»Dude, How Much Health Do You Have Left?« On Masculinity and the Rationalization of Health in Video Games

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Abstract: Many video games reinforce a rationalizing logic of self-care through the use of health management tools like hit points and health bars. This paper attempts to problematize the quantification of health in games by situating it at the nexus of objective rationality and hegemonic masculinity. I argue that this assemblage not only necessitates the conditions of existence for hit points and status effects, but also embeds the mechanisms with biopolitical scripts that (re)produce the ideal masculine biocitizen. This rationalization of health in games reinforces hegemonic practices of biomedicine that aim to preserve masculinity rather than improve overall health. Hit points and health bars therefore reproduce masculine ways of seeing that contribute to masculine health practices in the everyday world and consequentially men's health disparities.

Keywords: Biomedicalization; Men's Health; Self-Tracking; Fallout 76; Toxic Masculinity

Schlagworte: Biomedikalisierung; Gesundheit des Mannes; Fallout 76; Toxische Männlichkeit

1. Introduction

A haggard figure hunches over a stagnant pool of water. He hesitates for a moment. The water might not be safe, and who knows if it's even sanitary. He weighs the risk of infection, but his thirst surmounts his precautionary wits. He takes a sip. He survives the questionable decision but has a hard time retaining water for the next twenty minutes. The player notices that the avatar seems to be perpetually parched and pulls up a menu to investigate current status effects. One line on the dark green screen reads, »Dysentery: Periodic water loss for 15 minutes.«

Players who contract diseases in digital games seem to always carry a medical encyclopedia in their backpacks or come preloaded with a medical doctorate. As

soon as their character feels ill, players are given the diagnosis, symptoms, and duration of their malady. Once they pull up a menu, the player can decide to find (or sometimes make) a remedy, wait it out, or pay someone else for healing services. Diseases such as Fallout 76's (Bethesda 2018) dysentery (mentioned above), Far Cry 2's (Ubisoft 2008) malaria, The Elder Scrolls' (Bethesda 1996-2018) vampirism, and many others equate diseases with status effects, or temporary modifications to a character's statistics (stats, i.e., numerical representations of abilities). In short, these diseases often lower or >debuff< stats such as health, stamina, or strength for a certain amount of time until the condition improves. To shorten the duration of the debuff or prevent it altogether, players can consume healing agents or abilities that cure or mitigate the condition. The mechanics of buffing and debuffing then seemingly motivate players to operate in a state of perpetual preparedness. When illness acts as a status effect, it requires players to constantly track, translate, and monitor various streams of data with the understanding that they, the players, are solely responsible and accountable for the state of their characters' health.

Disease, discomfort, and damage in video games therefore predominantly revolve around resource management. Whether it's through managing hit points and damage stats or monitoring characters' thirst, hunger, and immunity, these ludic assemblages encourage players to utilize practices of self-surveillance. Many games reinforce this orientation through the use of heads-up displays (HUDs), which provide players with a surplus of resource data in the forms of meters, timers, countdowns etc. The health bar is one such tool for the management of resources – in particular, of health or hit points. But how and why is a concept so broad and ill-defined as »health« typically rationalized, represented, and operationalized as percentages or a small red rectangle in video games?

This paper attempts to problematize in-game health stats by situating them at the nexus of biomedicalization, rationalization, and hegemonic masculinity. These three discourses inform and structure one another, and, as this paper will show, contribute to the hit points longevity in game design and their critical invisibility in academic scholarship. This paper argues that the ludic rationalization and self-management of health burgeons from and perpetuates hegemonic conceptualizations of healthcare, which rely heavily on characteristics often associated with authoritative practices of masculinity.¹Health management in video

¹ The gendering of rationality resounds within Western philosophy. Ancient Greek philosophers attempted to describe rationality as something that transcended gender; however, they also concretized a dichotomy between feminine nature on the one hand and the masculine preoccupation of the mind and reason on the other (Lloyd 1984). Cartesian philosophies of rationality utilized these distinctions, assigning dominance to rational thought »based on clarity, dispassion, and detachment« and subordination to other ways of knowing (Bordo 1986, 440). Following a trail of Western philosophical thought from Descartes to Bacon to Kant to Weber and beyond, Ross-

games is therefore one product and producer of expectations for men's self-care and their relationship to contemporary biomedicine.

