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Scaling Technoliberalism for Massively Multiplayer Online Games

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Abstract

The sandbox genre of Massively Multiplayer Online Games (MMOGs) addresses players as subjects with agency to shape worlds, impact populations, and make history through their actions within virtual environments. Designed features afford feelings of empowerment and solidarity that undergird technoliberal forms of subjectivity, which uphold technological structures as legitimate means to emergent effects in virtual worlds. This article uses ethnographic fieldwork and player interviews at *EVE Online* fan conventions to examine how the ideas and affects of technoliberalism are afforded through procedurally-encoded game processes, yet are aestheticized through branding onto player communities and their platforms. This smooths over the contradiction at the heart of technoliberalism that players' agency to shape virtual world content is contingent on rules encoded into platforms whose development and adjustment are beyond their control. These contradictions are the key to understanding the pleasures of freedom and complexities of control in designed environments beyond gaming.

1. Branding the Crowd

Massively multiplayer online games (MMOGs) cultivate particular forms of subjectivity. The genre known as “sandbox” games addresses players as subjects with agency to shape worlds, impact populations, and make history through their activity within a game. Sandbox design provides affordances not just for avatars to act, but also for players to feel like their deeds have far-reaching consequences and are part of a larger collective enterprise. This article uses ethnographic fieldwork at EVE Online conventions to examine how the sandbox genre affords feelings of empowerment and solidarity that undergird technoliberal forms of player subjectivity, which uphold the idea of technological structures as legitimate means to emergent effects in virtual worlds. These ideas and affects are afforded through procedurally-encoded game processes, yet are aestheticized through branding onto player communities and their platforms. The aestheticization of these affordances smooth over the contradiction at the heart of technoliberalism that players’ agency to shape virtual world content is contingent on rules encoded into platforms whose development and adjustment are beyond their control. These inconsistencies in technoliberal governance are the key to understanding the pleasures of freedom and complexities of control in designed environments beyond gaming.

On a late spring evening in 2013, I joined fans of the galactic warfare game EVE Online as they gathered in their hundreds at Reykjavik’s harbor to celebrate the digital game’s tenth anniversary. Our destination was the Harpa conference center, a futuristic glass building encased in an iridescent honeycomb facade, which seemed to rise organically out of the water. Inside the building, under hexagonal shadows cast by the Nordic twilight, female bartenders with spiky neon hair and cyber-primitivist face paintings refreshed partygoers along a glossy white bar that led into a dance hall. Inside the hall, the pitch-darkness was pierced by columns of blue spotlights flanking a platform, where a deejay was sampling from a densely layered downtempo track interspersed with gospel vocals.¹ Addressing the crowd consisting mostly of European and North American white men in their twenties and thirties, the deejay urged us to wave our lighters and smartphones in tribute as he welcomed us to “the Church of EVE Online.”

As the tempo picked up, a large screen behind the deejay projected looping game footage of spaceships taking off against opalescent planetary backgrounds. The vertical flight of these ships trailed after the blue spotlights as they faded out. This was intercut with scenes of rotating nebulae and a live feed of the deejay’s hand movements, which were superimposed by the “EVE” logo. As the track worked towards its crescendo, it was scratched with soundbites of “Autopilot Jumping,” an audio effect from the game voiced by fictional spaceship computers to signal the commencement of interstellar travel. These familiar sounds from the game sent the crowd cheering and hopping, the momentum of which was channeled by the deejay into the hip-hop anthem “Jump Around” by House of Pain.

Another sampled soundbite was “Welcome to the Sandbox,” a catchphrase from the game’s popular promotional video trailer.² The trailer was called “The Butterfly Effect” (CCP Games, 2009) and the catchphrase referenced EVE’s open-ended structure, which distinguished it as part of the sandbox genre. The trailer depicted how one character’s decision to interrupt or ignore the attack of a defenseless ship could trigger a chain reaction of escalating proportions that drew characters onto the forefront of large-scale warfare. Similar conflicts between player groups played out within the game against a fictional backdrop of militaristic hyper-capitalism and in relation to game rules that condoned treacherous forms of play such as fraud and espionage (Carter & Gibbs, 2013). The trailer video used a branching graphical structure to demonstrate how a single character could be part of a combat unit, which merged into armed alliances, which in turn conglomerated into thousand-player

¹ Z-Trip was an American deejay known for mashup sets and compositions featuring video game soundtracks and visuals. He sampled from electronic artist Pretty Lights’s “Finally Moving.”

