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MY AVATAR, MY SELF: A POSTHUMAN EXAMINATION OF VIDEO GAMES AND CYBORG BODIES

A thesis submitted to
the Graduate College of
Marshall University
In partial fulfillment of
the requirements for the degree of
Master of Arts
in
English
by
Zachery Tyler Rakes
Approved by
Dr. Kristen Lillvis
Dr. Walter Squire
Professor Eric Smith

Marshall University
May 2016

APPROVAL OF THESIS

We, the faculty supervising the work of Zack Rakes, affirm that the thesis, "My Avatar, My Self: A Posthuman Examination of Video Games and Cyborg Bodies," meets the high academic standards for original scholarship and creative work established by the English MA program and the College of Liberal Arts. This work also conforms to the editorial standards of our discipline and the Graduate College of Marshall University. With our signature, we approve the manuscript for publication.

Kristen Lillvis, PhD	Committee Chair	4-25-16 Date
Walter Squire, PhD	Committee Member	4-26-16 Date
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Abstract

My Avatar, My Self is a project which seeks to examine cultural conceptions of the flesh-and-machine physical cyborg and to subsequently challenge these conceptions with a new idea of the cyborg: the *conceptual cyborg*. This thesis serves to discuss through posthuman theory what the conceptual cyborg is, how it has become a prevalent force in advanced technological societies, and what it means for human beings to be conceptual cyborgs. Beyond that, I also discuss the importance of the conceptual cyborg's ability to be digitally embodied in virtual spaces, and this idea is expanded on through an examination of science-fiction television, video games, and even social media in relation to the conceptual cyborg. By examining contemporary cultural artifacts of the past two decades, I explain how we are all already conceptual cyborgs and how video games are able to serve as the best examples for the conceptual cyborg's powers of digital embodiment.

Introduction

This project has come about as a result of my personal interest in both video games and the advancement and augmentation of the human being. This research was initially pursued as a way to explore posthuman theory in relation to video game players and the ability for people to be digitally embodied within the many realms of video games. As I continued my work with theorists such as Donna Haraway and N. Katherine Hayles, however, this idea of posthuman, digital embodiment soon lead me to examine the concept of the posthuman cyborg. Ultimately, I began researching conceptions of the cyborg and have worked in order to re-conceptualize the reality of the cyborg into that of what I term the *conceptual cyborg*, which has become the focal point for this project.

When seeking to conceptualize the cyborg, Donna Haraway terms the cyborg as, in one respect, “a creature of fiction,” as, in the public eye, the understanding of the cyborg has its roots in both science fact as well as science fiction (149). The term “cyborg” itself was coined in 1960 by scientists Manfred Clynes and Nathan Kline as a shorthand for “cybernetic organism,” as they described a possible “augmented man” who would be more suited for space travel than ordinary humans (Kunzru par. 35). Though the term itself was only developed in recent decades, it could be argued that the concept of the cyborg has always been of some interest to mankind. All number of medical machinery, from pacemakers to insulin drips, for example, have “augmented” those who might have otherwise died without their intervention since the mid-to-early 1900s, making these people cyborg-like.

According to Hari Kunzru, author of “You Are Cyborg,” soon after the publishing of Clynes and Kline’s paper “Cyborgs and Space” in 1960, cyborgs became the center

of research and development fascination. Military projects such as mechanical human exoskeletons and robotic implants were theorized and tested throughout the decade of the 1960s, with scientists trying to find some semblance of human advancement to shed the natural weaknesses of the human flesh. This cyborg research was not merely a staging ground for technological and physical human advancement, though, as the motivations behind these forays into cyborgian research often delved into the realm of human ascension, “a new and larger dimension for man’s spirit,” as said by Clynes and Kline, rather than mere augmentation (qtd. in Kunzru, par. 36). It is from this heritage of the cyborg that we have figures in popular culture such as the Terminator, the Six-Million Dollar Man, and RoboCop to give rise to the flesh-and-machine cyborg that so permeates popular culture today.

This conversation about the flesh-and-machine cyborg is not exclusive to the public sphere, however – the cyborg has been a subject of critical academic discussion since the turn of the century. Kevin Warwick, for example, writes in his 2003 article “Cyborg Morals, Cyborg Values, Cyborg Ethics” that “the cyborg is formed by a human, machine brain/nervous system coupling,” making the cyborg that he examines in this piece very much a flesh-and-machine hybrid reality (132). The cyborg examined in this capacity falls in line with that of the flesh-and-machine cyborg forefronted in popular culture, and the ultimate idea behind this is the concept that, according to Warwick, the flesh-and-machine cyborg is considered an “upgrade[d]” human, with neural, physical links to machine-based technologies (136).

As I looked further into these considerations regarding the flesh-and-machine cyborg, I found that there are currently those who might consider that this cyborg has the capacity to exist beyond the realm of science fiction. This idea of the cyborg’s ability

to reach further has actually developed to the point now where some people are, in many ways, embracing the idea of the cyborg as a “human, machine brain/nervous system coupling” (Warwick 132). As an example of this, we need look no further than Dusseldorf’s Cyborg Fair, an event in which attendees experiment, or watch others experiment, with what they consider cyborg technologies, attempting to augment their bodies to varying degrees. In an article written about this event by Anna Neifer, she describes how some attendees took it upon themselves to have an LED light chip, the Northstar V1, surgically implanted under their skin (par. 5). Reasons for installing the Northstar V1 vary for attendees: in order to backlight tattoos, mimic bioluminescence, or just to have it for the sake of self-augmentation (Neifer par. 12-14). The Northstar V1 is just one of many different kinds of personal bodily augmentation that people have begun to experiment with. Though this event and others like it are not necessarily in the mainstream public eye, they do show that there is currently an active movement behind the idea that the flesh-and-machine cyborg can move beyond science fiction and become a reality.

Regardless of whether you consider the popularity of the flesh-and-machine cyborg in popular fiction or the niche movements that work towards actual mechanized human augmentation, it occurred to me that both, taken together, demonstrate just how deeply rooted this concept of the cyborg is in society at large. The flesh-and-machine, neural-interfaced cyborg is one that seems to have a hold on society’s imagination, with varying degrees of fascination and dedication to it. However, the process of physical cyborgian augmentation, though widespread in fiction, did not seem to be as immediately important in terms of its capacity to manifest itself in society. By this, I mean to say that this idea of the flesh-and-machine cyborg did not stand out to me as

being largely indicative of the actual ongoing process of overall significant human advancement or of how humans have begun to interact differently with others and their own technologies.

As an alternative to the flesh-and-machine cyborg, in my research I first found Hayles' discussion of the posthuman cyborg, stating that the cyborg exists as a being that can tear down or complicate traditional boundaries (*How* 84). What was most interesting about this to me at the time was that this definition of the cyborg does not place emphasis on the *physicality* of the cyborg but on its *functionality*. In considering what the cyborg represents to our current technological society, this definition of the cyborg seems to be more immediately relevant and applicable, as our technologies seem to be ever-more geared towards non-physical augmentation of our functionalities as people. As an example, consider the technologies developed for our modern world: mainstream technologies designed to help us be more productive, save more information, keep better notes, or help us stay more in touch with others come less through actual physical tools, objects, or physical augmentations. Instead, these developments are more often than not being brought to us through apps, programs, and web sites, and they are developed to function in such a way that they can interact with us seamlessly, ingraining themselves in our daily routines. It is this attempt at a digital integration of man and machine that makes the idea of the *functional* cyborg more immediately appealing, and more importantly, more relevant, than that of the *physical* cyborg.

With this concept of a cyborg that does not exist as a literal fusion of man and machine, as well as my personal interest in the technologies of video games, I pursued the idea of video game players as cyborgs. Though this is not a topic that has been

discussed and theorized in any great detail, I found that writer Brendan Keogh's "Across Worlds and Bodies: Criticism in the Age of Video Games," though mainly about how we should approach gaming criticism, contained a particularly enlightening discussion about how players exist as cyborgs of a sort when they play video games. In his discussion, he notes that the player exists as a cyborg through her interaction with the game, the peripheries used for input, and the avatars used within the game, but that ultimately the player is still a divided entity: the player is both a cyborg entity and a separate physical entity simultaneously. When reading his discussion of this cyborg, I could not help but think back to Hayles' notion of the cyborg existing to tear down or complicate traditional boundaries. The idea of being both a cyborg and not a cyborg simultaneously did not sit right with me.

Ultimately, my musings over the idea of the functional, non-flesh-and-machine cyborg as well as considering Keogh's idea of the cyborg that seemed to be in opposition to that of Hayles helped pave the way for what I end up terming as the *conceptual cyborg*. The conceptual cyborg does not have to rely on physical augmentations or the literal fusion of man and machine to achieve its status as a cyborg—it is cybernetic not in its physicality but in its relationships with cybernetics. Instead, the conceptual cyborg continues the trajectory of cyborgian human advancement by linking man and machine through ideas, digital representations, and digitally embodied extensions of the human within digital spaces.

My decision to use video games as a basis for my analysis of posthuman, cyborgian embodiment stems in one sense from a deep, personal interest and investment in video games. I grew up during a period in the history of video games where the industry experienced rapid growth in what seemed like a short span of time,

so much so that at the earliest age I could, I was playing the pixelated *Super Mario World* (1990), and in a span of a few years, the fully 3d-rendered *Super Mario 64* (1996) completely replaced all expectations I had of what video games were capable of doing. In that respect, I found myself growing up and developing alongside video games, as both myself and the video games industry sought to develop ourselves and push the boundaries of what we were capable of.

In part because of these personal ties I have to video games, as well as my knowledge of what video games have become and are capable of, my decision to use video games as the focus of this project also stems from my belief that video games are perhaps one of the best forms of digital media with which to demonstrate the validity of the conceptual cyborg. In large part, I feel as though video games allow players a cyborg existence in a way that other forms of media do not. While a film, a book, or a television show might bring its audience along for the ride, video games, by sheer nature of players engaging with them, make players active participants in their worlds and narratives instead of observant bystanders. It is this involvement of the player within the game that allows video games to fulfill a main tenant of the cyborg that Hayles mentions, in that being able to exist simultaneously in the physical and digital worlds is an active breaking down of traditional boundaries.

