



Biopolitical Markers in Digital Games: Life/Health Interfaces¹

Abstract: The article presents an examination of game biopolitics in relation to life interfaces in digital games and operationalizes the notion of biopolitical marker. The aim of this study was to describe and analyze meaningful interface elements related to the concept of life. The first part of the article introduces the general philosophical and theoretical framework for the study of life biopolitics in games. Here, I operationalize the concept of biopolitical marker. The second part consists of game descriptions focusing on the ways life is construed and mediated via their interfaces. In this part I present different interface conceptualization of health, life and hit points. The article concludes with a typology and problematization of a set of biopolitical markers distinguished in the previous sections.

Keywords: digital games, biopolitics, health, interfaces, markers

Introduction

The main problem I examine in this article is related to biopolitics, a theory and philosophy concerning political governance of life.² The problematic of biopolitics to date has been explored in game studies in relation to identity³ and avatars,⁴

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2. Michel Foucault, *The Birth of Biopolitics: Lectures at the Collège De France, 1978–79*, trans. Graham Burchell (New York: Palgrave Macmillan, 2010); Roberto Esposito, *Bíos: Biopolitics and Philosophy* (Minneapolis: University of Minnesota Press, 2008); Roberto Esposito, *Immunitas: The Protection and Negation of Life*, trans. Zakiya Hanafi (Cambridge: Polity, 2017); Catherine Mills, *Biopolitics*. First edition (Abingdon, Oxon, New York, NY: Routledge, 2018); Thomas Lemke, *Biopolitics. An Advanced Introduction* (New York: New York University Press, 2011).

3. Agata Zarzycka, “‘Czy ja tak brzmię?’ Autokreacja i immunizacja w serii Mass Effect,” *Teksty Drugie*, no. 3 (2017).

4. Thomas Apperley and Justin Clemens, “The Biopolitics of Gaming: Avatar-Player Self-Reflexivity in Assassin’s Creed II,” in *The Play Versus Story Divide in Game Studies: Critical Essays*, ed. Matthew W. Kapell (Jefferson, NC: McFarland, 2016); Andrew Baerg, “Biopolitics, Algorithms, Identity: Electronic Arts and the Sports Gamer,” in *Sports and Identity: New Agendas in Communication*, eds. Barry Brummett and Andrew Ishak (New York: Routledge, 2013).

mechanics,⁵ power,⁶ health,⁷ and play.⁸ Game scholars have also researched the most negative pole of biopolitical governance of life – thanatopolitics, the politics of death.⁹ In my study, I defined what I call biopolitical markers and presented a method of distinguishing them. These markers are significant elements of game ontology,¹⁰ interface semiotics,¹¹ representations, mechanics and game narratives.¹² I think these markers could be further used to distinguish more complex biopolitical systems, or to describe and identify specific politics of life presented by games of different genres.

In this article, I have focused on one element: health represented through different game interfaces. Health is a manifestation of biopolitical reformulation of life, although not the only way games construct and represent life. The relationship between life and health is both a question of framework and quality: life is a singular unit represented by health bar. Within numerous representation matrixes health can therefore function as life's quality, measure, a set element. This means that government over life (biopolitics) oftentimes takes the form of governance over health as a system of building blocks, economized, gamified and interwoven into different assemblages of game representations, narratives and mechanics.

5. Salko J. Kattenberg, "Biopolitical Games: Identifying Obscured Mechanisms in Applied Games" (MA, Faculty Humanities, University of Utrecht, 2015); Jakub Wencel, "Gamified Vs. Non-Gamified Space in Video Games: A Biopolitical Approach," in *Gamification. Critical Approaches*, eds. Jarosław Kopeć and Krzysztof Pacewicz (Warszawa: Uniwersytet Warszawski, 2015).

6. Mike Piero, "Gaming Under Biopolitical Sovereign Power: The Chronotope of the Abject in the Binding of Isaac," *Eludamos. Journal for Computer Game Culture* 11, no. 1 (2020); Michał Kłosiński, "Frostpunk – tęsknota za biopolityką stanu wyjątkowego," *Teksty Drugie*, no. 1 (2020), <https://doi.org/10.18318/t.d.2020.1.18>.

7. Brandon Rogers, "'Dude, How Much Health Do You Have Left?,'" in *Krankheit in Digitalen Spielen*, ed. Arno Gørgen and Stefan H. Simond (Bielefeld: transcript Verlag, 2020).