² This was a well-known trailer among EVE players and was viewed millions of times on the video sharing website YouTube.

coalitions battling in epic virtual wars that could be discussed by hundreds of thousands more. The trailer ends by asking the viewer to “imagine what you might be a part of: being in the right place, at the right time could touch the lives of 300,000 people in 230 countries around the world.”³

This visual pattern emphasized the scale of the sandbox genre’s escalation of singular actions into sweeping consequences and was repeated in EVE’s promotional media, player conversations, and brand events such as the fan celebration in Reykjavik. I call this motif “mass causality” and show how affordances for causal connections between individual acts and global impacts within play environments also evoked feelings of social consequence and solidarity in play communities, which are resonant across virtual world gaming. Players are addressed through designed features that enable and constrain their actions and propel their consequences cumulatively across vast swathes of the game world. The reach and persistence of these emergent effects offer players a sense of durable meaning in virtual play. Mass causality aestheticizes what anthropologist Thomas Malaby (2009) calls technoliberalism: an orientation characterized by distrust in the vertical direction, belief in the legitimacy of emergent effects, and faith in technology to achieve those effects. Technoliberal subjects are free to choose and empowered to act, and are not disciplined by regulations but governed through technological structures and adjustments. This is the contradiction at the core of technoliberal subjectivity: while players are unfettered in their shaping of EVE’s hyper-capitalist fiction, their freedom within that fiction is regulated and constrained by digitally-encoded rules whose development and adjustment are ultimately beyond their control.

This article argues that sandbox design does not just afford mass causality of avatar actions; it also affords the meanings and feelings of individual empowerment and collective enterprise that smooth over inconsistencies at the heart of technoliberal governance. Examining mass causality through the framework of affordances puts the game platform’s materially-embedded possibilities in relation with players’ goals, competencies, and impressions. This relationality underscores how technoliberalism arises from interplays between the procedural rhetoric (Bogost, 2007) encoded into gaming technologies and the promotional rhetoric evoked by video trailers and dance parties at fan conventions. By re-staging connections between individual actions and collective outcomes within the game in the context of players’ social gatherings, mass causality transfers feelings of empowerment and solidarity from the game’s fiction to player communities and their platforms. While the procedural rhetoric of EVE’s sandbox mechanics hints at democratic world-shaping, the processes for shaping these mechanics fall short of the shared decision-making that characterizes what Nico Carpentier (2016) considers media participation.

Under the luminous nebulae and amid the rhythmic surge of human bodies in the “Church of EVE Online,” the sounds and images from the *Butterfly Effect* trailer evoked a sense of connection and consequence that was social and almost cosmic. Such events are what marketing scholars McAlexander and Schouten (1998) call brandfests, which are highly orchestrated events whose primary function is to cultivate customer loyalty and celebrate brand ownership. These events are attended by a brand’s most enthusiastic consumers and fans who arrive primed for meaningful social connections and experiences that they expect to transcend their everyday lives. For a brief moment in that dance hall, as one of hundreds of bodies whirling to the same sonic crests, mass causality was no longer merely an idea or motif, it was a feeling. Devon Powers (2010) suggests that interacting with brands with their whole bodies, at many levels of experience, in multi-sensory activities such as concerts enhances people’s affective attachments to brands. More powerful than the display of logos, the brandfest’s immersive spectacles used audio and visual iconography to reinforce notions of mass causality through the embodied sociality of the crowd. This paper discusses how brandfest rituals reinforce gaming technologies that kindle feelings of participation while eschewing its politics.

³ Since the trailer’s release in 2009, the game’s subscribers have increased from 300,000 to over half a million.

Cultural studies scholars maintain that affective intensities do things - they work in concrete ways to align individuals with communities and legitimize processes and relations of power (Ahmed, 2004). Therefore, cultural critique and its interventions “must be affective in order to be effective” (Mazzarella, 2009, p. 299; Cited in Muehlebach, 2011). The branding of mass causality does things - it smooths over contradictions in technoliberal agency and governance. These contradictions epitomize what Jodi Dean (2009) calls communicative capitalism: the merging of democracy and capitalism in networked communication technologies, where subjects misinterpret their enrichment of neoliberal information flows for meaningful participation in political processes. This analysis of mass causality contributes to the re-politicization of digital cultures by nudging popular and public discourse towards more evidence-based and ethically-informed assessments of platform governance.

This article combines ethnographic fieldwork and semi-structured interviews with EVE players and developers at brandfests with textual analysis of promotional texts, customer relations communications, press reports, and video recordings of selected brandfest events over an additional four years that are available on the company's website. I carried out participant observation at two week-long conventions in Reykjavik in 2013 and 2014, which included panels, presentations, musical performances, and sightseeing excursions. I interviewed eight players and seven developers during and after the convention in Reykjavik. When circumstances prevented audiotaping, I took detailed notes of interviews that were promptly transcribed. Observations, impressions, and conversations were reported into an audio recorder and translated into detailed notes after leaving the field site. This fieldwork was part of a larger project investigating player cultures cultivated through franchises managed by EVE's developer CCP Games. My findings arose from an iterative analytical process. Guided by processes described by Miles and Huberman (1984) and Glaser and Strauss (1967), I coded, compared, and collapsed data from observations, interactions, conversations, interviews, and documents to form themes and categories that were refined inductively. I then rearranged and reconstituted these themes into a conceptual framework and set of arguments. Finally, I worked backward to assemble ethnographic vignettes into narratives that illustrated these arguments.