In order to support these arguments, I make four sequential moves. The first dissects the epistemology of hit points in reference to masculine rationality - a normalized version of logical reasoning that's structured upon objectivity and objectification. Then, I investigate the relationship between this masculine rationality and biomedicalization (i.e., the hyper-systemization, commodification, and moralization of health and healthcare). I argue that this »agencement« (Puar 2012, 57) not only necessitates the conditions of existence for hit points and status effects, but also embeds the mechanisms with biopolitical scripts that (re)produce the ideal masculine biocitizen (Takeshita 2012; Crawshaw 2007). In the fourth section, I describe how this milieu ushers a hyper-rationalization and regulation of in-game healthcare resources that players use to maintain health and control diseases. In doing so, I also emphasize the self-surveillant processes that expect and prepare a subject who reads, responds to, and is responsible for acting on incoming (health) information. For the final section, I discuss how the practice of ingame health management reifies contemporary men's health practices. In closing, I suggest that hit points reinforce hegemonic practices of biomedicine that aim to preserve men's masculinity rather than improve their overall health.

2. From Health to Hit Points: Objectifying Health through Masculine Rationality

Video game developers and publishers love to announce how the next big game or game console will be better, faster, sleeker, and more perceptually stunning than its predecessors; however, many game design aspects persist across generations (Parisi 2015). Visualizations of health, for instance, permeate a vast majority of mainstream games. In some, health appears as a geometric shape filled with colors like red or green; in others, it's seen as a screen overlay which disappears over time; and still in the more traditional varieties, it becomes recognizable through discrete units such as hearts and changing dragonfly colors. Regardless of the form it takes, health in games can easily be recognized as ubiquitous. Today, scholars and players alike take these visualizations of health as one of video game's inherent components, but health in games, like all normative structures,

Smith and Kornberger (2004) describe how this history of gendered (metaphorical) associations and power differentials contributed to rendering both the natural and the feminine *controllable* by masculine people and practices. Within this chapter, masculine practices refer to a plethora of techniques by which phenomenon are rendered legible to and governable by a (masculine) observer. Masculine rationality therefore describes a system of flows of power in which a hegemonic viewpoint claims legitimacy and domination over other ways of knowing and becoming.

has had to be normalized through general acceptance and repetition in order to persist and maintain critical invisibility.

While they might represent it differently, the types of health visualization mentioned above render dynamic processes as objectified resources. In short, they turn complex pathologies into calculable numerical data. Yet video games didn't start this proverbial fire. Character statistics have long existed within game spaces. Ancient precursors of chess, for example, differentiated unit types along quantified lines of mobility, while wargames of the early 19th century used wooden blocks as abstractions of troop numbers. In these early iterations of character attributes (or stats), the players operated as the State, and the number and type of soldiers on the battlefield acted as stats for this (militarized) institutional power. Toward the end of the 20th century, however, another form of statistical representation began to solidify: the translation of individual characteristics into numerical data.

One of the most recognizable examples of this emphasis on individuals comes from Gary Gygax and Dave Arneson's (1974) tabletop roleplaying game *Dungeons and Dragons* (D&D). In opposition to wargaming apparatuses, D&D operationalizes the player as a single actor rather than as a governing body and thereby shifts the subject of health from armies to individuals. Although life and death existed within the original wargames, they only existed as binary states. In wargames, a living soldier was always on the brink of a critical existence failure – one second alive and the next dead. Instead of using the number of living/dead men as a marker of the State's power or attributes, D&D introduced the hit point mechanism for individual characters, which allotted them a calculable amount of shits« they could take before dying.

Digital roleplaying games later took Gygax and Arneson's conceptualization of hit points as inspiration for their own computational systems. In the 1980s, a number of game developers began to incorporate health mechanics and visualizations into arcade games – especially roleplaying games. Namco's (1985) *Dragon Buster* became one of the first to use a bar-based visualization to represent the character's current percentage of >vitality.< Later home console games such as Nintendo's (1986) *The Legend of Zelda* popularized the use of hearts as a representation of hit points, and this conceptualization of health in games started to gain traction. Unsurprisingly, the extension of player's health and consequently gameplay time became a staple for home console play that continues to this day. While players in the arcade paid per turn, players at home paid a larger upfront sum for unlimited gameplay. The incorporation of health into games therefore has a strong connection with the political economy of the video game and arcade industries, but the transition from the arcade to the home did more than disseminate visualizations and mechanics. The movement of in-game health from coin-operated arcades to domestic spaces allowed for the concept of health to solidify as a resource management issue. While the arcade required players to pay for their time either through skill or by inserting another coin, the home console system permitted and encouraged longer periods of continuous play since failure no longer resulted in an economic loss. The <code>sthree tries per coin< model</code> would not have translated well for home consoles, but the longer duration of play granted by hit points started to become more and more popular. This proliferation of hit points marks a notable shift in the representation of health in video games – one that makes a clear distinction between deaths and debuffs. Unlike the one hit <code>slife<</code> seen in arcade games like *Pac-Man* (1980) and *Galaga* (1981), hit points and health bars situate health as a resource that must be monitored and managed in order to stay alive and succeed within the game. In short, like *Dungeons and Dragons* before it, hit points in digital games structure in-game health as a personal attribute and a rationalized object.

