guide through Rapture) is revealed to be Frank Fontaine and Jack is revealed to be the illegitimate son of Andrew Ryan, seized upon birth by Fontaine and mentally conditioned to do the latter's bidding.¹⁸ It was Fontaine who ordered Jack to fulfill various missions within Rapture, and, ultimately, to kill Ryan. As analyzed by Aldred and Greenspan (2011: 490), among others, the twist “cleverly [addresses] the dystopian themes of user agency and free will”. But although Jack's (and the player's) agency is problematized, he manages to break free of the mind control, and turns on and defeats Fontaine. We never see Jack from the third person view, so it is difficult to assess whether plasmids deform his body. However, other human survivors neither recognize nor approach him as a splicer. In other words, he can reap the benefits of plasmids without suffering the side effects. Unlike others, he can be redeemed, and his dehumanization reversed.

Throughout the game, the player can choose whether Jack ‘harvests’ Little Sisters for ADAM, or ‘saves’ them, i.e. whether he treats them as a resource (in line with the Randian worship of selfishness), or whether he treats them compassionately. If he saves all the Little Sisters, a final cut-scene shows them helping him escape Rapture, joining him on a journey to the surface, and becoming his surrogate daughters. He becomes a patriarch of a family that can easily pass as human (see Stang 2018).¹⁹ The special status Jack maintains thanks to his connections to Ryan and Fontaine resonates with the

¹⁸ Jack is controlled by the phrase “Would you kindly”. Origins of this mental conditioning are detailed in the *Burial at Sea* DLC to *BioShock Infinite* (Irrational Games 2013; see also Maziarczyk 2015).

¹⁹ The other two, ‘negative’, endings (which can be distinguished by tone but not by events depicted) hint at Jack becoming a villain himself and starting a nuclear war. However, Levine has said that he had originally intended only one ambiguous ending; the idea to create multiple endings reportedly came from the publisher (Sinclair 2007).

elitism of Rapture's Randian utopia. The privilege to leave is reserved to the player character, but not to regular splicers. While Jack is always shown from the first-person subject position, splicers remain othered by being presented as objects of player agency and obstacles to gameplay progress.

Conclusion and Discussion

Throughout the article, I have presented two complementary strands of argument. On the one hand, I traced the efforts of *BioShock*'s designers to make their game immersive and emotionally affecting; on the other hand, I examined the steps taken in the game's backstory to make in-game fictional humans less human. The splicers' mechanics were inherited from the initial 'Scooby-Doo monsters', who, despite their placeholder status, still haunt the final version. To provide a coherent justification of their behavior, the game's embedded narrative tells a story of dehumanization and degradation without redemption. So much of the agency and ability we associate with humans has been taken away from Rapture's citizens that they are closer to zombies or vending machines.

I have identified three main avenues of dehumanization, each of which provides a fictional counterpart to the mechanical features of splicers as computational others:

[i]—Erosion of social structure and eradication of political life following the fall of Rapture, which transforms splicers into atomized creatures.

[ii]—Bodily disintegration and the use of masks that makes splicers into fungible, interchangeable enemies.

[iii]—Addiction and loss of mental capabilities, which explain the splicers' blindness to context and their simplistic behavior.

As *BioShock* shares mechanics with many other first-person shooter and role-playing games, similar techniques of dehumanization have been employed in numerous titles, although they might appear less prominently in their narratives. Games like the *Fallout* series have used dystopian settings to justify violent and immoral actions of both player and non-player characters (Interplay Productions 1997; Black Isle Studios 1998; Bethesda Softworks 2008; *ibid.* 2015; Obsidian Entertainment 2010). Bodily disintegration and the foregrounding of anatomy is, in general, typical of blockbuster action games, for example in headshot sequences (Phillips 2018). Similar to splicers' masks, helmets and uniforms in shooter games like *Call of Duty: Modern Warfare* (Infinity Ward 2007) also hide the individuality of the soldiers, making them into fungible enemies. The theme of addiction, brainwashing and mental conditioning is commonly used to justify violence and explain enemy behavior. The mind control trope was even more pronounced in *System Shock 2*, *BioShock*'s predecessor (Looking Glass Studios/Irrational Games 1999), in which ex-human enemies, subsumed into a collective entity called 'The Many', seem to be vaguely aware of the fact that they are being controlled—and even tell the protagonist that they are sorry for attacking him. A more recent example is *Far Cry 5* (Ubisoft Montreal 2018), a game in which most enemies are supposedly under the influence of hallucinatory gas called 'Bliss'.

I have argued that dehumanization is encouraged by technological constraints put on computational others. The enormous challenge of simulating complex, non-violent human behavior may drive developers to fall back on the convenient but stereotypical themes of violent conflict with dehumanized enemies. That said, the relationship between technological affordances and the representation of otherness is far from straightforward. I do not wish to make a technologically determinist argument by ascribing all the problematic and simplistic features of video game enemy representation to the underlying hardware architecture and software engines. These do not absolve designers from the responsibility for their work. I would, however, like to suggest rephrasing of one of the central questions in the critique of video game representation.

My analysis has shown that NPCs are partially monstrous from the outset and by default, not only as a result of conscious or unconscious design choices. Rather than asking how games *dehumanize* people (or groups of people), we can ask how they *humanize* (or fail to humanize) computational others. As they constitute a baseline for the representation of computational others, analyzing hostile monsters is therefore essential to the study of representation of all enemies in video games. In this respect, *BioShock* is, despite its stereotypical portrayal of queerness (Mejeur 2018) and mental disorders, a self-aware and self-reflective title, honest in admitting that its enemies cannot be human. It engages with their computational otherness and couples it with a sophisticated narrative about dehumanization and its possible causes. In my view, the game is thus less effective as a critique of Randian objectivism, than it is as an exploration of what it means to be deprived of humanity.

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