Humans as Data: A Critique of *Watch_Dogs 2*'s Dystopian Criticism

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Abstract

The fear of humans abusing technology to control others and the sociopolitical order has been at the heart of many dystopian stories. This fear is also at the heart of *Watch_Dogs 2*, where the centralized city-wide management system made by the Blume Corporation, called ctOS, has become the basis for all things online. Over the course of the story, the player becomes part of the hacktivist group DedSec, who uncover and disclose the manipulative usage of the internet by Blume and other tech corporations. The oppressive system of surveillance, automated data collection, and (social) media manipulation is presented in detail during the main and side missions of the game. These missions criticize current topics of interest regarding internet and data security by referencing specific events and addressing important, underlying issues. The game also includes gameplay aspects where players are able to experience and perform the power of the system first-hand. However, textual analyses of the narrative and the ludic elements reveal contradictions and incoherencies between gameplay design and the narrative's intended criticism caused by the interplay of narrative storytelling and gameplay elements. The result is a split of atmosphere between story and gameplay, creating the impression that *Watch_Dogs 2* has two contradicting personalities, which ultimately subvert its own dystopian criticism.

Keywords

Dystopia; science fiction; technology; internet of things; big data; social control; storytelling-gameplay discrepancy

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Introduction

"You are now less valuable than the data you produce" (Ubisoft Montréal, 2016). Dystopian fictional works have always been a mirror of the issues and fears of their time. One such fear is humans using technology to control others and the socio-political order. Social media companies and tech conglomerates like Facebook and Google have sparked this fear because of their large-scale data collection practices and the secrecy surrounding them. *Watch_Dogs 2* recognizes this and paints the picture of a dystopian world where the Internet of Things and social media are used by leading tech corporations to create near-perfect digital profiles of citizens, manipulate the system to their own benefit, and control public discourse. The game's story is divided into main and side missions, "each . . . a study of a particular facet of our present-day digital dystopia" (Evans-Thirlwell, 2016). As the player completes missions, they slowly uncover the highly questionable and often manipulative practices of the leading tech corporations, particularly Blume Corporation, the developer of the Central Operation System called ctOS which serves as a digital grid for almost all electronic devices. So instead of humans losing control over machines, the game's narrative revolves around humans abusing technology to exploit and control others.

Textual analysis provides the basis for the argument developed in this paper. Video games are treated as texts with two substantially different modes of presentation: narrative and ludic. The first two sections will describe the narrative representation of *Watch_Dogs 2*'s dystopian criticism and analyze is references to real-world concepts and issues. The third section examines the ludic elements of the game which present a critical approach to current surveillance and big data collection practices by having the player perform actions in the game world. In the last section, the complex interplay of narrative and ludic storytelling in *Watch_Dogs 2* is analyzed regarding logical coherence and the mutual influence the two representational modes have on each other regarding their overall perception by the player.

Watch_Dogs 2 argues that "through the abstraction of . . . thoughts, emotions, and facts into sets of computable symbols" (Langlois et al., 2015, p. 7), the social and private lives in all of their facets are being compromised. However, as the critical dystopian story is continuously juxtaposed with gameplay, a stark contrast between them becomes apparent, which also causes logical contradictions. Ultimately, these contradictions subvert the detailed, multi-faceted criticism of *Watch_Dogs 2*'s dystopian future and split the game in two parts with very different atmospheres to them. On the one hand, the game covers important contemporary social issues such as technological surveillance or algorithmic bias and discrimination. On the other hand, the "game's silly alternate reality" outside of missions and the juxtaposition with an often serious tone and critique during missions create a "[struggle] for

tonal consistency" (Kollar, 2016) in its overall narrative, which lead players to dismiss the story as "hollow" and incoherent (Evans-Thirlwell, 2016). In other words, the game's two faces subvert its own criticism.