2. Scaling Technoliberalism for the Masses

A year after witnessing the “church of EVE Online,” I returned to Reykjavik for the fan convention. Several days before the official events, the game's most committed fans had already arrived to hang out at a small bar with dark wood and low lights, decorated with distressed pressed tin wall panels and industrial accents. The bar was close to the headquarters of EVE's developer CCP Games, whose employees received a discounted rate for alcohol purchases. Most of the forty people there were white men of various ages from North America and Europe who conversed in English. The bar had many niches where small groups clustered for conversation and laughter, which was punctuated by the dull clinking of beer mugs.

People circulated among groups and introduced themselves by their real-life names, followed by their character's in-game unit, alliance, and coalition affiliations. Many of them were exchanging war stories and military tactics from a recent battle in the game dubbed the “Bloodbath of B-R5RB,” which was widely reported by gaming and mainstream news outlets at the time as the largest conflict to ever take place within a video game. Fleets of combat spacecraft such as fighters, battleships, dreadnoughts, and supercarriers clashed in a region of space in the game called B-R5RB. Spaceships that had been laboriously crafted by players over weeks and months were obliterated en masse in a blitz of lasers from every direction.

Press releases and news reports emphasized the scale of the conflict: 7,548 players destroyed over 3000 ships valued at around \$300,000 worth of in-game currency over 22 hours of fighting (CCP Dolan, 2014). These were large numbers compared to MMOGs where ten or twenty players

fight alongside each other, and were repeated in the many gaming news sites that reported on the event, such as Polygon.com (Pitcher, 2014) and TheEscapist.com (Chalk, 2014). Even mainstream news sites such as HuffingtonPost.com (Casti, 2014), CBS (2014), and Associated Press (2014) picked up the story. ABC News, for example, posted the headline: “Epic Virtual Space Battle Costs Players Over \$300,000” (Chang, 2014). The scale of these huge battles distinguished EVE from other games and attracted many players to the game. According to the company, in the weeks after the Bloodbath was widely reported by gaming and mainstream news, 15,000 new players signed up to try the game.

These media reports also emphasized how these large-scale events escalated from the seemingly trivial actions of single individuals. For example, the video game website Kotaku.com (Good, 2014) posted an article titled: “Gigantic Space Battle Breaks Out in EVE Online, Thanks to Unpaid Bill.” This referred to a missed rent payment on a space station, a strategic waypoint in the territorial conflict between two large player coalitions that had been going on for several months. EVE player groups used in-game currency to pay monthly fees in order to claim territory. Someone forgot to check “Automatic Bill Pay” in their game settings. This lapsed payment made it easy to seize the station, which triggered fighting in the region. The company’s press release underscored that “one pilot’s action (or inaction) had repercussions for the entire universe — a *butterfly wing* [emphasis added] causing a massive typhoon of destruction.” This was a reference to the aforementioned “The Butterfly Effect” (CCP Games, 2009) promotional trailer, which was hyperlinked in the press release. This chain reaction of seemingly trivial individual actions into events of mass significance was made explicit by the trailer’s narration:

In EVE, the choices you make shape the outcome of events ... what matters most was that the experience was emergent and unscripted. Because in the sandbox, all player actions, no matter how subtle or bold, always have an impact.

This motif of increasing scale and significance was reinforced by camera movement that zoomed in and out from the perspective of a single hypothetical player joining with others to form a corporation, to corporations banding into an alliance, and finally to alliances merging into coalitions that faced off in massive wars that transformed EVE’s territorial map. Vollans, Janes, Therrien, and Arsenault (2017) propose that promotional media such as video trailers are deployed by developers in a tacit contract with the specialist gaming press to manage and shape desire for their products. When contextualized in media reportage on the MMOG’s immense battles and paired with promotional reassurances about the cumulative impact of every player action, the trailer’s arresting visual pattern has the effect of putting individual efforts into a kind of universal perspective.

Crucially, the scale of clashes such as the Bloodbath thrilled fans at the Reykjavik bar because of its culmination from what was known as player-driven narratives or events. One of these fans was Wayne, a compact middle-aged white man with a silver buzzcut who was a fitness instructor in Ohio and a fleet commander in a well-known military alliance in the game. He was a prominent player who was on friendly terms with developers and other high profile players. When he heard I was researching the game, Wayne told me why EVE was different from other games:

In EVE it's the players, not the dev[eloper]s who create the most exciting content. All the cool stories you see in the news - that came from us... We started those feuds, we built those fleets, we waged those wars. And that's what gets new players in and keeps old players like me coming back. EVE is not like other MMO[G]s, it's a *Sandbox*.