But why would health be rationalized in the first place? The term rationality often gets conflated with logic and (masculine) reasoning, but another aspect hides within the word itself: ration, or the fixed allotment of resources. As Ian Hacking (1990) notes in his history of probability, what counts as acceptable forms of objective knowledge begins to change after the surge of statistics in the early 19th century wherein rationality and reason slowly merge with empirical epistemologies. Fast-forward to the 21st century, and we can quickly recognize how empirical data, rationality, and epistemological validity interact with one another to the point at which they no longer appear separate. Simply stated, the relationship between segmentation, calculation, and authority has become normalized. In the words of boyd and Crawford (2012), this normal conglomeration forwards a mythology by which »large data sets offer a higher form of intelligence and knowledge that can generate insights that were previously impossible, with the aura of truth, objectivity, and accuracy« (2).

Hit points burgeon in this milieu. Falling in line with other forms of empirical objectivity, hit points attempt to segment health into discrete units that can be counted, monitored, predicted, and ultimately controlled. In doing so, health becomes rationalized, rationable, and rationed. Take Klei Entertainment's (2013) *Don't Starve* as an example. In this open world survival game, the protagonist, Wilson, attempts to survive in harshly different conditions by maintaining a variety of health dimensions such as hunger, health, sanity, body temperature, and dryness. *Don't Starve* hyperbolizes the rationalization of health. Not only does the player have to watch the health bar, but she also has to keep an eye on other health-adjacent resources because they eventually reduce hit points as well if they diminish beyond a certain point. This isn't to say that *Don't Starve* is necessarily exceptional; however, it does operationalize an extreme segmentation of health across various domains, which allows the concept of in-game health to become extremely dissected and controlled through the micro-management of various resources.

Even though philosophies of rationality are not homogenous, everyday use of the word evokes a normalized and hyper-masculinized form of it. This >masculine rationality infiltrates technological design practices and sociotechnical imaginaries, which Jasanoff (2015) describes as the »collectively held and performed visions of desirable futures [...] [that] are at once products of and instruments of the co-production of science, technology, and society in modernity« (28). Through its invisibility and normalization, masculine rationality circumscribes the possibilities of what can and cannot be counted as valuable knowledge. Today, data constitutes the linchpin of acceptable epistemology, and feminist data scholars work hard to emphasize how this data is far from neutral or objective (Gitelman 2013; Day 2014). Yet, data is rarely presented or digested raw; it is almost always displayed and interpreted through visualization. As Gitelman (2013) remarks, »data are mobilized graphically« (13). The visualization of data, like the data itself, arises within certain institutional structures and constraints that predominantly favor the epistemology of masculine rationality. These data visualizations act as instruments through which (oftentimes masculine) power, politics, and ideology are mobilized and enforced (Kennedy et al. 2016).

The visualization of health in video games therefore marks more than an arbitrary element of design. Rendering health as a rational and segmented continuum feeds into masculine logics of objectivity and objectification. In her work on gender and rationality, Karen Jones (2004) critically problematizes the assumption that rationality resides within the realm of the masculine. Rather than speaking against rational thought as a whole, Jones questions the rubric of rationality that is most often used to create »valid« knowledge (such as statistical data, scientific reasoning, and objectivity). Jones argues (via MacKinnon) that rationality and masculinity are intertwined not ontologically but by their epistemological reliance on objective knowledge and objectification. As MacKinnon (1987) states, »[0] bjectivity is the epistemological stance of which objectification is a social process, of which male-dominance is the acted out social practice« (308). In other words, objectivity mandates a power hierarchy between dominating masculine gazes and subordinated feminized/naturalized objects. Consider the very literal example of European anatomical research in the 19th century. The male physician's medical gaze hailed the feminine body as an object of anatomical and pathological study. The idea of a »woman doctor« at the time seemed like an oxymoron because »the relationship between doctor and patient was believed to be the gendered one of gazer and object of the gaze« (Liggins 2000, 130). In Situated Knowledges, Donna Haraway (1988) extrapolates this amalgamation of objectivity, visualization, and masculinity by describing a patriarchal fixation on certain technologies of vision for creating the conditions of objectivity. For her, the power of visualization technologies lies in their prescriptive capabilities. In other words, »[s]truggles over what will count as rational accounts of the world are struggles over *how* to see« (Haraway 1988, 587). Returning to the example of female anatomy, one doesn't have to look far to see how sexual education textbooks visualize masculine-coded anatomy as the standard against which feminine-coded structures are compared (Lawrence and Bendixen 1992). Seeing the female body as a deviation from masculine norms re-inscribes power hierarchies under the guise of objective techniques of rendering >natural
> phenomena visible.