The Compromised Social

Watch_Dogs 2 is set in a fictional San Francisco where the Blume Corporation has implemented the central Operating System, in short ctOS, "a citywide operating system merging big data with surveillance, security, and transit programs" (Ubisoft Montréal, 2016). Being the provider for internet access and infrastructure management, the ctOS itself is already powerful and its influence has been increased by integrating it into the Internet of Things. The Internet of Things, broadly speaking, is a term for "the digitalization and networking of products" (Sendler, 2018, p. 6), meaning that not only are smart phones and computers connected to it but also other devices such as TVs, watches, and fridges. Since almost every electronic device in *Watch_Dogs 2* is a smart device connected to the internet, they are also necessarily connected to the ctOS. Thus, the ctOS has access to public infrastructural objects, to private devices, and consequently, their data as well. In other words, almost every single electronic device can be used to monitor someone and collect data on their wants and needs, as well as on secrets or incriminating evidence. This almost all-encompassing access is used to convert and compile all aspects of social behavior into digital profiles by using computer algorithms which collect and analyze data from health apps, cameras, microphones, social media, internet searches, GPS, and more.

The capability to monitor most aspects of everyday life is used to create extensive digital profiles of as many people as possible. The information contained in a digital profile comes from different sources that use the ctOS, for example from the company Haum Electronics Inc., which sells Haum 2.0, a "system to monitor [people's] homes, promising privacy, security, and convenience" (Ubisoft Montréal, 2016). Using this smart home system, the company invades the privacy of their customers, gathering information which is then monetized by offering it to other companies in exchange for a fee.

Besides being sold, the profiles are used to estimate whether a person is a highly dangerous suspect prone to criminal activity, needing close surveillance. This is based on the automatic analysis and evaluation of a digital profile by the "predictive algorithm" called Bellwether (Ubisoft Montréal, 2016). If the algorithm calculates a high enough risk, the profile is flagged, which happens to the game's protagonist, Marcus Holloway, prior to the beginning of the game.

Since almost everything in the game's reality is connected to the ctOS, most people are unable to escape the collection of their data. Companies have automated many processes to give the impression of more objectivity and rational decision-making, but this comes at the cost of

human control over these processes. Most decisions about people are based on their digital profile and are heavily biased before they can even start a social interaction. For example, a job application may be sorted out by an algorithm before it even reaches the addressee, significantly reducing a person's chances at social mobility. In the worst case, this may decide whether a person is killed in a police interaction. As a consequence, a person's profile has become more important than the actual person.

However, the digital profiles are not just the basis for decision-making. The Blume Corporation actively manipulates social life using the Bellwether system, which influences a user's perception of the world through algorithms deciding what content, news, and advertisements the targeted person sees. By creating this "user bubble," Bellwether manipulates the user's opinion and brings them to echo back the information and opinions they receive. The Blume Corporation's goal is to collect increasingly more data, since the higher the accuracy of a person's profile, the easier it is to manipulate them through social media and the internet by using selected or even fake content.

Lastly, the Blume Corporation not only collects public and private data about people, but also uses this data to control public discourse. The digital profiles and the Bellwether system allow them to create the social reality of the highest bidders and to pressure politicians into supporting the political direction of Blume. In other words, the corporation uses its power not only for economic benefit, but also to establish itself at the center of a technological and cultural hegemony by using its "social, cultural, ideological, [and] economic influence" (Merriam-Webster, n.d.) provided by the ctOS. In *Watch_Dogs 2*, the boundaries of private life have been breached and the social has been compromised.

Narrative Criticism of Current Reality

Like many dystopian stories, *Watch_Dogs 2* has revolutionary heroes at the center of its narrative. The player character is the protagonist Marcus, who joins the hacktivist group DedSec. Throughout the game, the group hacks into the servers of various high-profile companies, revealing incriminating evidence of their discriminatory behavior and privacy invasions, and publicizes this information as an attempt to raise awareness and effect societal change. By opposing the villainous technological elite, who abuse their power to manipulate society, the members of DedSec become the story's heroes, uncovering and fighting against the oppressive system behind ctOS. At the same time, DedSec also serves as the story's focalizer, representing the perspective from which several key issues about data handling, automation, and online behavior in today's world are critically discussed.