As a brief note, chapter one speaks largely about what I term to be the *player-as-cyborg* instead of the *conceptual cyborg*. In truth, the former functions largely as a division of the latter: the player-as-cyborg does exist as a conceptual cyborg and can in truth only exist because of the nature of the conceptual cyborg. Were it not for the nature of the conceptual cyborg to allow people to be seamlessly, non-physically integrated with their technologies, the player-as-cyborg would have no platform with

which to enact its posthuman, digital embodiment. When I use the term player-as-cyborg, I do so only when the conceptual cyborg is being applied solely in reference to video games, and as such it constitutes most of the theoretical discussion of the first chapter. As chapter two works to flesh out the conceptual cyborg as a whole, it makes sense to discuss the conceptual cyborg in broad strokes, explaining it in relation to not just video games, but also technology, social media, and television shows.

Thinking back to my younger days and seeing video games grow up alongside me—and me with them—it seems amazing to me that as of writing of this piece, numerous virtual reality headsets strictly for video gaming have recently been released onto the market. While these technologies are still in development, working towards more polished peripherals, they serve as yet another bridge to enact digital embodiment through video games that I once thought would exist only in science fiction. As our technologies continue to move forward, I feel that this discussion of digital, posthuman embodiment through our status as conceptual cyborgs is more relevant than ever.

Chapter 1

The Player-as-Cyborg and Mixed Realities

Video games have, by nature, always been an interactive medium. Games like *Pong* (1972) or *Breakout* (1976), though not host to any deep mechanics or engaging narratives beyond scoring points using a ball and paddle, have been able to draw players into the moment and the "world" of the games themselves through engaging, entertaining gameplay. As video games have become increasingly sophisticated, however, the medium has evolved beyond simply being a conduit for gameplay and entertainment—players have been allowed greater opportunities to feel they are active participants in the games themselves. To some players, the level of interaction with their video games allows them to feel as though they can actually live within the worlds of their games.

Finding embodiment within the world of video games is an entirely posthuman concept – using a video game as both a digital "prosthesis" and an extension of the self speaks to part of the posthuman condition (Hayles, *How* 3). While this concept of immersion and embodiment within video games at one point might have been relegated to a solitary experience, this is not necessarily the case now. The advent of subscription-based Massively Multiplayer Online Role Playing Games (MMORPGs) and services such as Xbox Live, for example, have created a different sort of realm for gamers to live in – a hybridized space of existence that intertwines the physical and the digital. This intertwining of the physical and digital worlds is what N. Katherine Hayles terms in "Cybernetics" as "mixed realities." In the "mixed realities" of video game worlds, players can have identities and avatars all their own, but they can also live in virtual

social spaces as their avatars, using them as digital prostheses for embodied interactions with others.

I argue that as technology continues to develop and become more seamlessly integrated with the physical world, people should embrace the existence of these mixed realities of the virtual world of video games, instead of sectioning them off as merely digital locations separate from the "real." When people begin to accept these mixed realities and allow themselves to become seamlessly integrated with their digital avatars/bodies, entirely new possibilities of existence and socialization open up.

To better grasp how we can become seamlessly integrated with our digital bodies, it is necessary to ensure that a broader understanding is reached with regards to Hayles' concept of "mixed reality," which she defines as, "an integration of virtuality and actuality" ("Cybernetics" 148). In leading up to the discussion of mixed reality, Hayles talks about how technology is already becoming seamlessly integrated with the physical world by way of cell phones, GPS, digital sensors, and other such devices, and how doing so has shaped our physical environment ("Cybernetics" 148).

Further, Hayles goes on to mention how a decade or so ago (and arguably, still today) there existed a notion that "virtual realms [were] 'cyber' locations distinct from the real world" ("Cybernetics" 148). She uses the concept of mixed realities to push back against this notion. Like Hayles, I argue that we already inhabit a mixed reality simply by living in our increasingly digital age in the physical world. When we live in an age where our phones will tell us how long it will take for us to drive home before we ask it, or when we have strong relationships with people that we interact with almost exclusively through social media, it is difficult to deny that we are, in some way, existing in a near-constant mixture of physical and virtual realities. In effect, these technologies are

becoming integrated with everyday life in numerous ways, and as technology continues to advance, it is important to consider how changes in technology may begin to bring about more changes in the fabric of human existence.

Mixed reality does not necessarily work only in the sense of technology coming into our physical lives, however. I argue that if technology can come into our “real” lives, then it should be possible for us to, in a sense, bring our “real” lives into these technologies, and more specifically, into our games. I mentioned earlier that in MMORPGs, players can enter the world of the game as their avatars, and that by doing so, they can exist as actual living entities within those worlds. In a sense, this is not entirely different from technology coming into our “real” lives. By using avatars to be able to actually exist within these game worlds, players may be embodied within the realm of video games through these avatars. This furthering of our existence into the worlds of video games, then, serves as another possible application of the concept of mixed reality, especially for the posthuman subject.

Discussing how players can bring the self into the realm of video games may become simpler if we discuss the existence of players as cyborgs. In his own discussion of Hayles and the relation of her theory to video games and video game criticism, Brendan Keogh states that in considering how people play video games, “the player must not be understood as autonomous and distinct from the game, but as redistributed across a network of information and actors and materialities” (“Across Worlds and Bodies” par. 27). In a sense, this concept that the player is “redistributed” across different aspects of the game acts as yet another push against the notion that video game realms are set apart from the “real world,” because in playing a game, in being indistinct from the game, players must, to a degree, adopt a cyborg-esque existence.

Koegh furthers this in his assertion that “the player embodies a hybridised body, incorporating flesh, hardware, and virtual objects and beings into their corporeal schema…the hybridity of the videogame text demands a cyborg identity that understands the player as posthuman, as a subject distributed and emergent” (“Across Worlds and Bodies” par. 27). While players do not necessarily exist as actual fusions of man and machine, as Keogh suggests, it is true that players generally do not just “play” a game. Players interact with games. To a certain degree, players must make an active effort to understand and incorporate the systems at work within a game in order to play it. Thus, this reflects Hayles’ statement that “the posthuman view configures human being so that it can be seamlessly articulated with intelligent machines” (*How* 3).

It is this “seamless articulation” with these machines that allows players to be posthuman, cyborg entities. As video games exist as multisensory instances which players navigate, players can, in a sense, become one with their games, and more specifically, with their avatars. This, I argue, is the sort of cyborg existence that players inhabit when the status of integration with games reaches a peak of a true union of player and avatar – the hybrid entity that is player-as-cyborg.

Up until this point, Keogh’s thoughts have been used as a basis for establishing that players can exist as cyborg entities when interacting with the worlds of their games. However, I do depart from his line of thinking with regards to how players exist as cyborgs. As Keogh further explores what it means for a player to be a cyborg, his discussion takes us to examining the game *Metal Gear Solid* (1998). Directed, written, and produced by Hideo Kojima, *Metal Gear Solid* tells the story of an ex-soldier, Solid Snake, who is brought back into the fray for one final mission: to infiltrate the Alaskan nuclear weapons compound Shadow Moses and destroy the terrorist cell FOXHOUND

that has taken control of it. The game revolves around infiltrating Shadow Moses, avoiding encounter with guards, and defeating the members of FOXHOUND through individual boss battles.

At one point, Keogh makes reference to a particular member of FOXHOUND, Psycho Mantis, and he says, in reference to a previous section in his piece discussing the "meta" nature of *Metal Gear Solid*, "When Psycho Mantis uses the second-person address to say 'you haven't saved the game often' he is not talking to either me the player or Solid Snake the character, he is talking to the cyborgian, gestalt identity that is the two of us combined across bodies and worlds" ("Across Worlds and Bodies" par. 26). In saying that Psycho Mantis does not speak to Keogh, as the player, or his avatar, but to the hybridized body that is the two combined, Keogh evokes the thought that the player is twofold: he exists as his cyborg entity, which is being spoken to through the game, but he also exists as his own separate entity, which is removed from the game, even while interacting with it. In this, Keogh suggests that the player still exists within a binary: the player subsists simultaneously as a cyborg and as non-cyborg. This duality of the cyborg and non-cyborg existence in and of itself contradicts the idea of the cyborg, however, as cyborgs exist as beings that can tear down or complicate traditional boundaries (Hayles, *How* 84). A cyborg, in the sense of our discussion, is an amalgamation of player and game, of player and avatar – a symbiotic existence in which player and game become one. Setting forth a binary or a distinction between the cyborg self and the "real" self, then, pushes back against the concept of the actual existence of a player-as-cyborg.

A further problem with dividing the cyborg and the "real" selves also arises if we consider how the player-as-cyborg fits into mixed realities. As the concept of virtual

spaces as mixed realities is very much alive with consideration to video game worlds, we hit an obvious wall if we think of player-as-cyborg as composed of two separate entities. Separating the “real” and the cyborg serves to set us back to the thought of classifying the virtual spaces of video game worlds as those that are separate from physical spaces. If we are to embrace the concept that our lives can intertwine with our video games and the worlds contained within them and, if we are to, by extension, take on the concept that doing so allows us to live within mixed realities, it only makes sense for the player-as-cyborg to exist as an amalgamation of the physical and the virtual. When Psycho Mantis speaks in the second person, he is speaking to the cyborg entity that the player exists as, and there is no player outside of the game. The player, in that time and space, exists solely as player-as-cyborg, as the combination of the player and the avatar that she inhabits at the time. It is this existence of player-as-cyborg working in tandem with the existence of mixed realities that allows players to form bonds with their in-game avatars and exist within the worlds of their games.

In the case of games such as *Metal Gear Solid*, the player’s experience of existing as player-as-cyborg can be seen as that of a solitary experience. The game itself is focused on the single player in order to deliver a narrative experience in which the player is the only cyborg entity within that instance of play. By doing this, it is fairly simple to establish a link between players and the avatar/character in order to interact with the game through the player-as-cyborg. The player is able to, in a cyborg fashion, merge with her avatar and then be embodied in the world of the game through it. This digitally embodied merging of player and avatar, in effect, allows the player-as-cyborg to form a sort of bond or connection with her avatar.

The direct addresses in *Metal Gear Solid* extend beyond the conversation with Psycho Mantis, however, and serve to further cement the “player as cyborg” union between the player and Solid Snake. Within the general structure of *Metal Gear Solid,* first-person perspectives are largely uncommon. The common perspective that the player is presented with when playing is a third-person perspective of the current area (see fig. 1), and aiming weapons of any kind is also usually restricted to the third-person perspective.

Fig. 1. “Illustration of third-person perspective: Snake hiding from guard.” Konami, 1998.

Even the cinematic cut scenes (scenes which play out like a movie instead of an interactive scenario in the game) are generally played out in a third-person perspective, as if the player were watching a film. With the game having a basis in a third-person perspective, then, the incorporation of first-person direct addresses stands out more and arguably changes how the player interacts with and experiences the events of the game. Beyond the encounter with Psycho Mantis, *Metal Gear Solid* incorporates these

first-person direct addresses throughout the rest of its story, continually pulling the player into scenarios in which she has shared, simultaneous experiences with Solid Snake. In manipulating, and thereby directing, the player's viewpoint of the game from a third-person perspective to a first-person perspective, *Metal Gear Solid* makes the player a direct participant in the events of the game, rather than simply a bystander looking in at the events that unfold.