8. Stephanie Rutheford and Pablo S. Bose, "Biopower and Play: Bodies, Spaces, and Nature in Digital Games," *Aether: The Journal of Media Geography* 12, no. 10 (2013).

9. Peter Christiansen, "Thanatogaming: Death, Videogames, and the Biopolitical State," *Proceedings of DiGRA 2014: <Verb that ends in 'ing'> the <noun> of Game <plural noun>*, 2014; Nicholas St. Jacques and Samuel Tobin, "<Theoretical Article>Death Rules: A Survey and Analysis of PC Death in Tabletop Role-Playing Games," *RPG学研究* 1 (2020); Ken S. McAllister and Judd E. Ruggill, "Playing to Death," *American Journal of Play* 11, no. 1 (2018).

10. José P. Zagal et al., "Towards an Ontological Language for Game Analysis," in *Worlds in Play: International Perspectives on Digital Games Research*, ed. Suzanne de Castell and Jennifer Jenson (New York, NY: Peter Lang, 2007).

11. Alexander S. Lenkevich, "Are You in Your Body?! The Study of Biopolitical Interface Design," *Galactica Media: Journal of Media Studies* 3, no. 2 (2021), accessed June 6, 2022, <https://doi.org/10.46539/gmd.v3i2.160>, <http://galacticamedia.com/index.php/gmd/article/view/160>; Piotr Kubiński, *Gry wideo: zarys poetyki* (Kraków: Universitas, 2016).

12. Astrid Ensslin and Alice Bell, *Digital Fiction and the Unnatural: Transmedial Narrative Theory, Method, and Analysis* (Columbus: The Ohio State University Press, 2021).

I analyzed those using hermeneutics¹³ to depict various strategies and mechanisms which construct life as a concept, a problem and a resource to be governed. I worked with representations, semiotic and discursive elements¹⁴ which function as biopolitical markers – significant traces of politics aimed at protection, control and governance of life.

My aim was to present different elements of interfaces related to government of life, define the notion of biopolitical marker and operationalize this concept for further exploration of biopolitics in digital games. In my analysis I used game hermeneutics. The theoretical background was based in biopolitical theories elaborated in the 20th and 21st century.

Life as a Biopolitical Marker

The concept of marker can be traced to two distinct disciplinary fields: empirical research and philosophy. The former uses the notion of marker to designate significant elements, or indicators for analysis, for example: markers of depression, discourse markers, biochemical markers, geological markers, etc. The latter uses the term mark [*marque*] to name an irreplaceable signifying element of an event (a date, signature, writing) which then can be re-marked and iterated because it opens up a process of significations and interpretation.¹⁵ 9/11 would be an example of such a singularity which then allows us to reiterate it, reference it, retell it.

I relate this double meaning of marker to biopolitics understood as an umbrella term for different theoretical and philosophical approaches, which have surfaced in the 20th and 21st century as part of academic critique of political systems and institutions, their mechanisms of defining life, controlling population, producing ideology or extermination. More specifically, biopolitical theory describes: the production of new forms of subjectivity, like the economic man¹⁶;

13. Michał Kłosiński, “How to Interpret Digital Games? A Hermeneutic Guide in Ten Points, with References and Bibliography,” *Game Studies* 22, no. 2 (2022), http://gamestudies.org/2202/articles/gap_klosinski; Michał Kłosiński, *Hermeneutyka gier wideo. Interpretacja, immersja, utopia* (Warszawa: Wydawnictwo IBL PAN, 2018); Veli-Matti Karhulahti, “Hermeneutics and Ludocriticism,” *Journal of Games Criticism* 2, no. 1 (2015); Espen Aarseth and Sebastian Möring, “The Game Itself?,” in *International Conference on the Foundations of Digital Games*, eds. Georgios N. Yannakakis et al. (New York, NY: ACM, 2020).

14. Gerald Voorhees, “Discursive Games and Gamic Discourses,” *Communication +1* 1, no. 1 (2012), <https://doi.org/10.7275/R5G15XSM>.

15. Simon Wortham, *The Derrida Dictionary* (London: Bloomsbury Publishing, 2020), 96; Hannu Poutiainen, “Additions, Subtractions, Iterations: Deconstruction and the Actuality of Context,” *Journal of Literary Theory* 8, no. 1 (2014), 185–187, <https://doi.org/10.1515/jlt-2014-0008>.