Games scholars Bergstrom, Carter, Woodford, and Paul, (2013) contend that EVE is known less for the storylines and characters of designed quests, and more by the escalation of interpersonal drama between players into large-scale conflicts between their alliances and coalitions. Christopher

Paul (2016) argues that design choices within game features such as tutorials encourage newcomers to join large alliances, nudging them to engage with and contribute to content emergent from the cooperation and conflict between player groups. In line with Wayne's explanations, Carter, Bergstrom, Webber, and Milik (2015) propose that this emergent content is a source of pride for many EVE players who see their activity within the game as more authentic than other MMOGs. For example, Eli, a white twenty-something programmer from Vancouver compared EVE to *World of Warcraft*, a popular MMOG structured around quests in which players cooperate to defeat enemy characters known as raid bosses. These quests are created by paid designers, artists, writers, and engineers. He expounded:

In other games, you kinda feel like you're, well, playing something that's been made for you to play. All the levels or quests have been created by someone. But in EVE, things happen that nobody planned, that nobody designed. Like the 'Burn Jita' campaign. That really made news. It's pretty much the most exciting thing I've seen in online gaming. And it was all thanks to players who did something because they could. I actually knew someone who was part of it... its cool because that would never be *allowed* to happen in another MMO[G].

Burn Jita was a coordinated campaign where a few well-connected players rallied thousands of others to destroy high-value industrial ships by invading an area within the game reserved for trade instead of combat. This took months of planning for kamikaze fleets to circumvent the security forces of non-player characters programmed to protect the area. The event was celebrated by players and chronicled by technology journalists for its sensational irreverence. Eli emphasized that Burn Jita was possible because unscripted player endeavors were allowed by the MMOG developer even if it contravened the game's intended design. This permissive attitude towards user governance was unique in the industry. For example, in an interview with the gaming news site Eurogamer, EVE's lead game designer stated that "the worst thing we could do is to stop it happening... it would be against everything we stand for" (Yin-Poole, 2012).⁴ EVE and its developer CCP Games stood for a mode of governance known as technoliberalism, whereby players were not disciplined through directives or coercion, but regulated through affordances based in gaming technologies and advanced through branding techniques.

2.1. Sandbox Affordances

Although the company did not design player-driven events, they did design the game structures that made activities like reconnaissance, espionage, and combat possible on a large scale. The company and players referred to these game design structures as the Sandbox. Like a playground sandbox, this genre encourages free-form play and construction instead of pre-defined objectives (Pearce, 2009). The genre encourages players to pursue their own goals, instead of progressing along pre-defined objectives and storylines created by developers. According to the company, this style of play was cultivated by design choices.

Thousand player battles like the Bloodbath are possible because the game system is designed for its half a million characters to occupy and interact in the same graphical environment. This was not possible in all MMOGs. It takes substantial computing power for so many characters and their actions to be graphically processed in real time. For this reason, most MMOGs create identical but separate versions of its game world that are each hosted on physical devices called servers. Each server's play environment can only be occupied by a few thousand players at a time. Popular MMOGs have hundreds of servers, each with a self-contained game world where events occurring in

⁴ The lead game designer interviewed was Kistoffer Touborg.

one can never actually impact others. They are like parallel universes unfolding on separate paths that never cross. EVE has only one server or shard.⁵

This technical architecture allows half a million subscribers'⁶ paths to potentially cross, where according to the Bloodbath's press release, the actions of one player can reverberate like the beat of a butterfly's wing across fictional galaxies to trigger a war. The escalation of player-driven storylines into mass events is also facilitated by logistical and communicative tools within the game for players to agglomerate into relatively large groupings. Combat units are known in EVE as "corporations," which are troops of ten to twenty members comparable to what is known as a guild in other MMOGs. Unlike other MMOGs, EVE's corporations are provided tools within the game to combine into larger groupings of more than a thousand members known as alliances and coalitions. The Bloodbath of B-R5RB was a result of a clash between two such coalitions. This scale of social organization was supported by game features that allowed players to coordinate and command in large numbers.

This reverberation of actions across a single game environment is significant because of what media scholar Mark Wolf (2012) calls "worldness": the impression that the environment depicted by media artifacts is more than a series of quests or an aesthetic and narrative compendium. Worldness is the impression of a vast world in which all objects, characters, and events are spatially, temporally, and causally interconnected. In media franchises, worldness is achieved through narrative and aesthetic consistency across transmedia product lines; in sandbox games like EVE, worldness is achieved through technical systems such as its single server or shard architecture. Wolf emphasizes that the worldness of interactive environments such as MMOGs is enhanced by its technical capacity for player actions to automatically be incorporated into the progression of that world. This contrasts with user-generated content such as fan fiction and art that are seldom officiated into a film or television franchise's canon. Games scholar Oskar Milik (2016) offers that this single-server design and the interconnectedness of the MMOG's economic, political, and military systems allows its conflicts to scale into large wars that are vital to the visibility and newsworthiness of EVE's player-driven stories. As aforementioned in the popular media reportage of the Bloodbath of B-R5RB, these stories are opportunities for the company to market its game to new players.