One example of this manipulation of player perspective comes shortly after a boss battle with FOXHOUND member Sniper Wolf. After defeating Sniper Wolf and failing to save his wounded ally, Meryl Silverburgh, Snake attempts to delve further into the Shadow Moses complex but is detected by soldiers; captured by Sniper Wolf, who had only feigned defeat; and knocked unconscious. At this point, the game switches from its cinematic, third-person view to a first-person perspective so that the player sees through the eyes of Snake. Through this change in perspective, the player is continuing to engage with the game but through a different medium, so to speak. In seeing through Snake's perspective when all experience prior to this has been from a third-person standpoint, the player is more directly acting on the embodied nature of her existence as the player-as-cyborg. Seeing through Snake's eyes is not merely a switch in perspective but is a firm example showing how player and avatar (in this case, the player and Snake) exist as a symbiotic, cyborgian whole.

Upon regaining consciousness, the consequences of Snake/the player's capture are brought to light, as the player's view is restricted to looking solely at a series of lights overhead, with no freedom of movement. Snake is, in fact, restrained, which strips him of his ability to do anything, save for stare at the lights overhead, and the game's first-person point of view places Snake and the player in the same situation (see fig. 2).

Members of FOXHOUND can be heard talking in the room, though neither the player nor Snake can see them, and it soon becomes apparent from their conversation that Snake has been brought in for questioning, and they will go to the lengths of torture in order to extract the information they need. What makes this a more concerning scene, however, is that Snake is not the only one who is currently captured – the player has her hands tied as well. At any point in the game previously, the player is allowed, to some degree, the freedom to explore any part of the Shadow Moses complex that can be accessed at that time. However, the player is now held captive in this section of the game and must pass the trials ahead in order to regain freedom. In this, the player-as-cyborg bond between the player and Snake is emboldened, as both are similarly restricted by their common foe.

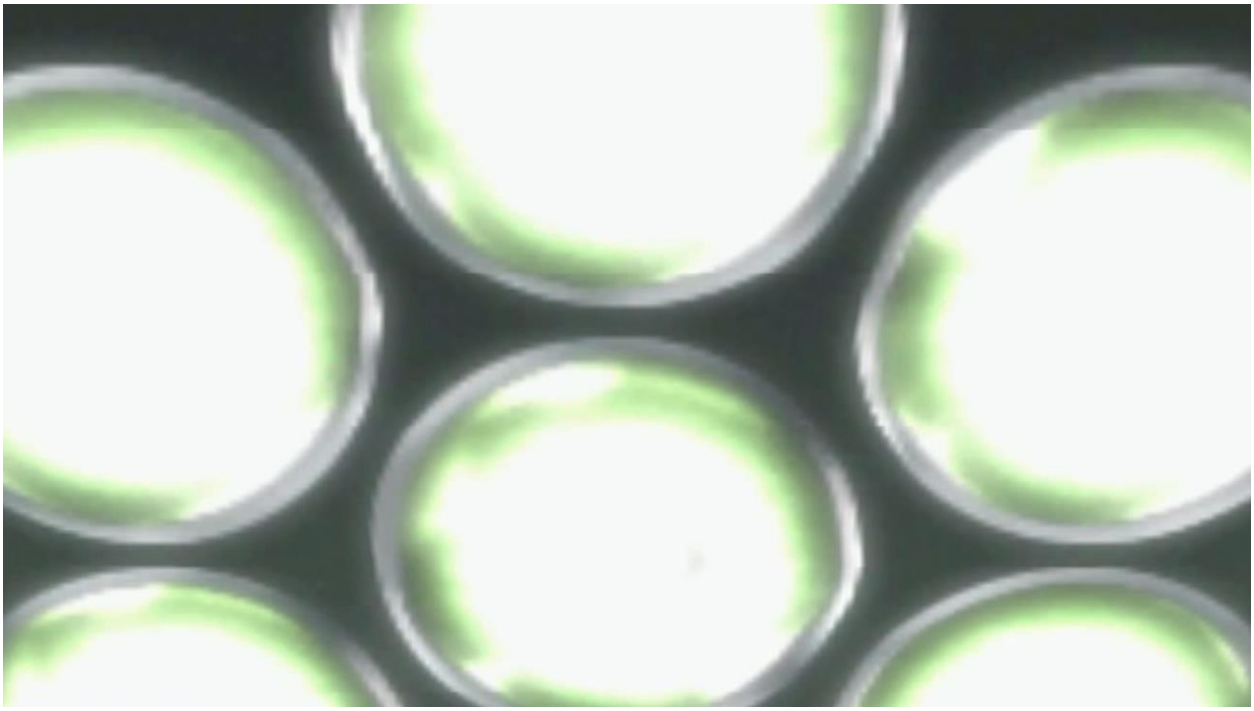

Fig. 2. “First-person view from Snake’s perspective.” Konami, 1998.

The bond between player and avatar as the player-as-cyborg is furthered during the torture scene when stakes are set that have meaning to both Snake and the player.

FOXHOUND member Revolver Ocelot is left to deal with Solid Snake's torture, and as a preamble to explaining how the torture process will work, Ocelot explains: "We're going to play a game, Snake…When the pain becomes too great to bear, just give up, and your suffering will end. But if you do, [Meryl's] life is mine." The stakes might seem somewhat low on the surface level, with the life of a non-playable character (NPC) hanging in the balance, especially considering that the player can complete the game regardless of whether or not Meryl lives or dies. However, by this point in the game, Meryl has become, to the player-as-cyborg, much more than an NPC – she has become a person.

For the player-as-cyborg, the fact that Meryl sheds her NPC status and becomes a person holds enormous weight, especially if it is to be considered that the player-as-cyborg holds control over whether she lives or dies. Initially, Meryl is designated as a hostage to rescue from the FOXHOUND Unit, but by this point in the game, the player has interacted with Meryl on multiple occasions and has witnessed her undergo a significant amount of character development. On a basic level, Meryl has become a sufficiently likable character. Any character can be a potentially likable character, however, and this can prove to be especially so for Meryl, whom the player learns so much about through witty banter, as well as listening to her reveal portions of her past. When she nearly sacrifices her life for Snake, and by proxy the player, and is captured and threatened with death, Meryl becomes, for the player-as-cyborg, more than just a likable character. She transcends this categorization and becomes a character that has real weight within the mixed reality of the game. She is not an NPC but a person with whom the player-as-cyborg has developed a relationship. Since Meryl's life is the bargaining ship that Ocelot has set in play, then the player, in effect, takes upon

responsibility for Meryl's life that would not be possible without the existence of the player-as-cyborg.

Since Ocelot has made a very clear threat of taking Meryl's life upon giving in to the torture, and the sequence requires input from the player, the player-as-cyborg is made a direct participant in the mixed reality of the game. As the explanation of the torture scene commences, the game switches back to a third-person perspective, and we can see Snake strapped to the torture bed. Ocelot wastes no time in diving into his explanation of how this sequence of the game will operate, and speaks directly to Snake, saying, "Press the Circle button repeatedly to regain your strength. When you've had enough, press the Select button to submit. When your life reaches zero, the game is over. There are no continues, my friend."

Though Ocelot's explanation of how the torture section works is not given in the first-person perspective, it is almost unthinkable to consider that it is not aimed at both the player and Snake simultaneously. The way that the scene is presented like a non-interactive film, as well as Ocelot's use of "my friend," seem to indicate that he is speaking directly to Snake. However, Snake, who is entirely restrained at this point, obviously has no Circle button or Select button to resist and submit with. The player does have these buttons, however, so the dialogue is obviously addressed to the player as well. In that sense, the player-as-cyborg has to struggle against or submit to the torture through a joint effort – Snake struggles against the "actual" torture, and he can only do so through the input provided by the player (see fig. 3). If the torture is resisted, then it is a victory won through the existence of the player-as-cyborg and through the dual nature of the mixed reality of the game.

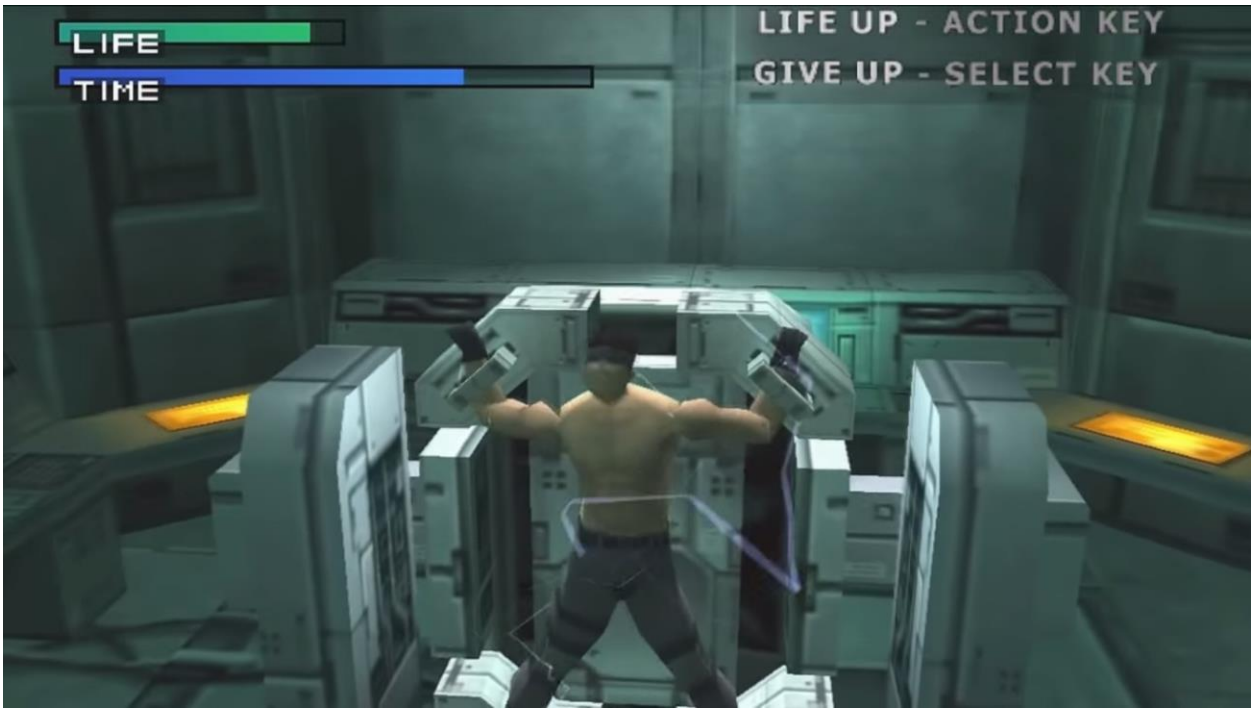

Fig. 3. “Snake resisting torture.” Konami, 1998.