The visualization of health in games likewise works to facilitate ways of seeing and being in the world that align with masculine rationality and objectification. Video game health visualizations like bars, meters, and overlays encourage players to see health as both an object and a resource. Drawing from MacKinnon's (1987) and Jones' (2004) gendered articulation of objectivity, the objectification of health into hit points reinforces the player as a subject who can and must monitor and control the subordinate products of its objective/objectifying vision.

Hit points and their visualizations on screen are products and producers of masculine rationality that circumscribe and segment health into discrete units. Under this visual and statistical paradigm, these units materialize as resources to be managed by the player. As it stands, these arguments about masculine rationality could be applied to a multitude of other measured and rationalized features in games such as countdown timers, ammunition reserves, and even the life system of the early arcade – all of which can be seen as facets of the neoliberal fragmentation of bodies into data (i.e., datafication). Health, however, seems to take on an additional layer of complexity. The subject prescribed by hit points and health bars resonates eerily well with that of the ideal citizen under biomedicalization. Like players who constantly manage in-game health, these biocitizens actively »inform themselves and live responsibly [...] [by adjusting] all areas of their physical and social environments so as to maximize health« (Rail and Jette 2015, 330). Biomedicalization then also plays a role in normalizing representations of health in video games and the subject they interpellate.

3. »How Much Health Do I Have Left?«: Biomedicalization and Health Management

Masculine rationality insists that there is power in numbers – a power that allows institutions to divide and conquer phenomena. The current biomedical paradigm echoes this numerical fetishism. The >datafication of health< transforms the lived, embodied experiences and qualitative aspects of everyday life into quantifiable data (Lupton 2013; Banner 2017; Ruckenstein and Dow Schüll 2017). The near ubiquitous expansion of this practice can be seen in a number of medical pursuits such

as data-driven research, public health databases, and the healthcare practices that we usually lump together as Health 2.0. Sociologists and critical scholars of health and medicine describe this datafication as part and parcel of a larger transformation in (particularly American) medicine that gained traction in the late 20th century: biomedicalization (Rose 2007b; Clarke et al. 2010; Ruckenstein and Dow Schüll 2017).

Biomedicalization refers to »the increasingly complex, multisited, multidirectional processes of medicalization that today are being both extended and reconstituted through the emergent social forms and practices of a highly and increasingly technoscientific biomedicine« (Clarke et al. 2010, 47). While the medicalization and biomedicalization theses both recognize (bio)medicine as an »institution of social control« (Zola 1972; Riska 2010), they diverge from one another in that they reference two different sociohistoric operations of medicine. Medicalization, on the one hand, refers to the >healthscape< that arose around the beginning of the Cold War and favored passive patients, great doctors, and diagnostic identities through pathological labeling. Biomedicalization, on the other hand, blossoms during the mid- to late 1980s as digital technologies begin to flood the market. The biomedical healthscape builds from its predecessor but also mobilizes remarkable shifts: passive patients become active and responsible consumers, >great< doctors are replaced by big data and technoscientific innovations, and diagnosis transforms into personal management (Clarke et al. 2010; Riska 2010).²

Nikolas Rose (2007a) addresses biomedicine's sprouting at the end of the >golden age of clinical medicine< by recognizing the imperial advances of medicine beyond trauma and disease to the governance of risk and the promotion of health (4). This transition from medicalization to biomedicalization is therefore »one from control over biomedical phenomena to transformations of them« (Clarke et al. 2010). In other words, biomedical assemblages that once attempted to enforce bodily boundaries through such things as antibiotics now enact power to alter the body prior to or immediately after infection. Rose (2007a) defines this status of citizenship within the biomedical state as diseased or always on the verge of disease by offering that »existentially healthy« persons under biomedicalization are actually »pre-symptomatically ill« (9). This postmodern emphasis on risk factors extends medical jurisdiction over health itself (not just disease and disability). Biomedicine consequently projects an imaginary of health that (re)produces health realities as »individual moral responsibilities« that can be fulfilled through greater self-knowledge, self-surveillance, self-care, and participation in the biomedical industry (Clarke et al. 2010, 162).