16. Foucault, *The Birth of Biopolitics*, 268–271.

new and changing politics of vitality, life and bioeconomy¹⁷; the logic of exclusion and inclusion that funds law and power in contemporary societies¹⁸; life as a process of becoming, grounded in environment and ecology¹⁹; the relation between positive and negative immunizing practices for the formation and functioning of any community²⁰; the subjugation of life to the power of death and maximalization of killing potency that produces “death-worlds,”²¹ and many more.

Therefore, biopolitical theory in general is interested in description and critique of life and death as subjected to any law, process and agency (positive or negative, systemic or endemic, of subject or population). What I define as a biopolitical marker is therefore a signifying element, which indicates the possibility of uncovering politics and policies related to governance over life. Biopolitical markers in games can be found at all levels of their complexity: interfaces, mechanics, representations, narratives, but also in the eventfulness of gameplay. Identification of biopolitical markers allows for better insight into the inner workings of games as power structures, the mechanisms of governance they represent on the one hand, and the ones they are on the other hand. In this study, I focused on different biopolitical markers in game interfaces.²²

The simplest and most figurative expression of life governance is life as a unit representing the possibility to continue playing the game found in platform games such as *Mario*²³ and *Prince of Persia*²⁴ or arcade games, where the concept of life is directly related to the coin-operated machine economy: you gain life if you insert additional coins. This basic relationship between game economy and the concept of life is part of the fundamentally economic character of games as simulations,

17. Nikolas Rose, *The Politics of Life Itself: Biomedicine, Power, and Subjectivity in the Twenty-First Century* (Princeton: Princeton University Press, 2009), 39–40; Jeffrey P. Bishop, M. Therese Lysaught and Andrew A. Michel, *Biopolitics After Neuroscience: Morality and the Economy of Virtue* (London–New York: Bloomsbury Academic, 2022).

18. Giorgio Agamben, *Homo Sacer: Sovereign Power and Bare Life*, trans. Daniel Heller-Roazen (Stanford: Stanford University Press, 1998), 21–22.

19. Rosi Braidotti, “The Politics of Life as Bios/Zoe,” in *Bits of Life: Feminism at the Intersections of Media, Bioscience, and Technology*, ed. Anneke Smelik and Nina Lykke (Seattle–London: University of Washington Press, 2008), 182.

20. Esposito, *Immunitas*, 12.

21. Achille Mbembe, *Necropolitics*, trans. Steven Corcoran (Durham–London: Duke University Press, 2020), 79–92. <https://doi.org/10.1515/9781478007227>.

22. Kay Köhle et al., “Diegetic and Non-Diegetic Health Interfaces in VR Shooter Games,” in *Human-Computer Interaction – INTERACT 2021: 18th IFIP TC 13 International Conference, Bari, Italy, August 30 – September 3, 2021, Proceedings, Part III*, eds. Kori Inkpen et al. (Cham: Springer, 2021); Lenkevich, “Are You in Your Body?!”; Kubiński, *Gry wideo*.

23. Nintendo, *Super Mario Bros* (NES: Nintendo R&D4, 1986).

24. Broderbund, *Prince of Persia* (PC: Broderbund, 1990).

procedural systems governed by spreadsheets, data and calculations.²⁵ However, as Seth Giddings explains, game economies are metamorphic in relation to their neoliberal counterparts: they rewrite, reshape, adapt and sometimes challenge contemporary political economies.²⁶ If, as Giddings says, games are not isomorphic, but metamorphic, than they not only reproduce biopolitics, but actively produce their own biopolitical mechanisms, representations and meanings. This process of abstracting life is already biopolitical, as it translates a property of living beings into an instrumentalized and rationalized digital entity: life and death become measurable indicators of success and failure.

Going back to the biopolitics of life as a unit represented by a coin-operated arcade machines, Giddings follows the reflection of Carly Kocurek, who stressed the influence of arcades on producing a new type of economic mentality²⁷ where mastery leads to optimization of financial expenditures: the better one plays, the less coins the player has to spend. What the early game economy described by Giddings, Rogers and Kocurek establishes is the direct reference between life as a resource exchanged for money, which in turn produces new economic assemblages of play, skill, time, etc. The quantifiable life tokens displayed on arcade screens are therefore biopolitical markers which signify that governance over life corresponds to one's skill, spending capacity and time. In those cases life is a commodity: it is bought, used, lost, gained, sustained or accumulated. Therefore, game life itself serves as the most fundamental biopolitical marker, the economic kernel of all regimes of power which hold it in its grasp.