Since the player and Snake are in the sequence together as the player-as-cyborg, it stands to reason that they will struggle together through this sequence, feeling compounding stress as a result of their status as the player-as-cyborg. Ocelot’s double threat – of a game over and of taking Meryl’s life – hangs over the heads of both Snake and the player, providing consequences for giving in to the torture, as well as for failing the torture sequence. If the life bar runs out and the player fails the torture sequence, for example, Snake will die, which is a scenario that Snake would doubtless attempt to avoid. As for the player, the consequences are also dire: if Snake dies, the player will have to resume from a previous save file, forcing her to replay numerous lengthy, unskippable cut scenes that lead up to the actual torture scene. Snake’s death, then, affects both Snake and the player in a negative fashion. There is a joint effort at work to keep Snake’s death from happening at all costs, with the motivations being expanded on through the nature of the player-as-cyborg.

Just as Snake and the player can work together to resist the torture, there also exists a flip side. Snake and the player can also work together to give in to the torture, which is an option that is entirely possible for the player to choose and is one which has multi-layered consequences for the player-as-cyborg. If over the course of the torture the stress becomes too great for the player as Snake comes closer to death, all that needs to be done is for Snake to give in to the torture, accomplished by the player pressing the Select button. At that, the torture sequences end, and the player and Snake are spared from death and its associated consequences. Should the decision be made to give in to the torture, however, it must be remembered that it comes at the cost of Meryl's life, and that it is the fault of both Snake and the player. The responsibility cannot rest on just one party through the player-as-cyborg.

The weight of Meryl's life is placed on both Snake and the player, and it is only through the existence of the player as the player-as-cyborg that allows this to fully come to fruition. Ocelot's threat of killing Meryl is not a hollow one. If Snake submits to the torture, Meryl will invariably die, and nothing can be done to change it, except for reloading from a previous save state and trying again. That being said, if the player-as-cyborg has submitted to the torture, it is unlikely that there would be any desire to revisit the section and go through the process a second time. Ultimately, submitting to the torture will allow the game to progress and does not impede the player's ability to complete the game. There are no "penalties" given to the player that places her at a disadvantage, either, though various portions of the game are altered to reflect Meryl's death, and both Snake and the player are consistently reminded that Meryl's death came about because of their actions.

It cannot be overstated that Meryl's death is due to the actions of the player-as-cyborg, because by initially placing the player in a shared perspective with Snake, and by explaining the terms of the torture scene in relation to the input buttons on the player's controller, Ocelot makes the player a direct accomplice in Meryl's death, should the player-as-cyborg submit to the torture. Though Snake and the player are given the chance to continue living if they submit to the torture, they must do so remembering that it has come at the cost of another, a sentiment that, in this realm of the game, could only be achieved through the existence of the player-as-cyborg. Again, neither the player nor Snake can be said to be solely responsible for Meryl's death. In order to submit to the torture, Snake had to physically give in, and the player had to physically press the Select button. It is a conscious, joint effort to submit to the torture, and it comes with great consequences. Though the dialogue about Meryl's death through the rest of the game is directed at Snake, the actual cooperation of the player that is required to submit to the torture makes the player directly complicit in Meryl's death – the death of a person, a friend, within the game. The torture section, in effect, acts as an exercise of digital embodiment within mixed realities through the player-as-cyborg – it asks whether or not the player is willing to allow a person that she has built a relationship with to die, and through what struggles the player will undergo to see their decision through. Ultimately, both resisting and submitting to the torture is a conscious act that makes the player directly responsible for either outcome, both of which could only be brought to fruition through the cooperation of the player and Snake in the mixed reality of the game.

The torture scene is only one set piece which *Metal Gear Solid* uses in order to draw the player-as-cyborg into the world of the game, however. While the torture scene

makes the player-as-cyborg responsible for the life or death of Meryl, a later scene in which Snake is confronted by his twin brother, Liquid Snake, serves to confront both the player and Snake about their choices and actions within the game. After a boss battle with Liquid, who was piloting the titular Metal Gear, the game transitions to a cut scene in the first-person perspective of Snake, once again placing the player and Snake in the same position (see fig. 4). As Liquid talks to Snake about the nature of his mission, asks why Snake does the things that he does for his mission, and accuses Snake of reveling in his work, he is directly addressing the player, as well. Though it may initially seem like the questions are only immediately relevant to Snake, the questions that Liquid asks and the accusations that he makes are just as relevant to the player as they are to Snake, if considered in light of the player as the player-as-cyborg.

The first of these lines of questioning that challenge both Snake and the player simultaneously comes when Liquid states that he yearns to bring the world to the brink of war once again, to which Snake responds that he does not wish for such a world. Liquid is quick to counteract Snake's opposition, however; "You lie!" he says. "So why are you here, then? Why do you continue to follow your orders while your superiors betray you? Why did you come here?" Snake's body language makes it fairly clear that he is caught off guard by Liquid's assertion, and as a result of this, Snake has no answer for Liquid. "Fine. I'll tell *you*, then," Liquid says, positing a theory to Snake and the player. "You enjoy all the killing. That's why. Are you denying it? Haven't you already killed most of my comrades?" Snake attempts to deflect this, as well, but cannot. "I watched your face when you did it. It was filled with the joy of battle." What is particularly interesting about this observation on the part of Liquid stems from the simultaneous first-person perspective – while it may seem fairly obvious that Liquid is

directly addressing Snake at this point, it must also be considered that he is also directly addressing the player. With the existence of mixed realities at play, this opens up the situation for consideration. It begs the question: to what degree are the player and Snake the same in this scenario? Does the player have the same look on her face that Liquid claims Snake does? Does the player truly enjoy this thrill of battle?

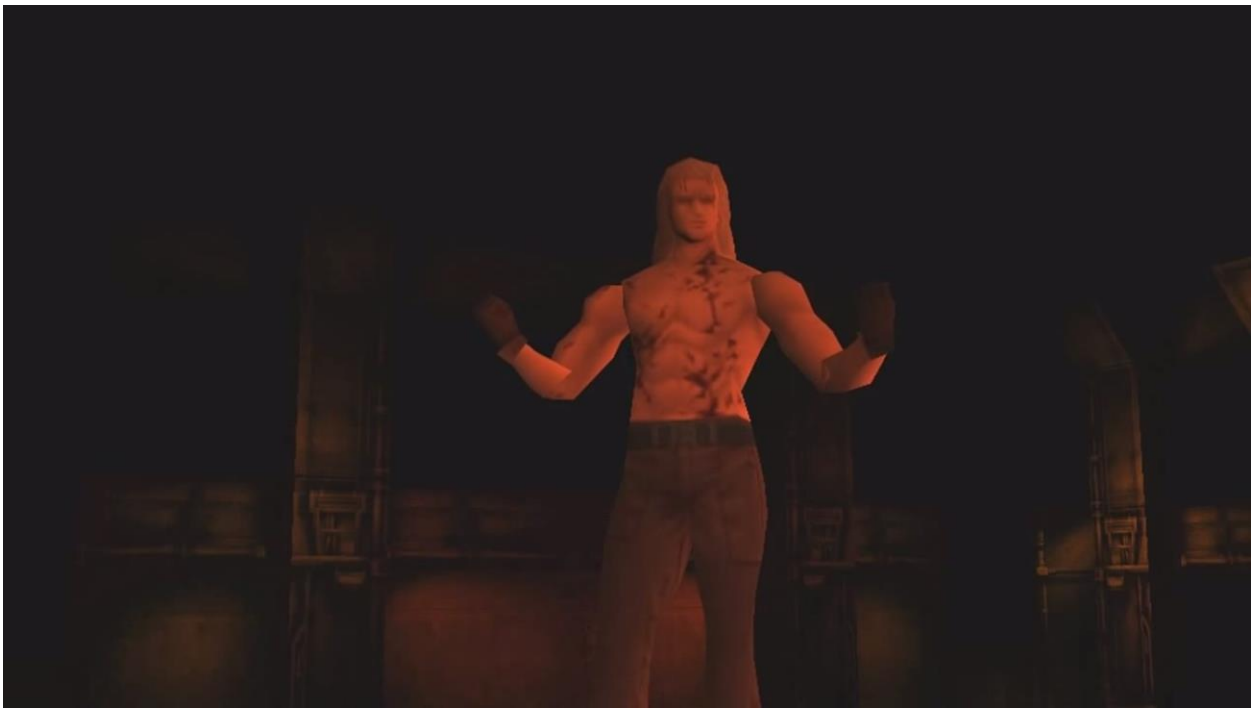

Fig. 4. “You enjoy the killing.” Konami, 1998.

At this, both Snake and the player must consider their answers to Liquid’s question. Why do both the player and Snake continue on with their collective mission? Could these answers potentially be the same? For Snake, this question is answered in his silence. Snake does not have a reply for Liquid because, arguably, Liquid is correct in his assumption. It is implied through numerous conversations throughout the game that combat, the “joy of battle,” as Liquid calls it, is almost all that Snake has known throughout his life. As a result, it is not unthinkable to consider that despite the twists, turns, and outright betrayals that the story goes through, Snake can overlook them

because he does indeed take to the seemingly endless stream of battles with members of FOXHOUND, as well as the run of the mill soldiers that litter the halls of Shadow Moses Island. For Snake, as a soldier, we have his answer to Liquid's question.

In considering how Liquid's question is aimed at both Snake and the player simultaneously, as the player-as-cyborg, we must consider what Liquid's question means for the player. Liquid asks simply why the player-as-cyborg continues on the mission, despite the twists and turns that the story and the characters take through the course of the story. For Snake, the question, and Liquid's accusation that he continues because he enjoys the gritty work, comes about because Snake is a soldier. The question, then, differs somewhat in considering how the player portion of the player-as-cyborg must take this question. The question may be more adequately thought of as "why do you continue to play the game?"