Another game structure facilitating large-scale player-driven storylines was the durability of changes to the simulated environment wrought by avatar actions, which went beyond the interactivity provided by most MMOGs. Many MMOGs' graphical environments reset periodically, so that if one guild slew a dragon and plundered its dungeon, the game system automatically regenerated non-player characters and environments so other players could experience the world as if they were the first to do so. Sandbox games like EVE did not regenerate environments but were programmed for lasting player-wrought impact on the simulated world. For example, when players altered EVE's fictional planets by destroying objects or depleting raw materials, these areas remained that way until other players modified them. This impacted other miners and the in-game value of the raw material. Anthropologist Tom Boellstorff (2008) offers that many open-ended virtual environments encourage users to create digital artifacts to sell or trade in what can be considered an "object-based economy." EVE's Sandbox cultivates a military-industrial economy where objects such as ships, space stations, armies are created for war. Games scholars Taylor, Bergstrom, Jenson, and de Castell (2015) assert that EVE's player-driven war machine is fueled by cycles of virtual manufacture and destruction wrought by battles such as the Bloodbath. Together, these design choices meant that local adjustments could add up to big changes such as the outcome of wars or the fate of empires.

⁵ EVE has a server and instance of the game world for players connecting from China.

⁶ At the time of fieldwork, customers paid a monthly subscription of fifteen U.S. dollars a month. In 2016 the company adopted a freemium model.

Crucially, the mass causality of avatar actions enabled through encoded game structures was a means towards the end of player experiences of personal empowerment and social consequence. At a talk during a brandfest in Las Vegas, EVE's Chief Marketing Officer professed that the company designed the sandbox according to the criteria of "totality, consistency, and malleability" to evoke a specific experience:

... to be able to make an impact, to make a difference, to see a visible result. Something that has changed as a result of your being there... (EVE) is a universe that is changed by our being there. It is a universe of real choice and consequence. It is not an illusion of choice that most developers give us where I am merely picking from multiple choice aspects (CCP Games, 2013).⁷

The developer encapsulated that the sandbox is designed for individual players to make their "ding in the universe."⁸ This desire was articulated by EVE's most dedicated players in the Reykjavik bar during the brandfest as they flaunted their virtual conquests, complained about the game's precipitous learning curve, and praised the resilience of the player community. For example, Eli, the programmer from Vancouver reflected upon his experience of the Bloodbath of B-R5RB as significant because of the scale of its influence within the game and even in popular culture:

"It's a rush to be in a huge battle like that, to fly with your corp[oration mates] while listening to your fleet commander lose his shit. Because it's basically chaos out there. There are lulls for sure, but there are also those moments where things blow up and you need to step up ... It's been reported in the news and all that - it's part of EVE history now, and I was part of it."

This collective history is a source of great pride and excitement for many players. Carter et al. (2015) offer that these emotions rest on how actions from EVE's history have conditioned its present, and promise to condition its future. Especially when amplified by the gaming and mainstream press, the player-driven events enabled by the MMOG's sandbox design offer a sense of durable meaning that may seem more ephemeral in other virtual worlds. Expressing similar sentiments, in a series of video interviews with convention attendees by PC Gamer (2014), one player remarked that the Bloodbath was:

"the pinnacle of what EVE is, and it's been everywhere, so that's the best story so far. I mean, I was there, everybody was there. It's fun to be a part of something that's become so massive that makes news, even non-gamer news. I got in about an hour after it started ... I got popped thirty seconds after the last Titan⁹ popped in actual game time. That was fantastic."

For players like Eli and others I spoke to in my research, their ding in EVE's universe was contingent on the size of player-driven events they were part of, and the reach of its publicity in gaming and popular culture. As highlighted in the player quotations, reportage in the mainstream news was seen as the apex of EVE's designed experience of meaningful choices and outcomes. Kelly Bergstrom (2016) notes that because of its publicity and visibility, large-scale fleet warfare is the most valued style of play in the MMOG. However, the author emphasizes that it is only one of a diversity of play-styles that are marginalized by the game's promotional, developmental, and player cultures.

⁷ David Reid was the CMO who gave this talk during the brandfest in Las Vegas in 2013. His talk connected totality to the MMOG's single shard architecture. Consistency and malleability can be related to the media studies concepts of worldness and the durability of changes made by players to interactive imaginary worlds.

⁸ EVE's chief marketing officer David Reid stated that he adapted a quotation from Apple's Steve Jobs that "We're here to put a dent in the universe." (Sutter, 2011)

⁹ A Titan is a class of warship that takes a substantial amount of player effort to construct within the game and is therefore seen as an accomplishment to defeat.