Inquiries into life as a basic biopolitical marker concern the way game interfaces mediate governance over real life. As shown by Alexander Lenkevich, digital game interfaces perform regulatory functions as biopolitical devices on two levels.²⁸ On the one hand, they simply represent biopolitics,²⁹ on the other, they reorganize gamer's life as mediators of multi-sensory (haptic and audio-visual) experiences.³⁰ Lenkevich therefore reinforces the argument made by Apperley and Clemens, who theorized that games use avatar focalization, localization and affective integration to govern and discipline the player.³¹ The most fundamen-

25. Seth Giddings, "Accursed Play: The Economic Imaginary of Early Game Studies," *Games and Culture* 13, no. 7 (2018), 771–772, <https://doi.org/10.1177/1555412018755914>; Rogers, "Dude, How Much Health Do You Have Left?," 328–329.

26. Giddings, "Accursed Play," 773.

27. Carly A. Kocurek, *Coin-Operated Americans: Rebooting Boyhood at the Video Game Arcade* (Minneapolis–London: University of Minnesota Press, 2015), 42–44.

28. Lenkevich, "'Are You in Your Body?!,'" 145.

29. Lenkevich, "'Are You in Your Body?!,'" 147.

30. Lenkevich, "'Are You in Your Body?!,'" 152–154.

31. Apperley and Clemens, "The Biopolitics of Gaming," 115–121.

tal way game interfaces mediate life is by displaying it as a unit and as a point/percentage bar. The introduction of hit points constitutes a major biopolitical innovation, because life as a singular entity to be saved, lost or gained represents a distinct object from life as a sum of hit points (HP) which can be emptied, re-filled or sustained.³² The granularity of life represented by hit points or percentage values mediates different possibilities of gameplay and control. For example, in the original *Super Mario Bros*, where life is a singular unit, the game uses powerup mechanic (mushroom or fire flower) to enable the avatar to take an additional hit from the enemy. To signify the change in Mario's endurance, the avatar grows. In a different manner, in *Horizon: Zero Dawn*³³ Aloy's life depends on the character level, is represented by hit points, divided into health bars, and subjected to resistance modifiers from skills, items and armor. Whereas Mario represents a fairly straightforward governance over life, a more complex system in *Horizon* displays a matrix of factors simulating various life's dependencies. The granularity of life representation is therefore a measure of biopolitical complexity: governance systems grow proportionally to the amount of hit point mechanics introduced in game. A separate matter relates to the complexity of the categories such as health, life, hit points, which can be distributed and used to describe both the avatar, the player and all elements of game ontology, like destructible walls.

With complex systems of life representation and governance a more robust biopolitical logic can be introduced. Life as a single unit represents a different approach to the relation between the subject and the world than life measured with hit points and percentage bars. If life is simply lost on contact with the enemy, we could speak of a marker of radical immunity biopolitics which reinforces the idea that the other should not be allowed to penetrate, to touch the subject at all cost. As explained by Esposito, immunization is an "inverse mode" of communization and these two processes represent the contradictory dynamic of protecting life: "life can be protected from what negates it only by means of a further negation."³⁴ In this sense immunization is the core process to understand what games posit as the other that negates the life of an avatar, or an in-game community, and thus, what they require us to negate. In some cases the very game world or environment becomes the other, especially when it poses a threat to the avatar. A less radical system is introduced with the leeway given by hit points as the penetration by the other does not always mean immediate death. The immunity biopolitics can therefore be nuanced by allowing a margin of touch, breaking of boundaries,