It cannot be said that there is a definite answer to why the player continues to play the game, as every player is bound to differ in some ways. Regardless of the potential differences in answers, however, Liquid's accusation continues to make the player complicit in the actions of Snake. It is possible, for instance, for the player to resonate with what Liquid is saying about the player-as-cyborg – that she enjoys the killing. It can be entirely satisfying, for example, for the player to defeat some of the more difficult members of the FOXHOUND unit throughout the course of the game, as it is ultimately that – a game. Why would a player play a game if she does not enjoy it? In that sense, the player may continue through the game simply because she enjoys the game for any number of reasons that would resonate with her. Another possibility, but certainly not the only other one, is that the player does not necessarily enjoy tearing through the base and killing all guards in sight. *Metal Gear Solid*'s tagline is "Tactical

Espionage Action," after all, and stealth is a central mechanic of the game. That said, it is possible to progress through the game without killing any of the generic guards; instead, the player is given the tools to dispose of the guards in non-lethal ways, though doing so is potentially more difficult than tearing through Shadow Moses by lethal means. In that, it might be more satisfying for the player to *not* kill when possible, though it is not possible for the members of the FOXHOUND unit to live after their boss battles, aside from Ocelot, for story purposes. In that sense, the player may continue to play the game because she enjoys the game itself and the potential challenges that she can place upon herself.

In reality, there are any number of reasons for players to continue their progress through the game, as each player is unique. Regardless of the player's answer to Liquid's question, by continuing through the game, the player *is* implicated in the deaths of the members of the FOXHOUND unit alongside Snake. Even if the player does not necessarily enjoy the "thrill of battle" – if she for instance, just enjoys the story – then she has still progressed to the point in the game where she has killed each member of the FOXHOUND unit. Even if the idea is that Snake enjoys the killing and the player is just along for the ride, the player is still complicit in the FOXHOUND unit's deaths because of the existence of the player-as-cyborg. Snake as the player avatar cannot act of his own volition in the game. Much like Snake cannot press the Select button to submit to Ocelot's torture, Snake also cannot just progress through the game by himself. Player input is needed. Since the union between Snake and the player is required to progress through the game, and as a result to kill the members of the FOXHOUND unit, it is only through the existence of the player-as-cyborg that the player and Snake can both be made complicit in these deaths, ultimately pulling the player,

once again, into an active, participatory role in the game instead of just the position of a bystander.

With this discussion of *Metal Gear Solid* as a backdrop, I want to further explore the concept of the video game player as a cyborg that Keogh posits and subsequently explain why I deviate from his line of reasoning. In his discussion of *Metal Gear Solid*, Keogh asserts that when playing a video game, the player *becomes* a cyborg through the interaction with the game, as the combination of the player and the avatar within the game. However, it is also implied that the player exists outside the game as well, in the player's physical body, as a separate entity. Essentially, Keogh asserts that the player simultaneously exists as both a cyborg and a non-cyborg when playing a video game ("Across Worlds and Bodies" par. 27). Keogh also states this in another way in his article "A Sum of Parts: Watching You Play." Keogh mentions that "We as videogame players never share the same world as our characters, our virtual bodies. We sit in one world, they sit in another, and we control them from a distance, like a puppet at the end of a network of digital strings. We come to understand and perceive that world through their presence in it" ("A Sum of Parts" par. 14). Essentially, this statement posits that while there is interaction between the player and the avatar, this hands-off, distanced existence is as far as the overlap can go. It is simply not possible, in this framework, to go beyond the relationship of the controller and the controlled, and this also implies that the player cannot actually experience the world of the game. As the controller in the relationship, the player can only observe the world of the game, which does not exist as a dynamic reality in this scenario. What makes this envisioning of the relationship between player and avatar so problematic is the fact that this assumes a separation/division of the player and the avatar.

If we are to consider the concept that the player and avatar exist in separate worlds that do not intersect, then this line of thinking cannot serve as a proper definition of the cyborg. Despite the fact that this conception of the cyborg does hone in on the cyborg's nature of being made up of parts, the division between player and avatar, of physical and digital, disregards key aspects of the cyborg. The player-as-cyborg, of course, cannot exist without the player and the video game. Both are required for the hybridized cyborg that comes from the unity and symbiosis of the player and the game avatar, and both are, by nature, not entirely the same. This lack of "sameness," however, should not create a division between player and avatar. If we recall that Hayles describes the cyborg as that which exists to tear down or complicate traditional boundaries (*How* 84), one must consider that dividing the player-as-cyborg into cyborg and non-cyborg simultaneously presents a paradox in the existence of the cyborg. The cyborg should not be subject to these divisions and binaries, but instead should exist actively in order to break them down. It stands to reason that for the cyborg to exist in its truest sense, there should be no division present between the player and the avatar.

In truth, the strongest evidence that the cyborg should be against division is that it is against its nature as that of a collective – a being that is a sum of many parts. We find this to be especially telling in Donna Haraway's "Cyborg Manifesto," part of her larger work *Simians, Cyborgs, and Women: The Reinvention of Nature*, which defines and provides a solid basis for discussing the makeup of the cyborg. According to Haraway, the cyborg is "a cybernetic organism, a hybrid of machine and organism, a creature of social reality as well as a creature of fiction" (149). The cyborg, whether an actual fusion of flesh and machine or a chimera in a social sense, is a combined being

by definition. To be divided, to be simultaneously all flesh and all machine but not both at the same time, is a fundamental misunderstanding of the reality of the cyborg.

Taking this foundation of the cyborg into consideration, our discussion of the player-as-cyborg using *Metal Gear Solid* as an example gives credence to the player-as-cyborg existing as a single, symbiotic entity, instead of a separated partnership, as Keogh implies. Through the existence of the player-as-cyborg, *Metal Gear Solid* is able to not only allow players to experience the game itself, but by directly referencing and involving the player in the action of the game, it brings players into the realm of the game, making them an active participant in the narrative. Actively including the player in the world of the game also encourages the player to question her own motives for how she behaves in the game, and what these motivations mean for her as a person when not engaged with the game itself. As this is in a video game, which can be seen as an active experience as opposed to perhaps watching a film or reading a book, which might be seen as a passive experience, the player has to make choices that have consequences in the mixed reality that is the video game, and in doing so, players are given the opportunity to act and have agency outside of the “normal” channels of reality. In this, as the player-as-cyborg, players break down the “traditional” barriers of reality, establish their own sense of action and agency, and by being involved actively in the world of the game, players blur the perceived line between reality and virtuality. It is through this seamless integration of man and machine, this existence of mixed realities, that the player-as-cyborg can fully exist, and that players can put themselves in the world of the game, and also bring the game out into the physical world.

Chapter 2

Cyborg Conceptions

When examining current cultural science fiction trends in critical theorization and entertainment, it is clear that the cyborg exists as a pivotal concept within the public eye and mainstream media in the realm of science fiction. The Replicant Rachael from Ridley Scott's *Blade Runner* (1982), Arnold Schwarzenegger in James Cameron's *The Terminator* (1984), the titular character in Paul Verhoeven's *RoboCop* (1987), and even Motoko Kusanagi in Mamoru Oshii's *Ghost in the Shell* (1995) have cemented the pop cultural concept of the cyborg as a literal fusion of man and machine. In a larger sense, though these were characters presented decades ago, this idea of a chimeric melding of flesh and technology has become synonymous with the term "cyborg" in popular media. Recent films such as James Cameron's *Avatar* (2009), as well as more current video games, such as Kojima Productions' *Metal Gear Rising: Revengeance* (2013), Croteam's *The Talos Principle* (2014), and Bethesda's *Fallout 4* (2015), all feature the cyborgs of flesh and machine in central roles within each work. What's more, each of these works has been met with massive acclaim, both from critics and from the consumer base alike.

What is particularly interesting about this classical conception of the cyborg, however, is that as technology and society have continued to advance in tandem, mixed realities, or rather the seamless integration of man and intelligent machine, are becoming increasingly prevalent. Because of this, it is necessary to consider the reality of the cyborg: that there exists a cultural difference in the understanding of what the cyborg is or, rather, what the cyborg has *become*. While the flesh-and-machine chimera cyborg is at the forefront of science fiction and popular in the public eye, it is not the

only contender for the consideration of the cyborg today, and numerous other artifacts in varying forms of media are working to reconceptualize the cyborg. The concept of the cyborg itself does not have to be that of a literal fusion of man and machine. In fact, the consideration of a non-literal “fusion” of man and machine is gathering increasingly more support. In an interview conducted by Hari Kunzru, Donna Haraway is called upon, in the late 1990s, to discuss her vision of the cyborg, some twelve years after her “Cyborg Manifesto” was published. Within this interview, Kunzru makes clear Haraway’s conception of the cyborg, and works to summarize the concept as follows:

> The cyborg age is here and now, everywhere there's a car or a phone or a VCR. Being a cyborg isn't about how many bits of silicon you have under your skin or how many prosthetics your body contains. It's about Donna Haraway going to the gym, looking at a shelf of carbo-loaded bodybuilding foods, checking out the Nautilus machines, and realizing that she's in a place that wouldn't exist without the idea of the body as high-performance machine. (Kunzru par. 10)

In this conception of the cyborg, Haraway’s body, which she claims contains no cybernetic enhancements, is still considered to be a machine of sorts, and this does not apply to just Haraway. Her home of Healdsburg, California, is populated entirely by cyborgs, Kunzru notes, because “the cyborg age is here and now, everywhere there's a car or a phone or a VCR.”

While there is no specific, agreed-upon term for this cyborg of Haraway that is presented by Kunzru, I argue that this may be manifested as a *conceptual cyborg* – a being that may not be cybernetic in its physicality but in its relationships with cybernetics. The conceptual cyborg does not have a need for a physical fusion of man

and machine in order to be considered a cyborg. Instead, the conceptual cyborg is cybernetic and cyborgian in how it links man and machine just as intimately together through ideas, digital representations, and extensions as one might consider the "typical" cyborg to do.

The conceptual cyborg does not look at all like the high-octane, flesh and machine 1980s action film cyborgs that have carried over into the popular culture of today. And it should not. Whereas the flesh-and-machine cyborg is seen as a science fiction sideshow, the conceptual cyborg, I argue, is a being that can and has become part of reality in technologically assimilated life, though it may not be known under this title. In this chapter, I use examples from recent television and video games in order to show how the conceptual cyborg affects our existence as human beings, how the conceptual cyborg differs from the flesh-and-machine cyborg of popular science fiction, and how we are in many ways already conceptual cyborgs. In a posthuman society where we can consider the human body the original prosthesis and the development of new technologies to be further extensions of the functionality of human beings, it makes sense, in a reality where technology of all kinds permeates and integrates seamlessly with our societies, that taking on the social reality of being conceptual cyborgs is the next logical step in the "evolution" of the human.