² Peter Conrad (2007) states that biomedicalization is not distinct from medicalization, but a specific process that also can be summarized under the medicalization umbrella term. He also acknowledges the processes of change as *shifting engines* of medicalization.

Strangely enough, the timeline for the propagation of biomedicalization aligns rather closely to the rising popularity of health bars and hit points in video games. In fact, some (Clarke et al. 2010) identify the watershed moment of biomedicalization as occurring around 1985 – the same year that Namco's *Dragon Buster* introduced the vitality bar to the arcade. It would be unwarranted and even absurd to suggest that the health bar has some causal relationship with biomedicalization or even that they share some historical point of origin (if such a thing exists). However, both are children of the era of digitalization and micro-processing; they build off of neoliberal logics that privilege dividualization and datafication. While video game software requires the quantification of health and statistical surveillance due to the technical affordances of the game/computer, these affordances also have a history that is tightly entangled with masculine practices of knowledge production. Recognizing this sociotechnical interplay, I suggest that in-game health operates as part of the biomedical apparatus.

I invoke the term apparatus here in the Foucauldian sense as a reference to the connection between technologies, institutions, and subjectification. Hit points and their visualizations in games take a notable position within the biomedical apparatus because they have »the capacity to capture, orient, determine, intercept, model, control, or secure the gestures, behaviors, opinions, or discourses of living beings« (Agamben 2009, 14). As Agamben (2009) discusses in his extension of Foucault's work, apparatuses are not so much things as they are technologically mediated processes of subjectification and governance. In a biomedicalized and datafied world, the apparatus of masculine rationalized health creates and is enacted through protocols or agreed upon rules that become normalized through repetitive practice (Parisi 2018). The apparatus not only utilizes institutions and written discourse to bolster these protocols but also everyday technological instruments such as cell phones, duct tape, DualShock controllers, and – yes – even hit points.

Although he doesn't use the phrase >biomedicalization,< Jeremy Packer (2013) starts to wrestle with understanding how the apparatus of biomedicalization creates and governs specific subjectivities. Taking the subject position of »smoker« as an example, he suggests that the (biomedical) apparatus is »both a means of capturing one's time, resources, and desires as well as a biopolitical attempt to objectify the smoker, turn them into data, in order to know them, reform them, and make them >unsmoke<< (20). A similar statement could be said about the subjects mediated by rationalized health in games. The apparatus surrounding ingame health simultaneously attempts to mediate an entrepreneurial subjectivity and objectify the concept of health as a commodity that can be bought, sold, or exchanged through labor.

In his lectures on biopolitics, Foucault (2008) uses the concept of »the entrepreneur of himself« to describe a self-sufficient and productive subject – one who is his own capital, producer, and source of earnings (226). The entrepreneur of himself under a biomedicalized regime takes the masculine rationality described earlier and turns the dominating gaze inwards. Not only do these patriarchal ways of seeing objectify women, they also turn men into self-objectifiers. Treating health as a commodity therefore situates health surveillance and upkeep as an attribute of labor. This in turn encourages a subjectivity and rationality that focuses on »the constant optimization of the allocation of resources with the aim of maximizing utility« (Schaupp 2016, 8). In short, biomedicalization (which is structured by masculine notions of rationality) promotes a subject whose health can be measured, monitored, and maintained as well as one who actively manages and strives to control flows of health data and resources.

4. Playing Biomedicalization: Subjectification through Hit Points

This entrepreneur of himself should paint a recognizable picture for those familiar with video game play. Players of many digital games (especially roleplaying games) constantly track and manage a rationalized form of health in order to progress within an algorithmic system of risk and reward. Although newcomers to games might focus on graphics or the ways in which a character looks or moves, experienced players rarely look at their avatars at all and instead turn their gaze to various streams of data and data visualizations such as maps and resources (de Castell et al. 2010). To >get good< and succeed at many games, players therefore have to embody an objectifying vision, which allows them to rationalize, monitor, and manage their character's health and hit points.

Rather than speaking through abstractions, let's look at an actual game to see how players >play< biomedicalized subjectivities. In fact, let's return to the example used at the outset of this chapter, Bethesda's (2018) *Fallout* 76. Similar to *Don't Starve*, health management in *Fallout* 76 is both exemplary and usefully hyperbolic. This massively multiplayer online role-playing game (MMORPG) drops the player into post-apocalyptic Appalachia twenty-five years after a nuclear war has devastated the world. This game relies on health measurement tools that were originally used in *Fallout: New Vegas*' Hardcore mode and *Fallout* 4's survival mode: exhaustion, hunger, and thirst. However, in *Fallout* 76, these appear both as status effects and visualizations on the HUD. Relatively early in the game then, the screen becomes overlaid with four resource meters: one for health, one for hunger, one for thirst, and one for action points (i.e., a game mechanic related to agility and moves per turn).