32. Rogers, "Dude, How Much Health Do You Have Left?," 329.

33. Guerrilla Games, *Horizon: Zero Dawn: Complete Edition* (PC: Sony Interactive Entertainment, 2020).

34. Esposito, *Immunitas*, 22.

testing resistances and different perception of danger. Moreover, with hit point mechanics life becomes a proper object of biopolitical calculations, manipulations and separate game loops. Interestingly, when life becomes a question of quality and care, instead of being just a measure of quantity, it undergoes further biopolitical rationalizations. Conversely, the farther biopolitics penetrates game mechanics, the more complexity is given to life as a biopolitical marker. Moreover, Rogers has analyzed the logic of self-care in games in relation to health management and masculine rationality, further problematizing the visual aspects of interfaces as kernels of gender politics.³⁵ According to his findings, the rationalization of health management in games can be understood as a biopolitical marker of hegemonic masculinity produced as part of neoliberal body politics. It is no surprise that health politics participate in production of neoliberal subjectivity. Even now, writing this article, I often glimpse at my smart band, constantly monitoring my pulse, number of steps and burned calories, presenting those via game-like interface. In this sense all diegetic and extradiegetic interface elements representing health status, buffs and debuffs, injuries and diseases should be considered as biopolitical markers similar to the ones governing our very lives. As suggested by Rogers, they represent a claim to biomedical omniscience – the players almost instantly know what ails their avatars. The complexity and correlation of biopolitical markers is what produces a specific biopolitical vector for the game interface. In the subsequent part of the paper I propose an interpretation of the representations, mechanics and discursive aspects of interface biopolitics referencing specific game examples.

Vectors of Immunization

I would like to consider five examples with game screenshots. These were selected based on preliminary research findings gathered via exploratory gameplay of 15 game titles of various genres (cRPG, aRPG, MMORPG, Battle Royale, VN, City builder, RTS, TBS, Gacha, Simulator) and across three platforms: Android Phone, PC and PlayStation 5. I selected cases which exemplify different markers not to repeat the same research observations.

The first one depicts *Disco Elysium* where health has been divided into physical and mental registers, each represented by different color.³⁶ The players use dialogue interactions to control these overlay health registers. Taking damage, loosing or winning rolls is related to intradiegetic interface elements: screen shaking and distinct sound signifying failure, success, loss of either health or mental attribute

35. Rogers, “Dude, How Much Health Do You Have Left?” 330.

36. ZA/UM, *Disco Elysium* (PC: ZA/UM, 2019).

points. Otherwise, the extradiegetic interface gives only basic information about protagonist's statuses. Expanding the interface governance of life is the character window which depicts the effects of items and clothing on different aspects of Harrier's personal traits. With this system players govern both physical and mental health of their protagonist, as well as a set of attributes to shape Harrier's personality. What *Disco Elysium* revolutionizes are biopolitical markers of mental health,³⁷ separate from Harrier's physical condition. Therefore, the game interface introduces an element of governance over both physical and mental health, simulating the relationship between agency and its emotional effects. With diverse systems referencing the state of mind as a deciding factor for Harrier's well-being, *Disco Elysium* builds a sense of responsibility for the broken, alcoholic and existentially shaken narrative identity. The biopolitical markers related to physical and mental condition present governance of life as a decision-making, identity building process. Their appearance during dice rolls signifies a link between mental and physical health and successful or unsuccessful use of one's cognitive or carnal resources. The object of immunization is the subject's own existence, his social and emotional relations with the world. Therefore, the interface in *Disco Elysium* would be an example of narrative identity biopolitics proper to the production of the idea of an economic man or *homo capitalus*.³⁸ Curiously, the game itself problematizes post-colonial biopolitics in its narrative.



Fig. 1. *Disco Elysium* Physical and mental condition of the protagonist in bottom left corner

37. Jimena A. Rodríguez et al., eds., *Mental Health Atmospheres Video Games: New Directions in Game Research II* (Bielefeld: transcript Verlag, 2022).

38. Bishop, Lysaught, and Michel, *Biopolitics after Neuroscience*, 114.



Fig. 2. *Horizon: Zero Dawn* HP and shield interface elements in the upper left corner

The second example is the interface of *Horizon: Zero Dawn*. This time, there are both intradiegetic and extradiegetic biopolitical markers. The former can be seen in the changing color of Aloy's armor (an optional item). The latter are: health and armor bar distinguished by red and blue color, amount of healing herbs in the pouch and potions in the inventory. Furthermore, the interface clearly informs players about the hit points pool of the enemy, so as to further the rationalization of combat. This exemplifies that health is not only a personalized element of governing the avatar, but also a marker of biopolitical perspective projected onto the world. Such perspective subjects the player's gaze to the imperative and logic of exploitation: what has a health bar can be conquered, killed, destroyed.³⁹ Here, health becomes a marker of biopolitical gaze: it designates that which can be penetrated, wounded, eliminated, reduced to nothingness or hacked. It also means that in some cases health also becomes an indicator of danger. Therefore, a world seen through this lens precisely sets the possible interactions with its inhabitants and its entities. In a way, caring for Aloy's well-being is also related to utilizing the biopolitical gaze to identify economically viable resources, parts that can be removed from animals and machines alike.⁴⁰ Such is the function