If we bring N. Katherine Hayles' concept of mixed realities into account, then the conceptual cyborg seems strangely familiar and applicable to what Haraway has to say in terms of her vision of the cyborg. Mixed reality, as Hayles terms it, refers to "an integration of virtuality and actuality" which allows "physical and virtual realms [to] merge in fluid and seamless ways," thus bringing humans and intelligent machines together in near-symbiotic fashion ("Cybernetics" 148). In a world where our

technologies are consistently developing to become extensions of ourselves – not in a physically augmented sense but instead as digital, societally pervasive extensions – the idea of the flesh-and-machine chimera cyborg seems to have little place in society aside from serving as an indulgence for science fiction. Along these same lines of mixed realities, however, the conceptual cyborg is largely able to escape the confines of science fiction.

What marks a particularly interesting distinction between the physical and the conceptual cyborg is that there is a stark difference in how the two are received and perceived. In her article “Cyborgasm,” Marj Kibby notes that “many of the popular films of the eighties reflect a nervousness in the face of advanced technology, depicting a contested space between the human and the technological” (para. 1). By and large, there appears to be a sense that the “traditional” cyborg faces a series of resistances from the general public – whether it is the physical resistances and altercations as presented in action films of the 1980s, or if it is merely a resistance towards becoming a cyborg. As society in the 1980s was becoming increasingly more of a mixed reality, representations of the cyborg in popular culture served to reflect a growing wariness of and resistance to man and intelligent machine mingling in mixed reality, and these resistances to this technological integration seem to have been conscious choices. What is particularly interesting about the conceptual cyborg now is that in seeming direct contrast with the “traditional” cyborg, its reception and integration has gone by largely unnoticed. Despite society’s previous resistance to the technological cyborg integration, it has become the norm now simply by sheer virtue of technology’s ubiquity in society. Where there was once strong resistance now lies an unconscious assimilation.

Haraway is by no means alone in the envisioning of the conceptual cyborg. If we consider the cyborg in terms of the seamless integration of man and intelligent machine vis-à-vis the theory of mixed realities, we can find this concept echoed in numerous other current works, showing how the conceptual cyborg is increasingly becoming a social reality, though largely an unconscious one. In examining how these current cultural artifacts unconsciously or indirectly discuss the emergence of the conceptual cyborg, we can see the slow, natural transformation of humanity in technological societies into conceptual cyborgs. In Production I.G.'s 2012 sci-fi television series *Psycho-Pass*, for example, we find a discussion about the reality of societal cyborg existence in a world of vastly advanced technology. In the world of *Psycho-Pass*, society has largely embraced and discovered ever-engrossing levels of technology, which have in turn permeated society on levels that would be beyond those of our current technological levels. Cyborg technologies have, for the most part, become commonplace for medical uses in the world of *Psycho-Pass* – however, should one so choose, one could opt to become almost entirely cybernetic.

Fig. 5. Toyohisa Senguji's cyborg body. Fuji TV, 2012

Such is the case for Toyohisa Senguji, one of few people who has opted for what is termed in the show as "full-body cyberization" ("The Fruits of Paradise"). Except for his brain and his nervous system, Senguji is entirely cybernetic, and despite his humanlike outward appearance (see fig. 5), he is considered by the mass media to be a cyborg. In this sense, Senguji is one of the cyborgs that falls under the category of literal fusions of man and machine. In episode nine, "The Fruits of Paradise," Senguji is being interviewed because of his status as a citizen who is almost fully cyborg, as his level of cyberization is largely unheard of in society. However, Senguji appears to see this near-full cyberization as a logical step in the advancement of mankind—during the interview he states "it's a mystery to me why other people haven't given up their limiting bodies" ("The Fruits of Paradise"). To clarify what he means by this, he later cites Plato's claim that man's soul is imprisoned within the body, and from this, we can see that Senguji seems to be fully invested in the adaptive powers of the flesh-and-machine cyborg. He

is so confident in this emergent technology, in fact, that though the technology present in the world of *Psycho-Pass* can only keep the brain alive for around 150 years, Senguji hopes to hold out until cyborg research reaches a breakthrough in which the brain can also become fully cyberized. From Senguji's perspective, once this full-bodied cyberization is achieved, then "the era of immortality will have arrived," as he terms it ("The Fruits of Paradise"). In this sense, much like early cyborg researchers of the 1950s and '60s, Senguji has pursued the cyborg not merely for human augmentation but for human ascension.

While *Psycho-Pass* conceptualizes the cyborg through the lens of the flesh-and-blood cyborg that has dominated popular culture for so long via Senguji, the show also uses Senguji's thoughts during his interview as a conduit to express the existence of a cyborg beyond that of flesh and machine. Continuing the interview, Senguji claims that though his body is almost completely machine and is thus categorized as a cyborg, he is not one of a mere few cyborgs—in fact, he claims that everyone is a cyborg. When the interviewer mentions to Senguji that a recent poll reveals that most people are reluctant to be at least 50% cyborg, he finds this sentiment amusing but offers a counter-point: "I do understand the reluctance those people feel. In the end, it's a matter of degree. For example, you. You're quite the cyborg yourself" ("The Fruits of Paradise"). Despite the interviewer's protests that she has no artificial or cybernetic implants in her body, Senguji notes that she constantly carries around a portable information terminal, AI-controlled clothing, and an AI secretary at home, to which she responds "Well, yes, but doesn't everyone?" Senguji then poses the question of what would happen to her if all of this information of all of her devices was lost, to which she responds that she would not be able to do anything until everything was restored to its

rightful status. In a sense, she could not function as she normally does. Satisfied, Senguji states to her, “When you entrust so much of your everyday life to those electronic devices, the argument that you aren’t a cyborg isn’t very convincing. To you, those portable terminals are already your second brain [. . .] It can be said that the history of science is a history of the expansion of the human body’s functionality, in other words, the history of man’s cyberization. It is all a matter of degree” (“The Fruits of Paradise”).

Much of what Senguji mentions in his interview demonstrates that in his society, almost everyone would fall under the category of the conceptual cyborg. In his explanation of why these people are cyborgs, however, it becomes clear that the ways in which current advanced societies interact with integrated technology show that we, too, are conceptual cyborgs. Despite the fact that technology as a whole in the series is far more advanced than our own at the present time, *Psycho-Pass* uses this discussion of the cyborg to comment on the real-world societal transitions towards becoming cyborgs. Senguji states, for example, that the “portable terminals” that everyone uses in *Psycho-Pass* are the equivalent of second brains to society, and that advances in technology like this serve to further the functionality of the human being. Hayles says much the same thing when she calls human bodies “the original prosthesis” and argues that finding other prostheses to use is a “continuation of a process that began before we were born” (*How* 3). In short, these portable terminals, the second brains, if you will, act as new prostheses that humans have learned to manipulate and expand their functionality with. This is not at all far off from our near-constant use of cell phones, computers, and other digital devices that make our current reality what it is. It is this similarity to our current technological state that makes this parallel so immediately

relevant—as much of the technology *Psycho-Pass* touts is far ahead of what is available to us today, it might seem easy to believe that the citizens of its society have become dependent on these technologies. However, Senguji makes it a point to address that the portable terminals, computers, and other devices—technologies that we ourselves use on a near-constant basis now—are those that people seem to be the most dependent on. From its position of highly technological science fiction, then, *Psycho-Pass* directly addresses our current society's reliance on these seemingly ubiquitous technologies, and shows that even though we are not quite as advanced technologically as society is in *Psycho-Pass*, we are still largely reliant on many of our technologies for simple day-to-day work and interactions with others.

Though we as a society are not in the habit of taking on numerous cybernetic enhancements to our body as Senguji has, one must question just how different the flesh and blood and conceptual cyborgs are. For Senguji, the flesh and blood cyborg, his integration with technology is on an intimate, physical level. The flesh and blood cyborg has its human consciousness embodied within itself, in the physical fusion of man and machine. The conceptual cyborgs, those within our society who might not actually consider themselves cyborgs, are embodied within the virtual spaces that they inhabit and make their own. The reality for many in technologically advanced society is that those that are "plugged in," so to speak, to social media and other online forms of representation are invested in digital databases. Our work, our digital, social identities, all of which are parts of ourselves, are housed in these spaces that are separate from our physical bodies. In that sense, the conceptual cyborg still works on the same level of the physical cyborg – it is still a being that exists as an amalgamation of multiple parts, even if they are not all physically connected. The conceptual cyborg exists

simultaneously in both the physical and the digital realm, still as a man and machine fusion. Indeed, living in the mixed reality that we do, where man and machine are in near-constant symbiosis, it is not a convincing argument to assert that we are not cyborgs in some capacity. Ultimately, it seems to be the natural, posthuman progression for us to be conceptual cyborgs in our technologically pervasive societies.

This idea of the conceptual cyborg, and in particular that of people existing in digital spaces as multiple, digital forms of their actual selves, has been brought to light recently through the efforts of a new form of study – cyborg anthropology. In 2010, cyborg anthropologist Amber Case gave a TED Talk concerning this, titled “We Are All Cyborgs Now,” asserting the concept that was later echoed by *Psycho-Pass* and other media artifacts. Case posits immediately that her audience consists entirely of cyborgs, making the distinction that they aren’t cyborgs like RoboCop or the Terminator, but that those in the audience exist as cyborgs “every time you look at a computer screen or use one of your cell phone devices.” This idea of the conceptual cyborg is central to cyborg anthropology, as are key tenets of posthumanism, as laid out by Hayles. For example, as Case talks about how cyborg anthropology studies humans and how we come to interact in an increasingly symbiotic fashion with technology, she equates technological development to the use of tools over millennia. Tools were once, she notes, used to physically augment and extend the physical bodies of humans. Now, however, tools are being used “not [as] an extension of the physical self, but [as] an extension of the mental self.” As a result of these adaptations and new uses of tools, human beings function differently: “we’re able to travel faster, communicate differently [. . .] we’re all carrying around little Mary Poppins technology. We can put anything we want into it, and it doesn't get heavier, and then we can take anything out” (Case). In essence,

cyborg anthropology acknowledges, as Katherine Hayles states, that the physical body has served as “the original prosthesis we all learn to manipulate” in posthumanism (*How* 3). This mental expansion through the use of these new technological and digital tools serves to fundamentally change the way that human beings behave on a larger scale and to further expand the functionality of human beings. Ultimately, these tools serve as further prostheses in addition to those we already use.