Fig. 1: Bethesda's Fallout 76 Heads-Up Display (HUD). Descriptive text added for clarification

The biomedical apparatus appears both within the game's design and the player's desire to self-regulate. As these various monitors suggest, health in *Fallout* 76 is hyper-rationalized. Hit points, thirst, hunger, and exhaustion all take on numerical significance. If any of these stats are ignored or mismanaged, the character takes debuffs (or temporary decreases) in overall performance. By staying well fed, well hydrated, well rested, and well tuned the players optimize their performance, and failing to do so puts them at an increased risk for damage and failure. Furthermore, these design features »provide the mechanisms and processes that maintain the necessary movement and flows to keep [the biomedical] apparatus working smoothly« (Packer 2013, 27). In other words, the incorporation of hit points and health visualizations in games works to normalize biomedicalization logics through the subjectification of players into ideal healthy citizens. When playing *Fallout* 76, for example, the players train themselves to 1) monitor their health and 2) manage it as if it were a resource.

Many diseases in digital roleplaying games work within this framework and intensify biomedicalized subjectification. Health and disease – the normal and the pathological – define one another (Canguilhem 1978; Briceño-León 2001; Haver-kamp, Bovenkerk, and Verweij 2018), and so it should come as no surprise that diseases in digital games operationalize the same masculine rationality. With-in a biomedical apparatus, we no longer typically define health as the absence of disease, but instead fixate on individual's capacities to self-regulate, adapt, and self-govern (Huber et al. 2011; Rail and Jette 2015). Diseases, especially >avoidable< ones such as those associated with lifestyle decisions, manifest in this system as the consequence of improper or negligent self-management. Even the risk of diseases becomes a disease in and of itself that must be regulated and reformed.

Digital games oftentimes encode these biomedicalized understandings of disease within their game mechanics. Notably, *Fallout* 76 has over twenty contractible diseases that range from dysentery to <code>>swamp</code> itch.< Regardless of the malady, the character develops their ailment as a repercussion of poor resource management. For instance, if the player drinks contaminated water often enough, the chance for contracting a disease like dysentery increases exponentially. Similar to the rationalization of health through hit points, disease susceptibility is rationalized as a controllable risk factor (or percent chance) of getting sick. While diseases don't have their own data visualizations on screen, becoming »famished« or »parched« increases the player's odds of contracting a disease. Disease susceptibility in the game therefore functions as a calculable and avoidable condition that must be managed on various fronts.

When diseases are contracted, they act as debuffs to characters' stats. Say a character in Fallout 76 sleeps on a dirty mattress and wakes up to this subtle notification: »You have contracted Swamp Itch.« If the player pulls up their character's stats on the pip boy and navigates to status effects, they'll see a line of text, which states that the dreaded swamp itch reduces their agility stat by four for the next fifteen minutes of play. The disease itself is rationalized as a cybernetic process reducible to inputs and outputs. This in-game disease functions similarly to health in games in that they both act as articulators of self-management. To cure the disease, the character can use a variety of items or services or just stick it out until the timer expires. In other games where these debuffs are semi-permanent (such as with vampirism in *The Elder Scrolls* franchise), diseases objectify more gameplay elements in order to render them significant, measurable, and manageable. Vampirism in Skyrim, for example, makes (blood)thirst and sunlight a disease-specific resource. Not only must these players account for un-diseased resources like health, stamina, and magic, they also have to keep track of their thirst and the time of day in order to mitigate dangerous debuffs. Diseases in these games, similarly to diseases under biomedicalization, become just another metric for the player to manage.³

³ Diseases like vampirism in *The Elder Scrolls* also come with positive effects or buffs that improve the character's stats. These »buffs« further exemplify the digitization of health and also encourage players to enact the stereotypical role of the »super cripple« or »the disabled person [who] is assigned super human almost magical abilities [as a means of eliciting respect from able-bodied populations]« (Barnes 1992, 12).