39. Jesús Fernández-Caro, "Post-Apocalyptic Nonhuman Characters in *Horizon: Zero Dawn*: Animal Machines, Posthumans, and AI-Based Deities," *Journal of Science Fiction* 3, no. 3 (2019).

40. Andrei Nae, "Beyond Cultural Identity. A Critique of *Horizon Zero Dawn* as an Entrepreneurial Ecosystem Simulator," *Postmodern Openings* 11, no. 3 (2020), <https://doi.org/10.18662/po/11.3/213>.

of the focus, an omniscience dispositive of power over the world introduced as a secondary interface overlay. A separate set of interface biopolitical markers are: the game minimap, compass and stealth indicator. The first two locate life in the world, convey the relation between knowledge of terrain and power to act and project a colonizing outlook on the world as a set of conquerable locations. The stealth indicator works differently. Represented by the eye icon, it is a biopolitical marker depicting the power of sight. Here, a link is made between safety, control and the power to immunize oneself from the surreptitious gaze of the other. This is a clear biopolitical marker of invigilation or veillance. Therefore, the interface of *Horizon: Zero Dawn* can be seen as a complex web of different markers: of biopolitics, thanatopolitics, colonialism and invigilation. Curiously, the game's narrative is all about combating such a thanatopolitical system of complete control over planetary life.

The third example comes from *Cyberpunk 2077* (Cyberpunk 2077). Here, the diegetic interface mediates the technological apprehension of life by representing its status with glitching screen and statuses conveyed via the avatar's implants. A shift from a simple extradiegetic overlay into a diegetic, hybrid form situated in the worldbuilding strategies, marks an important biopolitical dimension of the cyberpunk's discourse that permeates the game.⁴¹ That is why the main interface in *Cyberpunk 2077* serves as an extension of the phone, hacking and implants interfaces, which can be called upon just like the focus in *Horizon*. The phone interface mediates biopolitical connectedness of the body to the communication technology and functions as a marker of cyborg body politics.⁴² The hacking interface further dramatizes the relationship with the world as a space that can be penetrated, reprogrammed and modified – it is a marker of omniscience, technological politics on the one hand and veillance outlook on life on the other. This interface allows players to kill, debilitate or take control over NPC's, objects and technologies, thus it is a marker of biopower, technopower and thanatopolitics at the same time. Last and probably most interesting is the surgical overlay interface of the avatar's body where the player sees the purchased and installed cybernetic modifications (Fig. 3). This diegetic interface is different from the usual inventory mechanic present in both *Disco Elysium* and *Horizon*, as it mediates the cyberpunk metamorphosis of life and body. The body here is

41. Mateusz Felczak, "Apokalipsa z odzysku. Problemy z cyberpunkiem w polskich grach wideo," *Teksty Drugie* 6 (2021), 111–112, <https://doi.org/10.18318/td.2021.6.7>.

42. Julia Grillmayr, "Posthumanism(s)," in *The Routledge Companion to Cyberpunk Culture*, ed. Anna McFarlane, Graham J. Murphy, and Lars Schmeink (London–New York: Routledge, 2020), 276–277; Anna Kurowicka, "Cyberpunk ucieleśniony: feministyczne reinterpretacje gatunku," *Teksty Drugie* 6 (2021), 96, <https://doi.org/10.18318/td.2021.6.6>.

no longer an object that can be dressed up or upgraded by a set of objectified, rationalized biomedical attributes like strength, endurance, etc.