While some technologies have allowed for these mental expansions of humans, cyborg anthropology also centers on another facet of the conceptual cyborg—a concept that Amber Case calls “second selves.” In being part of this increasingly digital society, Case says, we begin to have an online presence through sites like Facebook, LinkedIn, Instagram, and other sites which work to present us in a social, digital medium (Case). Essentially, when we make an account on a social media site, for example, those accounts act as another representation of ourselves. We communicate with people on these sites in fundamentally different ways than we do in our physical bodies: sharing media such as websites, small bursts of information, pictures, and other artifacts. That said, since these accounts are very much constructed out of us, they are, as Case posits, other “selves” of us, and the ramifications of this concept are far-reaching. As she discusses how people interact with their second selves, Case notes that “suddenly we have to start to maintain our second self. You have to present yourself in digital life in a similar way that you would in your analog life. So, in the same way that you wake up, take a shower and get dressed, you have to learn to do that for your digital self.” While initially the second self seemed to indicate a symbiotic existence in which the physical and the digital selves come together to form a single entity, in this discussion of the second self, the language used to describe the second self works against that idea

of the second self and the physical being one. Instead, Case's elaboration on the second self seems to indicate that the self and the "second self" both inform and affect each other, but that they are ultimately two distinct, separate entities.

While the idea of the second self can and should inform our understanding of the conceptual cyborg, its separation of the online and offline selves into separate entities contradicts core ideals with regards to the conceptual cyborg. With the conceptual cyborg, the physical and digital "selves" are not two separate entities. The conceptual cyborg does not exist in a binary but is instead in a constant state of posthuman embodiment, extension, and symbiosis. What a person does as a conceptual cyborg, both online and offline, affects her cyborg identity as a whole. Though the second self and the conceptual cyborg cannot be said to be the same thing, some ideas of the second self can inform our understanding of the conceptual cyborg. Consider Case's point regarding the need for maintenance of the second self: she states that we have to maintain and represent how we are seen in our "digital" life through monitoring and altering our digital profiles. In this aspect, the conceptual cyborg is similar. The conceptual cyborg, by nature, exists as a collective, singular entity at all times; social media profiles, for example, serve as posthuman prostheses for the conceptual cyborg, allowing one to be embodied in these digital spaces. In being embodied in these digital spaces, a conceptual cyborg maintains her Facebook profile, much like how Case notes one might do for their second self. However, unlike the second self, the conceptual cyborg maintains her Facebook profile not simply for the sake of maintaining this "other self" but as a means of maintaining her entire, collective self and working to mold how she is perceived both online and offline. In this sense, both the online and offline

representations of the conceptual cyborg seek to inform and influence how people perceive her at all times, and at the same time.

In maintaining an existence as a conceptual cyborg, one of the most important factors to consider is that as a digitally embodied, collective whole, changes of any kind, both digital and physical, affect the whole of the entity, not one distinct “self.” For example, say a person were to change her profile picture on any social media site. In enacting this change, the result is not that people perceive only her *profile* differently or think that only her *profile* has changed—the change reflects on her collective whole as a person and a conceptual cyborg. As the profile picture is representative of the offline, physical body of the person as well, then this change may also affect how people may perceive or envision the physical, offline body, as well. In this sense, the maintenance of both the physical body and our online extensions reflect and act on one another constantly. We do not exist in a binary; the conceptual cyborgian identity is one of constant symbiosis and collective, digitally embodied consciousness.

While social media is one of the most readily accessible modes of conceptual cyborg embodiment, it can be argued that video games present the strongest case for the existence and implementation of the conceptual cyborg. For some, it may be difficult to consider how using web sites and apps can lead to living in a mixed reality, in which we are all cyborgs in some capacity. In fact, interacting with different forms of social media may actually feel like a passive experience for users instead of the maintenance of a digitally embodied extension of oneself. In large part, this might be the case simply due to the degree to which social media permeates our technologically integrated society, which may leave users feeling as though their use and management of social media comes as second nature to them. By contrast, video games can allow their

players to engage in what feels like a more active, tactile experience of being embodied in a digital reality through the digital extension of the player avatar via the player-as-cyborg.

While single player games such as *Metal Gear Solid* do present a strong case for posthuman, cyborg embodiment through the player-as-cyborg, it is perhaps through the ever-increasing field of massively multiplayer online games (MMOs) that we can see these concepts more adequately demonstrated. Single player games, as the discussion in the previous chapter has shown, can allow for the player-as-cyborg to experience posthuman embodiment, often through the implementation of a set player avatar. Generally speaking, however, this digital embodiment might not have as tight of a connection to the player-as-cyborg as playing an online-based game might. Take Valve Corporation's *Defense of the Ancients 2 (Dota 2)* (2013), for example. *Dota 2* is a massive online battle arena game (MOBA), a genre of game in which players comprise two teams and battle to destroy the opposing side's main structure. Most MOBAs follow this structure, and each one generally has its own features which attempt to make it stand out from the rest. *Dota 2* is, frankly, one of many MOBAs currently on the market, but it is one of the two most popular currently available. Other popular MOBAs include Riot Games' *League of Legends* (2009), Hi-Rez Studios' *Smite* (2014), and Blizzard Entertainment's *Heroes of the Storm* (2015) and *Overwatch* (2016), the latter of which is currently in a beta testing phase as of this writing. In reality, just about any MOBA could be used as an example for this, but *Dota 2* has been chosen for several reasons, including having arguably one of the largest player-bases of any MOBA currently on the market, reaching at points over millions of unique players per month worldwide, as well

as having one of the most prominent and lucrative competitive scenes among any of the games listed above.

What is interesting about *Dota 2* and other MOBAs is that players generally do not have their own player avatars that they can customize to reflect their physical selves, such as in games like Bethesda Studios' *Skyrim* (2011) or Hideo Kojima's *Metal Gear Solid V* (2015). Instead, players are embodied through unique playable characters, with pre-defined stories, abilities, and personalities of their own. Within the games, players choose from tens of playable characters (see fig. 6), each with their own style of play, and generally falling into specific roles—Carries, which specialize in head-on combat; Supports, which serve to aid the rest of their team; and within the major roles there are numerous specialized roles, as well. Generally speaking, players will find a role that suits their style of play the best and will come to find some sense of identification through their respective roles. Through being embodied through particular characters in specific roles, players can experience a different sense of identification and player-as-cyborg embodiment in online MOBAs.

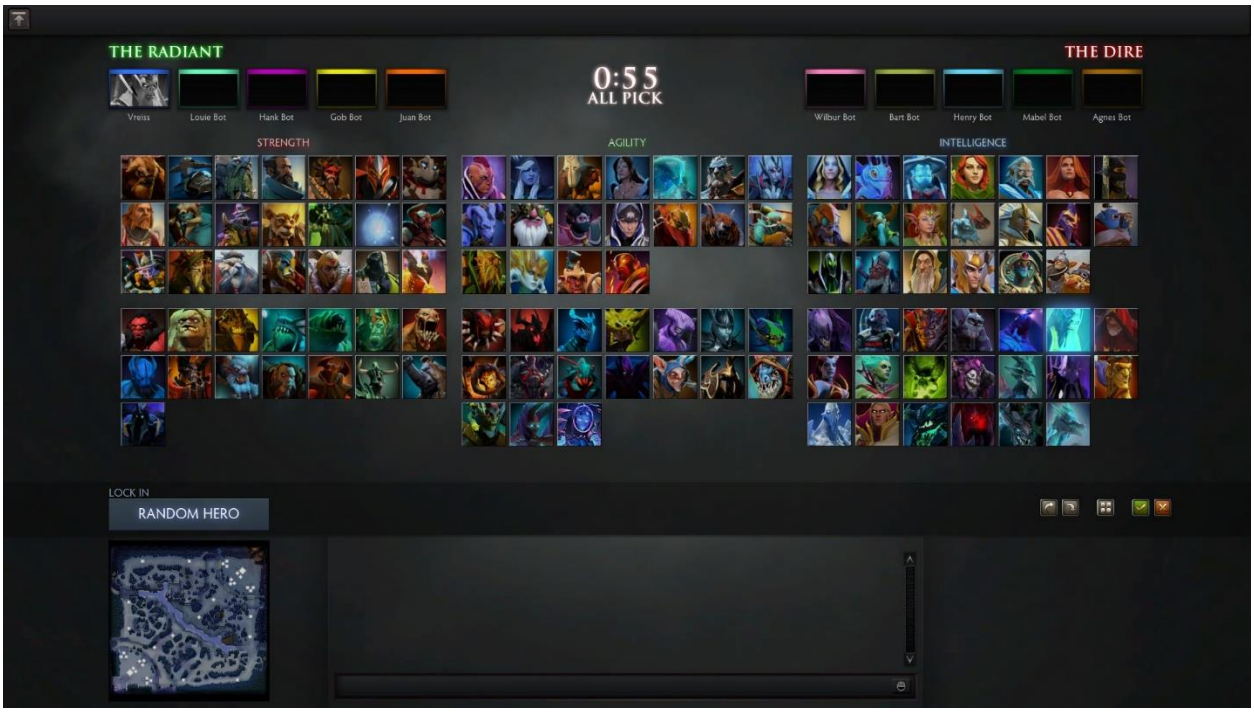

Fig. 6. *Dota 2*'s character selection screen. Valve Corporation, 2013.

Through the lens of the conceptual cyborg, this sense of identification through the game does not come solely through identification with regards to specific roles and characters, but it is also extended through in-game player profiles and identities. As the most played and most popular MOBAs are competitive in nature, these games have systems set in place to keep detailed records of player's statistics and set them for viewing in each player's profile: most played characters, average kill/death ratio, certain team contributions, and other such factors that differ for each MOBA are among some of the featured, defining statistics that are displayed (see fig. 7). These profiles are, in a large sense, how players are represented in these games, aside from their communication and performance in-game. Unless made private, anyone can see these profiles and the statistics that lie therein. In this sense, much like a social media profile, these in-game profiles behave as a platform for the digital, cyborg embodiment of the player within the community of the game, and for some, it may present a much more

urgent desire to actively maintain these digital representations of the self. Since these statistics, rankings, characters, and character roles are how many players are defined in relation to the game, and since the pool of people that players may interact with at any point in time is on a worldwide scale, these factors may create a sense of desire to present greater outputs of these rankings because they are not just a number or some ephemeral statistic – they are a reflection of each individual player. Much like with social media profiles, these changes that occur within the profile itself affect the cyborgian whole – not just the profile itself, but the perception of the physical player, as well.

Fig. 7. A sample profile page from *Dota 2*. Valve Corporation, 2013.