»Man, I Need Health!«: Toxic Masculinity, Men's Health, and the Normalization of Biomedicalization through Digital Games

As it should be clear by now, hit points and health bars are not innocuous elements of play; they survive and thrive via their connections to masculine rationality and biomedicine. Today, we can even see the dissemination of these game design elements spreading outside of gaming contexts into self-tracking applications like MyFitnessPal and Fitbit. Critical scholars of these mobile apps (Lupton 2016; Schmechel 2016) quickly recognize them as what Foucault (1990) calls »technologies of the self,« or the ways in which people »not only set themselves rules of conduct, but also seek to transform themselves, to change themselves in their singular being, and to make their life into an oeuvre that carries certain aesthetical values and meets certain stylistic criteria« (10). While their analyses speak only to self-tracking through mobile applications, in-game health management can also be conceptualized as a technology of self-creation and regulation – one that extends beyond red rectangles and pixelated hearts on a screen.

Keeping track of a character's health isn't a purely representational or screenbased practice; it's a biomedicalized logic that operates across an assemblage of bodies. Players' health management sits at the back of their mind as they scavenge through the Wasteland, and it materializes in their objectifying gaze, their fingertips, and their (passive) acceptance of masculine rationality. Hit points and the subjects they produce do not solely exist in a quarantined ludic space or magic circle, but rather arise as a reciprocal configuration between technologies, bodies, and sociocultural protocols – in this case, those forwarded by biomedicalization. As Packer notes, "This co-dependent relationship between technology and subjectification determines what technological forms get developed for use while simultaneously legitimating an understanding of the world that is fundamentally mediated by those same technologies" (Packer 2013, 12). Hit points have become a protocol for many digital role-playing games, yet their hyper-masculine and biomedicalized portrayal of the world normalizes the dangers and disparities of the biomedical apparatus.

A quick look at men's health practices reveals how attempting to adhere to this hyper-masculine, hyper-rationalized, and hyper-regulatory apparatus and its valorization of never-ending self-optimization steers biomedicalized subjects toward dangerous consequences. If we follow MacKinnon's (1987) and Haraway's (1988) argument that scientific objectivity functions as an extension of men's objectivizing and dominating gaze, then we must also recognize that this gaze constitutes idealized subjectivities for both the objectified and the objectifier. This »eye [that] fucks the world« (Haraway 1988, 581) actively obfuscates its origin, and it simultaneously establishes itself as the normal (and necessary) way for men to see and be in the world. The gaze of masculine rationality and subsequently biomedicalization is sometimes centered around the objectification of women's bodies (Jones 2004; Ross 2018); however, this idea could perhaps better be articulated as the objectification and heightened surveillance of the feminine – not just the female. In her analysis of the gendered difference between »calorie counting« and »calorie tracking,« Schmechel (2016) argues that the gendered associations of health-tracking practices fluctuate with dominant fields of governance. While dieting and »aesthetic self-creation« used to be the domain of the feminine, biomedicalization has once again masculinized self-optimization by situating it as an economic and moral duty. Health management today then becomes seen as man's work – a labor practice that accumulates masculine worth by tracking and controlling the threat of the feminine. In Schmechel's argument, this plays out on a structural level: the transition from (feminine) counting to (masculine) tracking undermines feminine connotations by aligning itself with other masculine-coded instruments like scientific objectivity and technoscience writ large.

Healthy male citizenship in the age of biomedicalization is governed by men's self-objectification and regulation in which the lines between masculinity, management, and medical care become indistinguishable. As Crawshaw (2007) states, the healthy male citizen is constituted by »new rationalities of health care and governance within which individuals are positioned as active, enterprising citizens [who are] responsible for their own well-being« (1607). Building on the idea of productive power, Lupton (1995) further recognizes how (masculine) rationalized health ushers a politics that paradoxically marginalizes and normalizes (un) desired subjectivities. These discourses of >healthism,< or those that privilege the accumulation and management of individual >healthiness< over everything else, prompt healthcare consumers to embody the role of the Foucauldian institution. In Lupton's (1995) words, this biomedicalized healthscape encourages individuals to »turn the [disciplinary] gaze upon themselves in the interest of their health« (11). This self-objectification shifts blame and responsibility for disease contraction away from the State and toward the individual – a transition Rose (2007b) and others identify as responsibilization. When people embody the masculine rationality of biomedicalization, they take on additional forms of labor, performing as their own trainers, nutritionists, and life coaches as a means for mitigating health risks and maintaining a biomedicalized masculinity. Yet no matter how much effort they put in, they will never reach an optimum status of health. In other words, the health bar can never actually be full. Optimum health (like hegemonic masculinity) is unachievable because such a thing only exists as an ideal form, and if it were to materialize - it could only do so through the combined effort of the individual and the State.