The game shows players a future where people perceive "automated software-based processes of analysis as more trustworthy and accurate than human ones" (Langlois et al., 2015, p. 3), which results in a highly

problematic system of AI-executed institutional discrimination. The game criticizes the gradual change from human to computer-based decision-making, as well as the human belief that machines are "free from human error, bias, or manipulation" (Gillespie, 2014, p. 192) and thus also free from "selection and description biases inherent in any human-edited media" (Bozdag, 2013, p. 210). For example, during the mission "Haum Sweet Haum," the player uncovers that the company Haum Electronics Inc. uses its smart devices to secretly collect data on their customers' behavior and sell it to health insurance companies, which then adapt their health coverage and premiums or use it to decide whether someone is insured in the first place. Haum Electronic Inc.'s way of applying computer-based decision making represents that machines are not, in fact, free from human biases and can effect wide-reaching consequences when numerous companies rely on the digital profiles. In reality, "smart-speaker" voice assistant programs like Alexa and Siri have already been recording its users and saving this information in clouds (Fowler, 2019; cf. Amazon.com Inc., 2020), which suggests that the first step towards a governing system like the one in *Watch_Dogs 2* has already been taken. Furthermore, scoring systems that rate and rank people "in countless aspects of their lives" already exist in reality (Citron & Pasquale, 2014, p. 2) and are used as bases for "important decisions about individuals" (Citron & Pasquale, 2014, p. 3). The difference between game and reality is that, at least for now, a single centralized algorithm such as the ctOS does not exist.

Data has no intrinsic power or meaning—it is made to have meaning or power through the interpretations of humans, even if the actual process of interpretation is done by an algorithm. An important and potential danger of relying on computer-based analyses and decision-making is that the collected data itself may already be biased and lead to a perpetuation of the embedded biases (Caliskan et al., 2017). For example, datasets for facial features, such as the IJB-A, create "substantial disparities" in the error rate of facial recognition software because their data mostly consists of light-skinned subjects (Buolamwini & Gebru, 2018, p. 1). The immense influence of biased data can have particularly drastic consequences on the legal system, where public authorities have started using Big Data analyses "for the purposes of building criminal profiles which can be deployed . . . in a predictive, real-time or post-fact manner" (Naudts, 2019, p. 2). However, "crimes committed by white people tend to be underreported compared to crimes committed by people of color" (Langlois et al., 2015, p. 5). Even if the algorithm itself were perfect, the algorithm would perpetuate biases towards black people since the data itself is already biased (Friedman & Nissenbaum, 1996). This criticism has also been directed at the Chicago Police Department in 2014 (Stroud, 2014), which is currently testing "a sophisticated and secret algorithm that correlates crime rates, poverty rates, and past criminal convictions . . . to target a group of four hundred people likely to commit a crime in the future"

(Langlois et al., 2015, p. 5). Even if a governance system is run by an artificial intelligence that can observe every moment of social life, its learning and interpretation capabilities are still based on its programming, which means that algorithms "often inadvertently pick up the human biases that are incorporated when the algorithm is programmed" (Kirkpatrick, 2016, p. 16). If algorithms pick up these biases, they automatically reproduce or even reinforce them. Prior to the beginning of *Watch_Dogs 2*, Marcus's digital profile had been flagged with an 82% threat probability based on his online activity and criminal record, which contained minor misdemeanors and notices of suspicious behavior by Bellwether. Even after deleting his criminal record and online behavior registry, his threat probability was still estimated to be 42%, a calculation based on his profile as an unemployed African-American male and a registered gun owner (see Figure 1). Algorithms are the "key logic governing the flows of information on which we depend" (Gillespie, 2014, p. 167). If issues such as structural discrimination against social groups are not accounted for in the foundational theories of algorithms, they will only perpetuate the discrimination, resulting in what Marcus calls "systemic injustice at its highest level" (Ubisoft Montréal, 2016). It is particularly worrying since in reality "algorithms are largely unregulated now, and they are indeed exercising power over individuals or policies in a way that in some cases (for example, hidden government watch lists) lacks any accountability whatsoever" (Diakopoulos, 2016, p. 58). With that said, *Watch_Dogs 2* criticises the lack of accountability regarding algorithms and advocates for what Nicholas Diakopoulos (2016) calls "algorithmic transparency information" (p. 61). Although it poses technical challenges, providing open access to information about the algorithm might help increase the trust in them as well as their reliability while also allowing the public to help shape the form big data collection is taking (Diakopoulos, 2016).

