

Prosthetic Metaphors, Rejection, and Representation in Games

Daniel Gardner

Chapman University, Grand Challenges Initiative
1 University Drive, Orange, CA
dgardner@chapman.edu

Kelly Hacker

Independent Researcher
kleinekelly@gmail.com

Keywords

Representation in Games; Prosthetic Metaphor; Characters, Avatars, and Virtual Worlds

EXTENDED ABSTRACT

The prosthetic metaphor is a familiar lens for examining how people may enact their own—or other—identities in games and virtual spaces (e.g., Nakamura 1995, Nguyen 2009, Klevjer 2012, and Purnomo et al. 2019). Influenced by science-fiction and cyborg anthropologists (Haraway 1991[1985]), applying “prosthetic” to virtual bodies that players *articulate* to interface with virtual worlds seems natural. In this paper, respecting scholars with lived prosthetic experience who have considered this metaphorical use (Kurzman 2001, Sobchack 2006), we re-evaluate how playable game avatars are a *mix* of practical *and* metaphorical prosthetics. Using events in the game *Rust* as a conceptual case study, we present preliminary analysis re-visiting prosthesis as an analytical lens to consider how “prosthetic rejection” may help game scholars reframe how differently represented groups of players may relate to virtual bodies and virtual worlds.

The application of *prosthetic* to virtual avatars operates as both metaphor and object. Metaphors are displacements that highlight “certain relations of structural or functional resemblance that might not be noticed without the transportation of a foreign object into an otherwise naturalized scene,” thus effecting an analogy (Sobchack 2005, 21). Common prosthetics are themselves both object and metaphor. A prosthetic arm is not an organic arm but signifies the idea of one through its structural, functional, and cosmetic resemblance. The avatars that players *don* to participate in digital games are similarly *metaphors* of embodied performances displaced from, but often representative of, our actual world. *Prosthetic* is one way we describe how players become *attached* to avatars through which they interface with digital environments.

“Prosthesis” entered the medical lexicon in the early 18th century, referring to the replacement of missing body parts with artificial ones (Wills 1995, Jain 1999). In the late 20th century, prosthesis entered human-technology interface literature through the concept of the “cyborg,” this time largely as metaphor (Jain 1999, Sobchack 2005). The metaphor of “technology as prosthesis” highlights certain relationships between bodies, technologies, and shifting subject positions. Critics of this metaphor point out how technology as prosthesis goes beyond the medical sense of replacing a

Proceedings of DiGRA 2022

© 2022 Authors & Digital Games Research Association DiGRA. Personal and educational classroom use of this paper is allowed, commercial use requires specific permission from the author.

missing part. Jain (1999), Kurzman (2001), and Sobchack (2006) argue scholars using this metaphor rarely rely on insights from amputees and their prosthetic devices, and often ascribe agency and autonomy to prosthetics while neglecting those traits in their users.

Rejection is a powerful example of this agency. Burrough and Brook describe rejection as “the non-use or minimal use of a prosthesis which has been *fitted* to an individual” (1985, 40; emphasis ours). Wilson writes how rejection may arise from challenges such as *poor fitting* (1970). McKenzie describes poor comfort, unnatural appearance, and the reactions the wearer gets from other people as reasons a prosthetic may be rejected (1970). Kurzman describes how “an artificial limb which is never quite incorporated usually indicates that an amputee is having difficulty adjusting to the amputation” (2001, 371); that is, struggles with the loss of *their* body.

Massively multiplayer online survival game *Rust* provides a unique case for reconsidering how virtual bodies may come to matter to, or be rejected by, different players. Unlike similar games that allow players to customize avatars, *Rust* assigns players pre-determined avatars. Initially all *Rust* avatars were white males. In 2015, updates began diversifying player avatars by randomly—and retroactively—applying different skin tones and other physiological traits, including genitalia (Grayson 2015, Garza 2016, Johnson 2016). Avatars are linked to players’ Steam IDs meaning that even should they delete their avatar, new ones will retain the same appearance.

Many games orient gameplay around characters whose visible characteristics players cannot control. The difference between *Rust* and these games is that generally all players receive the same *default* avatar. To apply the prosthetic metaphor, default avatars tend to follow a “one virtual body fits all” approach. And previous scholarship has identified how that “one body” tends to overwhelmingly be *fitted* to white and male players (Williams et al. 2009, Passmore et al. 2017, Gardner & Tanenbaum 2018).

Players cannot be defined by a single demographic identifier whether limb count, skin tone, gender, or sexual identity (Shaw, 2014). However, it is still worth noting many players are in a position where they cannot *reject* demographically poor-fitting common mass-produced default avatars should they wish to participate in digital games at all. Meanwhile, non-white or female avatars were apparently too poor a demographic fit for a large group of *Rust* players who *rejected* them (Grayson 2015, Garza 2016, Johnson 2016).

Rejection took the form of requests for refunds, a bombardment of poor reviews, and heated messages penned to the developer on forums and social media about how unacceptable it is to have to be Black or worse, “a FUCKING WOMEN the rest of [their] life” in-game (Johnson 2016). Despite the less physiologically immediate stakes of these avatar-prosthetics, these rejections followed similar logic to the medical contexts above. These players argued their avatars were now a *poor fit* because of an unacceptable appearance. These overwhelmingly white-male players could not adjust to losing *their* bodily representation in-game and struggled when another was provided.