Mass causality is based in gaming technologies but has intended effects that extend beyond avatar actions to player experiences. For this reason, mass causality must be understood not just technically as systems that feed back movement and matter in graphical environments, but also relationally as affordances for meaning and sentiment. At a fundamental level, interactivity can be defined as a reciprocal relationship or feedback between two elements in a system (Salen & Zimmerman, 2004). Because they operate through computer-mediated feedback to user inputs, digital games are by definition, interactive (Manovich, 2001). However, in order to fully comprehend the pleasures and pressures of technoliberal agency and governance, mass causality should be examined as what psychologist James Gibson (2014) calls affordances: materially-embedded possibilities for action by agents in relation to their environment. This ecological approach is distinct from device-centered approaches epitomized by usability engineers such as Donald Norman (1988) who see affordances as material properties that trigger user behavior. As a niche of affordances, mass causality exists in the relational and improvisational space between a game's technically encoded structures and players' intentions, competencies, and impressions (Scarantino, 2002; Lupton, 2014). By staking a middle ground between social constructivism and technological determinism, the affordance framework can take into account the material, the mediated, and the emotional aspects of human-technology interaction (Nagy & Neff, 2015).

The affordance paradigm elucidates how sandbox features of totality, consistency, and malleability form a relational space with promotional techniques, as well as with wider cultural expectations of technologically-enabled user empowerment. On the one hand, EVE's sandbox conveys mass causality through what games scholar Ian Bogost (2007) calls "procedural rhetoric": persuasion through digitally programmed game processes instead of through representations of characters or settings in media content. Eli, Wayne and other players I encountered in my research looked to the sandbox's processes as the lynchpin of beliefs that their actions mattered and that they were contributing to something larger than themselves. On the other hand, this experience of personal significance and collective enterprise was inflected through promotional rhetoric encoded into brandfest events, talks, and trailers. Expanding on Gibson's original definition of affordances, design scholars Almquist and Lupton (2009) propose that a designed artifact's materiality affords action as well as meaning, which comes to the fore in branding. Social theorist Adam Arvidsson (2006) argues that brands are no longer just symbols for differentiating products; brands are platforms for actions and attachments that cohere consumers, employees, and stakeholders around a common ethos and enterprise.

The ethos of mass causality was not just encoded into EVE's sandbox; it also emerged through the conversations and connections of fans who arrived at the Reykjavik bar days ahead of the brandfest to commune with strangers over their shared passion for the game. Sociologist Celia Lury (2004) suggests that brands are informational objects that function as platforms anticipating certain actions and attachments. In addition to activity within the game, the EVE brand also anticipates actions and attachments such as meeting, drinking, chatting, and bonding with fellow consumers at brandfests. For example, even though Eli and Wayne just met, they shared their experiences about the Bloodbath of B-R5RB effortlessly and continued to hang out throughout the convention. Management scholars Marzocchi, Morandin, and Bergami (2013) suggest that inter-consumer attachments accrue brand loyalties that benefit companies in areas such as customer retention, tolerance for product failings, successful brand extension, and word-of-mouth promotion. By sharing war stories and extolling the virtues of the sandbox, players circulate ideas and affects about mass causality which are intensified through their web of relationships with the EVE brand, its development company, products, and other customers.

Mass causality may be favorable for game companies and meaningful for players. However, mass causality dignifies technoliberal orientations whereby companies govern user actions not through behavioral regulations, but through technical adjustments. Like digital media platforms, the

systems, rules, and features coded into MMOGs are continually updated, tested, and modified. Modifications to online platforms such as social media impact user behavior, accessibility, and public culture; adjustments to commercial MMOGs also affect player conduct, concerns, and rights. In both these cases, unlike regulations on user behavior, technical adjustments are more often algorithmic, opaque, and proprietary. The implications of mass causality on virtual world governance will be discussed in the next section.

3. The Cultural Politics of Technoliberalism

Mass causality glorifies a model of agency where players are free to roam the simulated environment marauding, scamming, mining, trading, warring, and colonizing, unbounded by narrative structures, aesthetic expectations, norms of decency, or codes of conduct. The only constraint players face in this anarcho-capitalist frontier is the very nature of this environment - its mineral deposits, its industrial technologies, its combat physics, and its sovereignty mechanisms. And unlike the physical world, the nature of this virtual world periodically shifts according to gaming industry trends, market activity, and consumer sentiment, in ways that are ultimately beyond players' control. This is the Faustian bargain of what anthropologist Thomas Malaby (2009) calls technoliberalism: an orientation that combines liberalism's distrust of vertical institutions in favor of outcomes that emerge from user interactions, with a deep faith in technology to achieve those outcomes.

MMOGs are not complete products at launch but are services that are continually being updated with new features, fixes, and content from paid developers, as well as enriched by actions, creations, and connections of players, which constitute vital forms of content and economic value (Kline, Dyer-Witheford, & De Peuter, G., 2003). These ongoing, multifaceted relations between MMOG companies and their players require structures of governance, which in the case of EVE, are technoliberal instead of disciplinary. EVE's developer CCP Games differs from other MMOGs which routinely use codes of conduct, community management, and peer surveillance to discipline players into norms of fair play, honesty, and sportsmanship (Humphreys, 2008). Instead, CCP takes a seemingly hands-off approach that condones in-game behavior deemed immoral, as long as it complies with the game's Terms of Service (ToS) and End User License Agreement (EULA). For example, even though the aforementioned Burn Jita campaign waged by player groups defied the designed expectations of the trade hub in the game, CCP developers did not disrupt the player-driven event, or punish the subscribers involved.