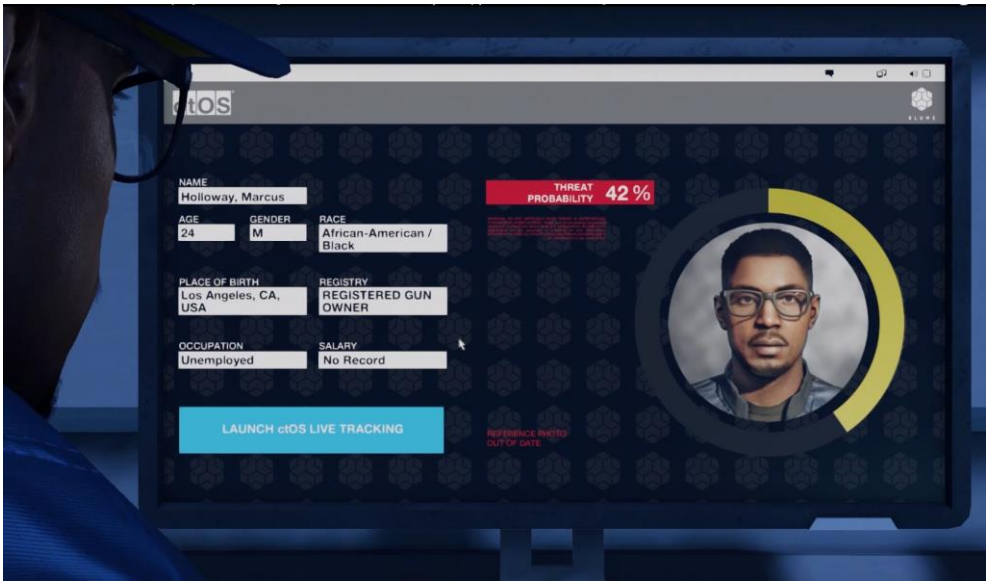

Figure 1. Marcus Holloway's digital profile after deleting his internet searches and criminal records (Ubisoft Montréal, 2016).

The automation of ctOS is also abused by people unaffiliated with Blume. In the side mission "Ripcode," it is uncovered that an unknown organization has manipulated the ctOS to significantly increase water, electricity, and internet bills, as well as credit card rates, to force residents to move to a different neighborhood "so [the people who manipulated the ctOS] can gentrify" it into an affluent area (Ubisoft Montréal, 2016). In the side mission "$911," Marcus discovers that a group of corrupt police officers has used the ctOS to hide their smuggling activities by flagging themselves as working undercover, while also "[killing] those who opposed them" (Ubisoft Montréal, 2016). With these missions, the game warns of the possibility of abusing a system lacking human surveillance. After all, an algorithm can only prevent what it is programmed to look out for.

According to Lu (2007), "people tend to use interpersonal sources . . . to obtain the information they need, rather than the public library or other institutional or mass media channels" (p. 104). More specifically, they rely on "strategic points in primary groups," so-called "information gatekeepers," who filter the mass of outside information and provide selected chunks of information they have deemed relevant or important to others (p. 109). Online platforms such as Google, Twitter, and Facebook, which have become major channels of communication, are now also gatekeepers due to their function as "information intermediaries" (Bozdag, 2013, p. 209). However, any internet platform "only appears to the [user] in its final form after customization and individualization," which is called "me-centricity" (McKelvey, 2015, p. 137). Advertisements, recommended content, search engine results, and particularly posts on social media, are filtered and prioritized based on the user's information, which the respective service can find or has