Fig. 3. *Cyberpunk 2077* Character implants interface

The implant interface represents a new outlook on body as an object to be augmented, reassembled, replaced and modified. Thus, the body itself becomes a biomedical object. Such interfaces challenge the biopolitical outlook on the body as an impenetrable object that has statistics, can be nurtured, grown and taken care of to function properly. The implant interface is a biopolitical marker of a radical body politics of a new kind: a biomedical regime set on functionally dismantling and altering the body.⁴³ This also means radicalization of the economic imperative of the body in cyberpunk culture: health becomes the measure of successful reconfiguration of body through technology and engineering. On the margin, the same thing happens to death, which becomes calculable, predictable, fully controllable via diegetic systems. One semeion in the screenshot displays an interface timer for the auto-resurrection system, signifying an important upgrade in V's body. This is a thanatoludic marker which exhibits the absolute, gamified interplay of life and death (Fig. 4). *Cyberpunk 2077* masterfully operates with all these empowering interface biopolitical markers in contrast with the major narrative arc, where it is an unstoppable technology that disempowers and devours the protagonist.

43. Sean McQueen, *Deleuze and Baudrillard: From Cyberpunk to Biopunk* (Edinburgh: Edinburgh University Press, 2016), 174.



Fig. 4. *Cyberpunk 2077* HP makers in upper left corner, blurry cybernetic lines denoting impending death

The fourth example is *The Wandering Village*, a city builder game⁴⁴ with a set of unique biopolitical markers. In this title the players build, expand and control a village atop of a living entity, which roams the world on its own, but can be coerced to do the player's bidding. The game offers overlay interface markers related to the population, its general satisfaction, dietary requirements and health. Similarly to the villagers, the entity called Onbu (a dinosaur-like creature that carries the village) was given a set of four explicit attributes: health, poison, hunger, rest, and one implicit – trust. The interface operates with diegetic (Onbu sounds, behaviors, growth, villagers need bubbles) and extradiegetic elements (overlays and management systems) to inform the player about the health parameters of the village and its carrier (Fig. 5). The majority of said biopolitical markers serve an immunizing function and signify a symbiotic relationship between the well-being of villagers and Onbu. The markers inform the player about dangers to life, invite healthcare agency and mediate a binary logic of life as care and death as corruption. Additional set of biopolitical markers can be seen in the status message window which informs players about the events concerning Onbu, villagers and the world. Therefore, the interface of *The Wandering Village* reinforces an idea that the player governs two distinct but interconnected health systems. The biopolitical markers here function as indicators of positive and negative immunization as they strengthen a vision of coexistence and community: between villagers, the

44. Stray Fawn Studio, *The Wandering Village* (PC: Stray Fawn Studio; WhisperGames, 2022).

world and Onbu. The negative biopolitical markers point not only to debuffs or ailments, but to an existential situation and problem influencing all human and non-human actors. Such usage of biopolitical markers in the game interface suggests a complex problematization of life not limited to population and healthcare, but also interested in the climate, biosphere and inhuman agents. The positive biopolitical markers reinforce the vision of life defined by three basic statistics: food variety, food quality and housing quality. Therefore the game interface mediates thinking about governance of life as fulfilling the populace needs. Interestingly, *The Wandering Village* interface is biopolitical in the strict sense of the term: it exhibits life (*bios*) as a problem of populace, and depicts populace as a resource (workforce) that has to be kept healthy in order for the village (*polis*) to grow and prosper. What saves the game from being another example of imperialist or neo-liberal biopolitical regime is Onbu, an entity which life signifies a barrier, a limit to growth, and a non-human agent the village has to acknowledge as a partner in its journey: the life of Onbu is de facto the player's HP indicator.



Fig. 5. *The Wandering Village* HP indicators for Onbu in top right corner, villager health ailments on the left open interface window

The final example is *Frostpunk*, a city builder game with a very strong representation of biopolitical problems.⁴⁵ The game operates with an assemblage of multiple interfaces devoted solely to the government of the steampunk city, its economy, technological advancement, population and health. The most interesting

45. 11 bit studios, *Frostpunk* (PC: 11 bit studios, 2018).