Burrough and Brook Write that creating prosthetics with cosmetic desirability *and* high functionality can be challenging (1985). However, in games visual appearance and function are not inherently constrained by each other. For instance, *Rust* avatars function the same regardless of appearance, making rejection based on technical capacity an unlikely explanation.

Games scholars can remix this example of avatar rejection in *Rust* to reflect on the experiences of players of color, women, and others for whom avatars are still rarely made to *fit* by default. White male player demands to retain their “privilege of immersion” (Passmore et al. 2018)—even when infused with racism and misogyny—highlight the circumstances underrepresented players regularly face. Re-visiting avatars as performative prosthetics that *fit* different players differently—and through which we articulate gameplay—better recognizes important facets of how diverse players may become *attached* to games.

ACKNOWLEDGMENTS

Tess Tanenbaum and Bonnie Nardi who advised earlier stages of this research. The Grand Challenges Initiative who supported travel to this conference. iSchool inclusion institute teams High-E and GameChangers whose work continues to inspire.

BIBLIOGRAPHY

- Burrough, S. F. and Brook, J. A. 1985. “Patterns of Acceptance and Rejection of Upper Limb Prostheses.” *Orthotics and Prosthetics*. Vol. 39, No. 2. 40-47.
- Facepunch Studios Ltd. 2013. *Rust*. Online Game. Facepunch Studios Ltd.
- Gardner, D. & Tanenbaum, T. 2018. “Dynamic Demographics: Lessons from a Large-Scale Census of Performative Possibilities in Games.” In *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems*.
- Garza, F. 2016. “Exactly how male gamers react when they are forced to play female characters.” *Quartz*. April 11, 2016.
- Grayson, N. 2015. “Rust Players Divided Over Not Being Able To Choose Their Sex” *Kotaku* July 20, 2015.
- Johnson, L. 2016. “This Game is Forcing Some Players to Be Women And They’re Freaking Out.” *Motherboard*. April 10, 2016.
- Haraway, D. 1991(1985). “A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century.” In *Simians, cyborgs, and women: The reinvention of nature*. Routledge, 149-181.
- Jain, S. S. 1999. “The Prosthetic Imagination: Enabling and Disabling the Prosthesis Trope.” *Science, Technology, & Human Values*. Vol. 24, No. 1. 31-54.
- Klevjer, R. 2012. “Enter the avatar: The phenomenology of prosthetic telepresence in computer games.” In *The philosophy of computer games* (pp. 17-38). Springer, Dordrecht.
- Kurzman, S. L. 2001. “Presence and Prosthesis: A Response to Nelson and Wright.” *Cultural Anthropology*, Vol. 16, No. 3. 374-387.
- McKenzie, D. S. 1970. “Functional Replacement of the Upper Extremity Today.” *Prosthetic and Orthotic Practice*. Edited by G. Murdoch. Edward Arnold, London. 363-376.
- Nakamura, L. 1995. “Race in/for cyberspace: Identity tourism and racial passing on the Internet.” *Works and Days*, 13(1-2), 181-193.
- Nguyen, M. 2009. “Queer cyborgs and new mutants: race, sexuality, and prosthetic sociality in digital space.” *American Studies: An Anthology*, 372-383.
- Passmore, C.J., Yates, R., Birk, M.V., and Mandryk, R.L. 2017. “Racial Diversity in Indie Games: Patterns, Challenges, and Opportunities.” In *Extended Abstracts*

Publication of the Annual Symposium on Computer-Human Interaction in Play, pp. 137-151.

- Passmore, C.J., Birk, M.V., and Mandryk, R.L. 2018. "The Privilege of Immersion: Racial and Ethnic Experiences, Perceptions, and Beliefs in Digital Gaming." In *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems*. 2018.
- Purnomo, S.L.A., Purnama, S.L.S., Untari, L., Asiyah, N. and Anggraini, N. 2019. "Gamemunication: Prosthetic Communication Ethnography of Game Avatars." *Jurnal Komunikasi: Malaysian Journal of Communication*, 35(4).
- Shaw, A. 2014. *Gaming at the Edge: Sexuality and gender at the margins of gamer culture*. U of Minnesota Press.
- Sobchack, V. 2006. "A Leg to Stand On: Prosthetics, Metaphor, and Materiality." *The Prosthetic Impulse: From a Posthuman Present to a Biocultural Future*. Edited by M. Smith and J. Morra. The MIT Press, 17-41.
- Williams, D., Martins, N., Consalvo, M., and Ivory, J.D. 2009. "The Virutal Census: Representations of Gender, Race and Age in Video Games. In *New Media & Society*, 11(5), pp 815-834.
- Wills, D. 1995. *Prosthesis*. Stanford University Press.
- Wilson, A. B. 1970. "Some Observations on Upper-Extremity Prosthetics." *Prosthetic and Orthotic Practice*. Edited by G. Murdoch. Edward Arnold, London. 331-335.