already collected (Bozdag, 2013). Thus, the algorithms and me-centricity embedded in these services are able to influence which information may reach a user. Without counter action by the user, this might create a "filter bubble," wherein they are shown information that aligns with or corresponds to their own interests (Bozdag, 2013, p. 209). Consequently, if a user does not interact with opposing information or views, the algorithm will only show information that aligns with the user's values and beliefs by filtering out contradicting information and opinions. Abusing algorithms this way has become a central issue in the discussion about voter manipulation via social media. Although it has only become a relevant part of the American public discourse since the 2016 U.S. presidential election and Facebook's fake news controversy (Jenkins, 2018; cf. Klaas & Cheeseman, 2018), it has been common practice in South America "for almost a decade," where voter manipulators exploited the human reliance on interpersonal gatekeepers and the tendency of "voters [to trust] what they thought were spontaneous expressions of real people on social media more than . . . experts on television and in newspapers" (Robertson et al., 2016). In this debate about personalization features, where issues of privacy stand against their usefulness to online searches (Morozov, 2011), *Watch_Dogs 2* assumes a critical position. In the story mission "Power to the Sheeple," DedSec discovers that the social media company !NViTE manipulates its personalization features in order to sway voters into voting for a specific politician. Though the game also implies criticism directed at internet users, who may become "sheeple" if they refuse to break through their filter bubble or critically examine the implications of posting personal information online, its main critique is aimed at the exploitative practices of social media conglomerates such as Google and Facebook.

Ludic Criticism of Current Reality

Besides representation, the game also uses its ludic nature as a mode of criticism. The threat posed by an oppressive system such as the ctOS, as represented by elements of the narrative, is further highlighted by its role in the gameplay as the antagonist of the player. The ctOS creates hindrances and sends enemies that try to keep the player from reaching their goals, which are framed as just and necessary by the narrative. In this sense, the ctOS is not just represented as a threat but also experienced first-hand as such when it directly attacks the player character in order to stop them.

Apart from this general ludic element of "(combat) action against [the oppressive system]" present in dystopian video games (Farca, 2018, p. 150), the game also uses a shift in perspective and power position to create a different mode of ludic criticism. While roaming the game world outside of missions, the player can stumble upon hacking access points, where the player usually hacks into the security camera of an ATM and controls the transactions of one or more random people. The player can

decide whether to give them more money, potentially ruin them financially, or comply with their request. These decisions have no impact on the game and are solely based on the digital profile they can view and short social interactions such as a phone call (see Figure 2). Other times, players can follow seemingly random clues which can, for example, lead them to a house where a man is trying to commit suicide in his garage with the fumes of his car. It is up to the player whether or not to start or stop the ventilation system or use the car's horn to attract a neighbor's attention, who then tries to rescue the man. There are no guidelines or hints from the game on what to do and, if the player is too slow, it is implied that the man dies. The player's information is reduced to the man's digital profile and a voice recording from his phone. In these scenarios, the player assumes a power position quite similar to the ctOS's: they see a short video feed of a person and must make a decision based on this glimpse into their personality and the small amount of data compiled by an algorithm. The player is forced into action with limited time and information, consequently creating a situation of stress and affect. I will call this "performative unsettlement" since the player performs as part of the system they are fighting and experiences the ctOS's enormous power over San Francisco's citizens. It also shows the inaccuracy inherent in the reduction of social life to data and its resulting danger in the form of potentially arbitrary decisions. Despite its potential effectiveness, this mode of criticism also has a drawback: by being implicit and performative instead of explicit and representative, the game risks that the message will not be received by the player.

Figure 2. After listening to parts of a phone call, the player can decide to steal money from this woman (Ubisoft Montréal, 2016).

As the story progresses, the player uncovers how dangerous the current internet and data practices can be if the people in charge are left unquestioned. *Watch_Dogs 2*'s criticism is primarily representational. On

the one hand, the criticism is represented implicitly by the game itself being the antagonist who interferes with the player's quest to uncover the truth. On the other hand, the criticism is also given explicit form by DedSec, whose members explain how invasive and problematic ctOS's technology and power are and condemn the practices used by those in power. In addition to representation, the game uses player performance to affect the player by placing them in power positions comparable to the ctOS's. For example, players are given almost absolute power over the financial or physical well-being of another person, but are given little to no guidance or information, deliberately creating moral dilemmas or a sense of stress and helplessness despite the power. Using these two modes of criticism, the game warns that "data is not a mirror of the social" but actually "the abstraction of everything . . . into sets of computable symbols" (Langlois et al., 2015, p. 7). The reduction of social life into data comes with a price and the convenience of automation and centralized control systems needs to be weighed against their potential dangers.