Fig. 6. *Frostpunk* Population control interfaces in the center and on the lower right interface panel

one is the “Book of laws,” a diegetic interface presented to the players as a web of power dispositives related to child labor, work shifts, medical treatment, utilization of corpses, and in later stages of the game represented by an ultimate choice between religious or disciplinary mechanisms of social control. The main, extradiegetic, overlay game interface does not operate with any health bars, but it offers biopolitical markers in shape of two meters referencing political attitude of citizens: Hope and Discontent. Moreover, the interface offers additional numerical markers referencing general populace: habitation, employment, deaths, prostheses, illness, type of workforce and heat (Fig. 6). The last element is what the game uses as the ultimate signifying factor – all other markers depend on the level of heat which immunizes populace from the growing danger of climate apocalypse. *Frostpunk* also blends in the diegetic messages from citizens which are presented to the player in the form of quest promises. Such a complex web of interface representations of population and its discontents serves one purpose: to produce a vision of total biopolitical and thanatopolitical control.⁴⁶ The players both care for the lives of the populace and play with death by enforcing rigorous laws and maximizing the workforce potential in harsh conditions. The game is set on presenting a society under the state of exception. The interface mediates this sense of emergency with color coded diegetic messages such as red exclamation marks in the freezing households and overlay extradiegetic ones such as a red

46. Kłosiński, “Frostpunk.”

undertone signaling a negative resource upkeep. Therefore, *Frostpunk* operates with numerous biopolitical markers because it makes biopolitical decisions a part of its message: it stages and problematizes governance over life as a problem of decision making and power.

Conclusion

The basic types of biopolitical markers in the selected game interfaces can be divided according to their function and underlying logic of immunization. The interface elements, as shown in the examples, can represent positive biopolitics of care, indicating strategies of nurturing and protecting life of either an individual, sum of individuals or a collective. These elements may also serve a negative biopolitical function, indicating the possibility of eliminating whatever the controlling gaze deems dangerous. As such these markers perform a regulatory function for the player, because they represent affordances of the entities the player controlled units come in contact with. Moreover, these markers signify their status and attitude towards the player or conversely – situate them in accordance to the position of power the player occupies. In cases where life is there to be extinguished, the biopolitical markers turn into thanatopolitical ones and indicate politics of death. Such is the function of those intradiegetic and extradiegetic interface elements which project vulnerabilities, instant death movement, etc. A separate category can be distinguished for necropolitical markers, the ones which indicate not the possibility of political extinguishing of life, but of economizing the distribution of death.

To introduce order into my findings, I distinguished four types of markers. The first, biopolitics and biopower, is exemplified by HP, life, population and workforce counters, regime stability indicators, and mechanics of (re)production. These indicate the drive to exercising control over life and population. The second marker, thanatopolitics and necropolitics is exemplified by debuffs, resurrection cooldowns, mechanics and representations of death, as well as killing efficiency. These indicate playful use of death or maximalization of killing potential and politics serving the production of “death worlds.” The third marker, veillance and invigilation is exemplified by stealth indicators, surveillance mechanics and representations. These indicate governance with surveillance, observation and the power of sight, sound or other senses. The last marker, immunity and community can be seen in reputation, representations and mechanics of inclusion or exclusion, friend and foe designation. These markers indicate zones of inclusion or exclusion, barriers and thresholds, complexity of community logic and group dynamic.

One of the questions that arises when analyzing biopolitical markers is whether these are genre specific, and therefore offer a way to rethink game genres as vehicles of biopolitical patterns. At this point such claims find confirmation in some markers, such as the ones related to population, and governance in strategy games. Studies on imperialism⁴⁷ and postcolonialism⁴⁸ reinforce arguments about control imperatives in relation to genre specificity. This should be an interesting expansion of the topic of biopolitics at a level of the complexity beyond simple identification and description of markers. However, one should keep in mind that colonial, or biopolitical logic, is not limited to any genre and that biopolitical markers can be found in games representing no specific biopolitical agenda or ideology.

Another problem related to working with markers and defining them is the fact that their function might change according to other game elements, such as mechanics, narrative, ontology and affordances of the game world. Moreover, some games offer additional difficulty settings, such as iron man mode, which further modifies the reception and perception of available markers. Difficulty settings themselves might serve as biopolitical markers fueling thanatopolitical or thanatoludic gaming strategies.

This study was aimed at producing a simple and operational set of biopolitical markers for further research and development in game studies. Working with five different examples I have shown the possibility of distinguishing functional traits of different interface elements representing life as a concept metamorphosized in games representing various genres. The typology of biopolitical markers presented here is by no means final. It, however, opens a way for further rethinking the relationship between singular markers and their assemblages in games in light of identifying biopolitical genre patterns and paradigms. Further research is required to fully operationalize this toolset and rethink its implications for critically oriented game studies.

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