This hands-off mode of player governance is not just part of EVE's aesthetic vision for mass causality; it is also at the core of its business model for content creation. Management scholar Jędrzej Czarnota (2016) describes how CCP developers insist that they are not dictators or gods but merely "janitors" of EVE's virtual world, who work in the background supporting player-driven narratives. For example, in a talk during a summit for video game executives, the company's CEO stated that "I'm just a janitor, I make the servers run, I fix the game," and insisted the MMOG's players were the real heroes and villains who "really make the EVE universe go round" (Variety, 2014). This role of powering the virtual universe designated to players was elaborated in an interview I conducted with a former CCP business development executive at a multi-genre fan convention in Atlanta. The developer explained that other MMOGs are like "theme parks" where players consume pre-scripted content such as quests featuring dialogue, puzzles, and battles. This may involve playing with or against other players, but they are still themed rides that are designed by writers and artists. He compared this with the content consumed in sandbox games like EVE:

The content that you're consuming is the friction between players in their struggle for resources, their competition with each other and so on; the permutations are a lot larger and unlike pre-

scripted content, this friction refreshes itself ... that's how you end up with the crazy stories that EVE has become famous for.

While EVE's tools for player-driven content are predetermined, the friction itself is unscripted, self-renewing, yet highly appealing to subscribers, which is efficient from both a development and marketing standpoint. Media scholars such as Postigo (2011) and van Dijck (2009) call such player contributions user-generated content and suggest that they are a vital productive force across online gaming, social media, and retailing platforms. This content borne from friction between players energizes the content within the EVE client and community as it circulates across online forums, fan websites, social media, personal conversations, brandfest events, and gaming news sites. Some of this content even becomes mythicized by players and canonized by developers, as in the case of EVE's *True Stories*, a graphic novel penned by renowned comic book writer Daniel Way (2014). Along this circuitous journey, player-driven content accumulates the cultural cachet of legitimacy that enchants mass causality and its associated feelings of personal empowerment and collective enterprise.

The legitimacy claimed by EVE's janitorial governance over player-driven content creation is part of wider technoliberal beliefs in the authenticity, efficiency, and virtue of emergence. Games researcher Jesper Juul (2005) suggests that emergent gameplay is not intentionally structured or predicted by designers, but arises from a player's negotiation with freedom and possibility within rule-based fictional worlds. Drawing from his ethnography of developers of the virtual world *Second life*, Malaby (2009) argues that technoliberals believe that technologically facilitated emergence guarantees individual freedom, maintains neutrality by aggregating collective inputs and is, therefore, a more legitimate form of content creation than top-down decision-making. In this sense, the procedural and promotional rhetoric encoded and evoked by EVE's sandbox affordances address players as technoliberal subjects who are free to choose and empowered to act, whose choices and actions are not disciplined by imposed regulations but facilitated by technological infrastructures.

The incongruence between this oblique form of control and the game's more overt claims about player freedom was addressed in an interview with a community manager at CCP's office in Reykjavik. The developer stated that "no moral standards are enforced by the universe," so lying, cheating, stealing are all allowed. I asked what was the company's decision-making process was for intervening in the sandbox. The developer paused thoughtfully and used the analogy of modifying the natural laws of the universe to explain how they "don't interfere directly in player activity" by issuing warnings or suspending subscribers' accounts for what they deemed undesirable conduct; instead, the company steers behavior "changing the mechanics." The logic of this analogy about natural laws of the virtual universe makes it hard to give credence to self-deprecating claims about janitorial governance such as the CEO's statement in an interview with The Guardian newspaper that:

People ask me what it's like to be the god of the universe of EVE ... and I have to tell them I don't know. I'm not the god of anything in EVE. I'm more like the janitor (Cowen, 2014).

Although players clearly celebrated their sense of power in the sandbox, they were not completely ignorant of the indirect control maintained by their virtual environments. Every fix, update, and expansion the company releases are felt by as social, political, and economic ramifications for EVE's fractious player groups. In most MMOGs, if players are dissatisfied about these ramifications, they are welcome to express their grievances, but only through "the circuits of interactivity controlled by the corporation itself" (Herman, Coombe, & Kaye, 2006, p. 204). Sociologist T. L. Taylor (2006) offers that most MMOGs authorize circuits of interactivity such as online user forums and feedback sessions at conventions, but not protests within the game. These

protests are coercively shut down by publishers who ban player accounts for disruption and failure to comply with its terms of service.