Contradicting Gameplay Decisions

Video games are more than just the stories they tell. Neither gameplay nor storytelling exist in a vacuum; instead, they influence each other. A game's storytelling frames the gameplay while the gameplay manifests instances of the story as the player continues playing (Domsch, 2013). In light of this mutual influence, a few of *Watch_Dogs 2*'s gameplay mechanics and design decisions need to be problematized with regards to the game's dystopian criticism.

Watch_Dogs (Ubisoft Montréal, 2014), the first game in the series, used a reputation bar to visualize the public opinion of the main character, a vigilante called Aiden Pearce, and its fluctuations based on the player's actions. For example, if the player completes missions or helps civilians by taking down criminals like muggers or thwarting attempted murders, Aiden gains points towards a good reputation. Depending on how good his reputation is, civilians treat Aiden more favorably and are less likely to call the police, and more positive comments on his actions will be on the news. However, if at any point Aiden kills or injures civilians or police officers, he will lose reputation points and the general public will view him less favorably. As his reputation sinks, people are more likely to report him to the police and negative comments about Aiden will be on the news broadcasts. This gameplay mechanic holds players accountable for their actions. If a player decides to play more violently and causes commotions, the civilians will treat Aiden as a terrorist, resulting in a higher difficulty for escapes from police chases and a higher chance of being reported to the police when passing civilians in the game world. While this mechanic only impacts the gameplay, it also exists in the game's narrative: Aiden's vigilante justice is being judged by the citizens of Chicago, who view his actions as either heroic or

terroristic. This mechanic also functions as a means of affecting the player's emotions:

> It's immediately humanising when you see that the hoodie in a backalley "writes vampire fan fiction," and you'll feel bad when your car careens into him and relief when a message pops up to say that your reputation has been affected by his being injured, not killed. (Smith, 2014)

This system has not been implemented in *Watch_Dogs 2*, and the lack of it contradicts the setting and characterization of the heroes. DedSec is a hacktivist group—the entire premise of the game is that they want to convince people to join their social movement against the tech companies, making their public reputation a strongly relevant factor. It also contradicts the pacifist and activist character designs of almost all DedSec members, who practically never engage in violent actions. This is especially apparent in the player character Marcus, who is never shown to use lethal violence in cutscenes. Even when confronted by the story's main villain, Dušan Nemec, he punches him once and leaves. However, the player can play as violently as they want in the game world, killing and injuring possible followers of their movement without any consequence. There is no permanent loss in followers or the organization becoming more hunted by the police. One reason behind not implementing the reputation bar might be that players felt "constricted" playing the first *Watch_Dogs*, since, for some players, "the whole point of a non-fantasy RPG is so you can do the things you can't do in the real world" (Yin-Poole, 2016). While the lack of a reputation system is not a problem per se, since it avoids players potentially feeling judged for how they enjoy playing the game, there is no denying that it causes the above-mentioned contradictions as well as "issues with tone" (Loveridge, 2016; cf. Kollar, 2016). The game creates a tonal discrepancy by juxtaposing the narrative's serious dystopian criticism with the gameplay, which is devoid of any critical reflection whatsoever. This is especially problematic since it delegitimizes the claim of *Watch_Dogs 2*'s heroes, who are at the heart of the dystopian criticism, that they are the good guys and makes the narrative feel "terribly hollow" (Evans-Thirlwell, 2016).

By completing gameplay activities in *Watch_Dogs 2*, the player gains more followers on the DedSec app, which take the place of experience points. Once a certain number of followers has been reached, the player levels up and gains access to more upgrades for Marcus's devices and skills. The representation of experience points as social media followers is, similarly to the reputation system, embedded in the narrative: DedSec uses the processing power of the app users' phones to gain more processing power themselves, which they need to handle the data ctOS is processing. In other words, gaining followers results in more processing power, which in turn means better technological upgrades for Marcus. However, viewing this feature with the missing reputation

system in mind creates more contradictions: it seems likely that DedSec would lose followers using the app, and consequently their processing power, because they would not wish to support their cause if the players play the game in a highly violent manner, injuring and killing innocent civilians while being a member of DedSec. Yet nothing happens if players act violently. The game does not make explicit whether citizens stop supporting DedSec or what happens in the case of a person uninstalling the app. Given that neither the number of followers nor the processing power decrease, the two gameplay mechanics imply that DedSec continues to use a person's phone without their consent, which would make them hardly better than the one's they are fighting against and contradict the characterization of the hacktivist group. A plausible reason that the number of followers never decreases could be that it would have to result in the possibility of the player losing a level. Whatever the reason is, the developer's decision to forgo the continuation of the reputation system and to include the follower system causes a stark inconsistency with the narrative.