The biomedicalized apparatus makes individuals responsible for their current and future health conditions, but men especially find themselves in an impossible predicament. On the one hand, the objective vision prescribed by masculine rationalization, biomedicalization, and in-game hit points sets the standard for what and how men should see in their daily lives in order to appear masculine. On the other hand, this hegemonic way of seeing also sets an impossible goal that men can never reach but nevertheless must constantly strive toward. This paradox destabilizes men's positions within a patriarchal system – a precariousness that will be the fault of the individual alone. If men do not vigilantly monitor their health and constantly strive for healthiness – or if they attempt to deviate from this prescribed conquering gaze – they may find themselves with a weaker masculine status that severs their connection to some patriarchal privileges while simultaneously expecting them to maintain dominance in all areas of their lives (Crawshaw 2007).

The consequences of framing individuals as solely responsible for their health are clearly apparent in men's health disparities. Men – the primary arbitrators of these masculine health practices – surpass other genders in their morbidity and mortality rates from a multitude of cancers and diseases, they more often engage in high-risk activities like excessive drinking and speeding, and they suffer biopsychosocial distress when their masculinity comes into question – especially through medical diagnoses of such things as testicular or prostate cancer (Evans et al. 2011; Matthew and Elterman 2014; Elder and Griffith 2016). Health and health management under biomedicalization are then seen as articulations and markers of masculinity. Equating health with masculinity is a dangerous game, but it's one that (especially male) patients and doctors have been playing for years.

Men's melding of masculinity and health maintenance materialize in their (lack of) help-seeking practices as well. Men typically avoid contact with healthcare providers unless it's as a last resort. They oftentimes avoid medical assistance because they think that they >should be< reluctant to ask for help as part of their masculine identities; however, these patterns get complicated when health issues inhibit work or sexual performance (O'Brien, Hunt, and Hart 2005). If illness somehow impedes masculine capabilities, then medical treatment becomes imperative. Men's health issues have historically escaped the diagnostic gaze of medicine because the male body has often been viewed as natural. Under biomedicalization though, the male body becomes the site of both naturalization and hypernaturalization, or the normalization of an ideal form as a natural state of being (Riska 2010). Given its past invisibility and contemporary responsibilization, men's health has been and continues to be aimed at protecting masculinity more than health per se – and this conflation of elements negatively impacts men's quantity and quality of life.

6. Conclusion

Hit points and health bars are far from neutral or normal design choices. As I have shown, hit points and health bars normalize biomedicalization by spreading the apparatus' »conquering gaze from nowhere« into assemblages of gameplay (Haraway 1988, 581). Fragmenting health into rational >points< operates through a masculine notion of rationality that seeks objectivity through objectification. These hit points situate health according to the logics of biomedicalization as resources that require monitoring and management – and diseases in games often manifest as extensions of these rationalizing principles. As part and parcel of the biomedical apparatus, the subjectivity reinforced by these game design elements extends beyond temporally fixed configurations of play and help constitute a larger health-scape.

Hit points and health bars reproduce masculine ways of seeing that contribute to masculine health practices in the everyday world and consequentially men's health disparities. If game scholars and advocates of men's health want to remediate the toxic practices of masculinity that prove detrimental to all genders, then they must first look to their reproductive mechanisms that hide in plain sight. Games have the potential to normalize contentious technologies, so it seems possible that gaming technologies and players' interactions with them work to resist or reinforce hegemonic standards (Ellerbrok 2011; Whitson and Simon 2014). If men's health and men's understanding of health run throughout the health bar's design, then this little red rectangle has much to say about the construction and performance of men's healthcare practices and masculinity in a biomedicalized world.

Ludography

DON'T STARVE (505 Games 2013, Klei Entertainment) DRAGON BUSTER (Namco 1985, Namco) FALLOUT 4 (Bethesda Softworks 2015, Bethesda Game Studios) FALLOUT 76 (Bethesda Softworks 2018, Bethesda Game Studios) FALLOUT: NEW VEGAS (Bethesda Softworks 2010, Obsidian Entertainment) FAR CRY 2 (Ubisoft 2008, Ubisoft Montreal) GALAGA (Midway 1981, Namco) PAC-MAN (Midway 1980, Namco) THE ELDER SCROLLS V: SKYRIM (Bethesda Softworks 2011, Bethesda Game Studios) THE LEGEND OF ZELDA (Nintendo 1987, Nintendo Research and Development 4)

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Fig. 1: Bethesda's Fallout 76 Heads-Up Display (HUD). [Descriptive text added for clarification]. In: Bethesda Game Studios. 08.10.2018. »Our Future Begins – What's new in Fallout 76?« Accessed 15.04.2019. https://fallout.bethesda.net/en/article/38siQygjP2kWcicmCoWGSM/our-future-begins-what's-new-infallout-76