Unlike other MMOGs, when such player protests occur in EVE's virtual world, the company's technoliberal convictions seemed to have prevented them from intervening (Blodgett & Tapia, 2011). Even protests to the company's governance had to be considered a legitimate form of emergent content. Such protests highlight inconsistencies at the core of technoliberalism. Malaby (2009, p. 59) reports that developers of Second Life were firm in their belief in that the affordances for content creation were value-neutral tools, and were unable to reconcile their technoliberal beliefs with "the contradiction between the company's position as the entity that provides the tools and its position as the entity that provides the world in which those tools were used." In a similar vein, for EVE's developer to uphold its belief in mass causality and the legitimacy of emergent player-driven content, the company had to endure the politicization of its own governance.

The inconsistencies within technoliberalism also hold promise for more democratic platform governance. In the case of EVE, one such protest took place in 2011 at a central trading hub where thousands of players began bombarding monuments symbolizing the company. This outcry was triggered by the company's development of items sold for advantages within the game, which deeply offended players who sought to uphold their dominant culture of meritocracy (Clark, 2015). Many disgruntled players also used official online forums to demand the firing of developers responsible for the store. These forms of consumer dissent escalated when the media began reporting on it, which arguably led the company to adopt a more conciliatory stance towards player demands in relation to its in-game store and other subsequent issues. This substantial change in customer relations and platform governance can be partly attributed to the publicity resulting from in-game protests, which were possible because of the company's technoliberal belief in the legitimacy of emergent content.

4. Conclusion

Sandbox design provides affordances not just for avatars to act, but also for players to feel like their deeds have wide-ranging consequence and are part of a larger collective enterprise. This article used the case of EVE Online to examine how the sandbox genre affords feelings of empowerment and solidarity that undergirds technoliberal forms of player subjectivity, which upholds the idea of technological structures as legitimate means to emergent effects in virtual worlds. The ideas and affects of technoliberalism are afforded through procedurally-encoded game processes and aestheticized through branding. This smooths over the contradiction at the heart of technoliberalism that players' agency to shape virtual world content is contingent on rules encoded into platforms whose development and adjustment are beyond their control. Mass causality's affordances for action, meaning, and affects blur important distinctions between technoliberal governance of players within game worlds and platforms. By crystalizing technoliberal agency into a brand image, mass causality depoliticizes platform governance; yet its internal contradictions also hold promise for consumer protest and commodity activism.

Contrary to these technoliberal claims and beliefs, technologically facilitated emergence is neither neutral nor morally superior. Virtual environments such as MMOGs are not simply maintained, as EVE's developers modestly profess. Anthropologist Bonnie Nardi (2010) asserts that governance in MMOGs operate according to what she calls "the tyranny of emergence," whereby design of software artifacts embody directive force, dominating experience while not completely determining it. Furthermore, seemingly small changes made by developers to game architecture, rules, or content have ramifications on an MMOG's myriad player factions. In this sense, technoliberalism and its emergent effects are inherently political. This insistence on the neutrality of emergence can be traced beyond gaming to what communication scholar Tarleton Gillespie (2010)

calls the ideology of media platforms, which are positioned by their companies as facilitators rather than arbiters or curators of player intentions and creations.

Beyond virtual worlds, the technoliberal ethos of mass causality can also be traced to what Michel Foucault (1991) called governmentality: a mode of control that works from the bottom up, by addressing subjects as free persons, while simultaneously putting mechanisms in place that channel subjects' experience of freedom into predetermined modes. Unlike the orders, rules, and norms of disciplinary power (Foucault, 1977), government operates through the provision of ambiances that frame and partially anticipate the agency of individuals. Sociologist Thomas Lemke (2001) proposes that governmentality focuses not on the players, but on the rules of the game, not on the inner subjugation of individuals, but on designing and controlling their outer environment. Within designed enclosures that may be virtual, digital, physical, or symbolic, subjects of governmentality do not experience ambiances as constrictive but as a choice. Political philosopher Wendy Brown (2015) maintains that government has a complex relationship with freedom, whereby it produced, organized, managed, consumed individual liberty, all while taking a hands-off approach to the subject. By showing how governing enclosures converge around the subject's freedom in and around the game, this article analyzes contradictions about agency at the heart of technoliberalism.

A crucial way to unravel these contradictions is by identifying and interpreting the underlying rules that drive the sandbox's technical processes. Media scholar Ian Bogost (2007) calls this mode of critical reflection "procedural literacy." This involves playing a game or using a platform with particular attention to how processes are being modeled in code. Procedural literacy also involves reflecting on what those modeled processes are saying about how things work in the universe of an MMOG, and how they could or should work in the universe outside it. In EVE, these processes model physical mechanisms such as causality, as well as social concepts such as human agency. These mechanisms and concepts are based on procedural rhetoric and reinforced by promotional rhetoric, which can both be critiqued by attending to the structures, operations, and embedded ideologies of sandbox processes and platform governance.

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