Another feature creating logical flaws is ScoutX, a smartphone app comparable to real apps like Instagram where users can share photos with their followers. Marcus gains more followers by taking pictures of tourist sites and other marked places and uploading them. This feature functions as both an alternative way of gaining experience points and an incentive for the player to interact with the environment. The mechanic that the player gains followers by using this feature implies that the photos are publicly accessible. In addition to that, the game represents that the social media posts were liked by other users (see Figure 3). At first, this would not be problematic if we assume that Marcus's ScoutX account is the official DedSec account for social media. However, the game does not differentiate what kind of photo it is, as long as the marked location is in the picture, which means that Marcus can also take a picture of himself without a mask on and upload it (see Figure 3). A DedSec member voluntarily uploading a picture of himself to the internet despite him being highly skilled and intelligent when it comes to staying undetected by the police is highly questionable. Furthermore, the fact that DedSec actually manages to stay undetected despite posting pictures with their actual faces also calls the investigative skills of the San Francisco police department into question. Having the player gain followers instead of experience points causes logical flaws, which again begs the question why the developers implemented this system if they ignore its relation to other aspects of the game.

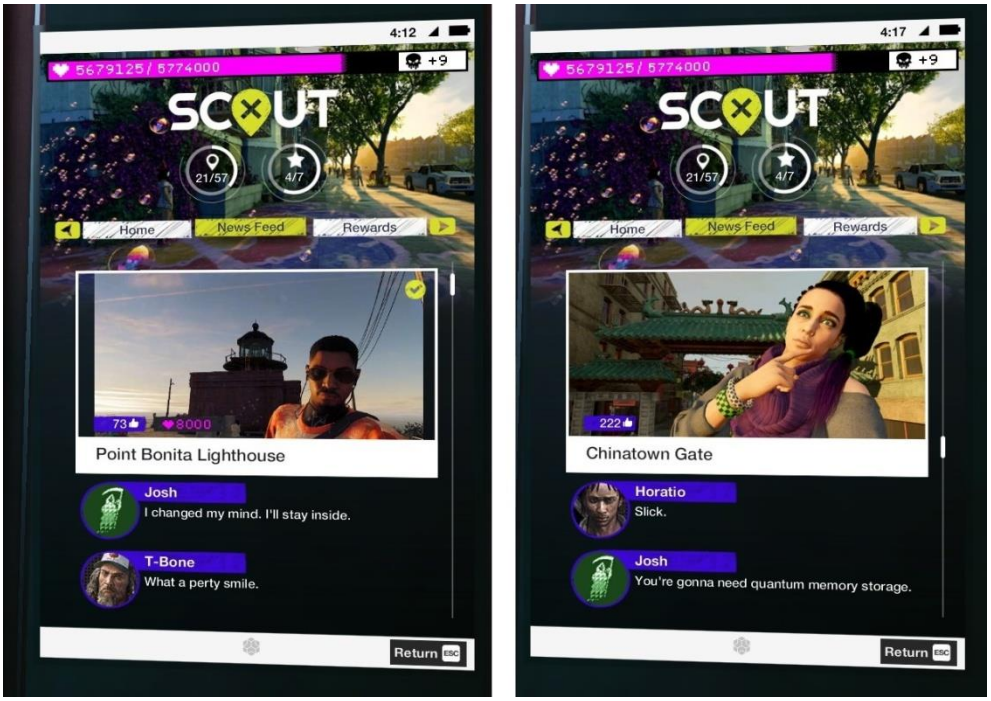

Figure 3. ScoutX posts by Marcus and Sitara. The amount of likes can be seen in the bottom left of the posted picture (Ubisoft Montréal, 2016).

While the previously mentioned side events where the player hacks ATMs or can help a man prevent suicide are potentially powerful performative criticism, they are also problematic in their relation to the characterization of Marcus. The player is in an ambiguous power position with the option of acting in a neutral, benevolent, or malicious manner, or not acting at all. Since the player controls Marcus, the player's actions are also Marcus's actions. From this perspective, having Marcus ruin someone financially despite not knowing them is uncharacteristically petty, even if it could arguably serve the aim of directing the citizen's anger at big corporations. In the case of the suicidal man, the game remains neutral by giving no direction or guidance whatsoever, leaving it to the player whether the man is saved. It is uncharacteristic of Marcus, who wants to save people from corporate exploitation, to not even care enough about a human life to comment on this event or have an opinion about it, yet the gameplay gives players the option to have Marcus behave that way, creating another inconsistency between narrative and gameplay.

In order to give players as much freedom as possible to enjoy the game in their own way, the developers have decided to not implement game mechanics from its predecessor because they were perceived as constraining (Yin-Poole, 2016). They also designed an experience point system based on the narrative's explanation that DedSec uses the processing power of their followers' phones. This explanation simultaneously ties the follower system into other game features, like the ScoutX app, while explaining their mechanics narratively. However,

both of these game design decisions heavily contradict the heroes' characterization and the tone of the main story, leading to friction undermining the carefully crafted dystopian criticism of "our present-day digital dystopia" (Evans-Thirlwell, 2016; cf. Kollar, 2016). As a result, the game appears to have split personalities with a strict distinction between story and gameplay.

Conclusion

Watch_Dogs 2 paints a critical picture of how people in power may make their decisions and that a continued digitalization of our electronic devices may lead to an oppressive system without actual free will. The game criticizes the way gatekeeper companies, such as Facebook and Google, treat the collection of personal data by showing a potential future in which a single company has managed to acquire access to the entirety of people's social lives and profit immensely by abusing the collected data. The company is also able to direct and sway public opinion according to their will by controlling filter bubbles. The game's narrative serves as an overt warning to internet users who "think that [they] are immune or underestimate the risks" of the internet (Ubisoft Montréal, 2016). In this regard, *Watch_Dogs 2* is one of many video game dystopias attempting to arouse "the desire to counteract dystopia in the real world" in the player (Farca, 2018, p. 74).

At its core, the story is critical of the gradual digitalization of our lives. More and more decisions are made by algorithms and software relying on big data collection of people's social lives. One of *Watch_Dogs 2*'s central criticisms is targeted at the belief that data collection with the help of algorithms is free from pre-existing human biases, when in fact, algorithms reflect these biases. Algorithmic collection of social data as well as automated responses and decisions based on that data will always be imperfect because algorithms reflect human notions about, for example, race or theories about what aspects of social life are important for determining crime rates. Furthermore, an algorithm may not only perpetuate these biases, but actually create weaknesses that can be exploited by skilled hackers. As more processes are automated and carried out by computational machines, people become less able to assess the algorithm's accuracy, or influence the outcomes themselves, and instead become passive subjects. The prominent role of social media is also critically represented by the fictional Blume Corporation and politicians abusing personalization features to create and control filter bubbles in order to sway public opinion in their intended direction. It is only logical then that the heroes in *Watch_Dogs 2* are hackers, who believe in transparency, democracy, and accountability. These values of current (Western) society are the justice for which DedSec fights.

However, the serious tone of the game's criticism is not reflected in the gameplay. Design decisions, for example the experience point system, in-game activities, and the exclusion of game mechanics from its

predecessor, are aimed at giving players as much freedom as possible and allowing them to have unconstrained fun. This juxtaposition of fun and serious tones causes internal incoherence. At times, the (missing) gameplay mechanics clash with the characterization of DedSec as a mostly peaceful hacktivist group. The contradictions caused by the interconnection of storytelling and gameplay result in a split of atmospheres, creating the impression that *Watch_Dogs 2* has two contradicting personalities, which ultimately subverts the game's own criticisms.

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