In a sense, where the player-as-cyborg embodiment in games such as *Metal Gear Solid* can draw the player in and make her complicit in the main story and choices of the game, the player-as-cyborg embodiment in *Dota 2* and other games of its kind serve to keep the players as the main driving force behind the game. *Dota 2* and other MOBAs do try to keep their own sense of flair with their own unique characters, settings,

and lore, but ultimately, additions and tweaks made to the game are all done in order to improve the quality of the game for the players, and to keep the player base invested in the game. Technically speaking, *Dota 2* does have a story, but it is largely background and not at all important or necessary to play the game. The game's narrative, at least in the traditional sense of the term, is an unlikely reason for players to invest time in the game. If we consider, however, that the game is meant to be a player-centric experience, and the statistics, milestones, wins, losses, and all other manner of data about the players are meticulously tracked and preserved, one might say that the narrative of *Dota 2* is one that the player crafts for herself in the way that could only be accomplished as a conceptual cyborg. As players become more comfortable with the game and its intricacies, they might come to find that though they initially loved holding the spotlight as the carry in games, their true passion comes in controlling the flow of the game in the background as a support, giving their team opportunities to pull ahead that they might not have had otherwise. It does not even have to be as specific as that, though—players might find that they simply like to change things up, playing whatever role or hero suits them for the time being, and they simply are enjoying the ride as they improve their skills in the game. Simply having a chronicle of their progression and development within the game gives players a history of their own to look back on, and a future of possibilities to look ahead to on the horizon as both they and the game continue to advance.

In much the same way, one might also consider that as players continue to play the game, there are no rewards that they can achieve that improve their skills in-game. The rewards that players can gain from playing the game are merely cosmetic and only serve to change the appearance of certain aspects of the game or the appearance of

their own character models—there are no special perks, for example, that might power up a hero's abilities from what they were when the player first started playing the game. The only true measured representation of progress in the game is a player's profile level, and even that has no bearing on what the player can actually do in the game—it, too, is merely cosmetic (see fig. 8) and serves to show how much a player has played the game or what kinds of specific challenges the player has achieved in their time in the game. In considering these factors, there is no traditional sense of progression in the game. There is no story to unravel, players do not unlock new characters to play as or new skills to use, and their level is merely a status symbol.

Fig. 8. Differing cosmetic models for the character Zeus. Valve Corporation, 2013.

Considering the fact that any sort of advancement in *Dota 2* is merely cosmetic, any progression in this sense reflects on a player's digital representation in-game, and by extension, reflects on the player's physical self as well. In considering Case's second self again as a vantage point for the conceptual cyborg, she notes that the second self "evolves in tandem with [one's] offline self," giving the sense of a symbiotic relationship between both selves. The conceptual cyborg is similar in this sense, as the cyborg

evolves in tandem, and it is interesting to consider the way one might consider how the whole evolves in relation to the actions the online and offline representations take. A person's digitally embodied representation might evolve as a person does physical things and makes note of them in this online platform, for example. However, if we consider how this tandem evolution might work with regards to a player's profile in *Dota 2*, players are not necessarily doing anything that has a tactile, physical significance by progressing within the game. Instead, progress is shown and recorded in a player's profile, and these changes then reflect on the player's "offline" self. In this sense, the maintenance of a person's digitally embodied representation works seemingly in reverse – generally it is thought that a person changes in their offline body in some way, and then the digitally embodied representation changes to reflect that. However, in this case, the player's in-game profile changes, and while the player may not change in any physical, offline sense, the identity and representation of the player while offline is altered by the maintenance of the online profile. The digital embodiment presented by the existence of the player-as-cyborg, then, has further reaching effects than one might initially consider, and can actually affect the representation of the player offline.

Another key aspect about *Dota 2* and other MOBAs is that they are, by nature, team-based games, and as such rely inherently on player cooperation. Players can play with specific friends, should they choose to, but are most often going to be matched with random players from across the globe. As a result, each of these players must work in tandem to accomplish their goal to win the match. What is particularly remarkable about this game, and perhaps other online multiplayer games that capitalize on teamwork and cooperation in this fashion, is simply the sheer scale that it works on. Players miles apart can be embodied in these digital characters and interact with one another to foster

interactions that would be otherwise impossible to achieve in a physical sense. It is only through the existence of the conceptual cyborg existing in our mixed realities that these interactions can take place.

It is through the existence of the conceptual cyborg, and by extension, the player-as-cyborg, that players are able to exist within these digital, mixed realities, and that they can arguably *live* in the games that they experience. Considering this, since the conceptual cyborg exists in symbiosis with the physical and digital representations of the player, and players can invest so much of themselves into their games, it is not unreasonable to consider that players can also bring their games from the digital to the physical world. This is not to say, of course, that players can bring their avatars, magic, or other actual game-bound mechanics into the physical world. I am instead suggesting that as the physical and digital identities of players are not necessarily separate entities, the experiences and bonds that players have with their games can have far-reaching, tactile effects with regards to their “offline” lives.

Perhaps one of the largest examples to consider when thinking about games being brought in to interact with the physical world is the rise of professional gaming, known broadly as “eSports.” As the name suggests, video games such as *Dota 2*, *League of Legends*, and numerous other games that fall into the category are becoming acknowledged in many circles as legitimate, professional, digital sports in high-level play. This may initially seem simple to write off as a niche interest at first, contributing little to any sort of real-world cultural relevance, but more recent statistics for the world championships of some eSports confirms otherwise. *Dota 2*’s world championships, aptly titled The International Dota 2 Championships (TI), were first hosted by Valve Corporation in Cologne, Germany in 2011, the year the game went into a public testing

phase. While the first TI was a reasonably small affair, inviting only 16 teams to compete and hosting a relatively small number of spectators, the prize pool for the tournament was a grand total of $1.6 million. Since then, Valve has hosted TI annually, with the event growing exponentially in viewership, monetary value, and public exposure each year.

Events like TI within the professional eSports community have come to develop an increasing grasp on the physical with the amount of draw and impact they have on the players competing, as well as the players spectating as fans of the teams and events. Beginning in 2013, Valve Corporation began selling digital tickets to TI, allowing spectators to view the matches of the tournament from within in-game browsers and allow them to cheer on their favorite teams. What's more, however, is that a portion of the ticket sales went to increasing the prize pool for each yearly TI. In 2015, the most recent competition, TI5, attracted the most attention to the tournament than any year before. As far as viewership data can tell, TI5 brought in a total of 4.6 million viewers at its peak, not counting those that attended the physical event in Seattle, Washington ("How Many People Watched Each TI" par. 6). Fans bought so many tickets that the KeyArena in Seattle sold out of available seats, and the grand total of the tournament's prize pool was $18,429,613, with $6,634,661 going to the champions of the tournament, and the remainder of the money being distributed amongst the fifteen following teams (The International 5). Obviously, this is no small amount of money—by comparison, players on the winning team of Super Bowl XLIX received bonuses of $97,000 each, and the losing team made $49,000 bonuses as well, totaling out to $7,738,000 for the total prize pool. Of course, the actual salaries of NFL players vary, but there is a marked difference between a bonus of $97,000 and a prize of a little over $1 million ("Super

Bowl 49” par. 2). This is not at all a small sum, and it is by no means a small achievement for the amount of contributions made by fans to help make the event as much of a success as it was.

The unprecedented sums of prize money and the possibilities afforded by them are not the only opportunity that the rise of eSports is affording players, however. According to Forbes contributor Paul Tassi, Riot Games – the developer of *League of Legends*, a MOBA which has an even larger player base than *Dota 2* and an equally active competitive eSports scene – worked with the United States government in negotiations to formally recognize eSports players as professional athletes. By being recognized as such, international eSports players can be granted visas for their technical status as professional athletes – something they may not have been afforded without such an opportunity. This is especially true for professional players who come from less privileged backgrounds.

Fig. 9. The stadium setting for The International *Dota 2* Championships 5. Valve Corporation, 2015.

The opportunities afforded to eSports players can be life-changing, but one must recall that it is only through their existence as players-as-cyborgs that these opportunities could be made available and that their gaming experiences could be brought full circle into the physical world. Through their persistence in maintaining and improving their in-game profiles and skills, highly successful eSports players like those invited to The International continue to be afforded these real-world opportunities to display their skills to a worldwide audience, in venues that are quickly becoming more mainstream and culturally relevant. The larger events like The International, however, present one of the most impressive examples of the cultural relevance of the conceptual cyborg, and its place in a digital mixed reality. When fans watch the matches of these tournaments, whether they are in person or watching through their in-game video feeds, and as professional commentators break down the plays and action of the games in real-time, the fans are not watching the actual, physical bodies of the players (see fig. 9). Their attention is focused on the avatars that the players inhabit during these games, which are ultimately extensions and digital representations of the players themselves. In this sense, eSports can become nearly identical in spectatorship structure to that of physical, “traditional” sports, and this is only possible through the existence of the player-as-cyborg/conceptual cyborg.

As we consider this symbiotic existence of the conceptual cyborg, it might be easy to see how some might feel that they would want to privilege their digital representations or digitally embodied consciousness over that of their physical selves. While I do argue that we should embrace the concept of living within these mixed realities as conceptual cyborgs, and that there is certainly a great deal of merit in living

in this fashion, it is important to keep in mind that there is a balance that must be kept in check in order to live within them. If players wish to live within the realms of these mixed realities, then they must also live just as much within the physical world. This should be apparent by virtue of considering that mixed realities themselves are the result of the intermingling of the physical and the digital. If one is neglected, then the mixed reality cannot exist. That being said, though, there still seems to be a sort of natural hierarchy in place when considering both the virtual and physical bodies of players-as-cyborgs.

In a study conducted on massively multiplayer online role-playing games (MMORPGs), Jessica Maybury notes that there are certain dangers present to the physical body by excessively privileging the physical body over the digital. In her article, Maybury details numerous documented online game-related deaths, almost all of which came about due to “bingeing” on their online games for extended periods of time. Some of these referenced incidents came about as a result of Korean players spending an excessive amount of time playing Blizzard Entertainment’s *Starcraft* (1998), which has gained such a following in South Korea that it is considered a national eSport. By playing these online games and existing in these mixed realities for extreme periods of time without a break (fifty hours, three days, etc.), these players and others like them did not take care of their physical bodies and died from sheer bodily exhaustion (Maybury 7).

Instances such as these are not meant to make a case against living as conceptual cyborgs within mixed realities. In fact, as we have seen through the course of this discussion, advanced society is increasingly becoming more intertwined with technology to the point where it would be difficult *not* to live as conceptual cyborgs in these settings. Cases like this do, however, reflect a simple fact of life: if the physical

body is neglected, the physical body will die. This is not the case for the embodied, cyborg existence of players as avatars within these mixed realities. These digital bodies will not grow old, decay, and wither away if they are not provided with constant upkeep. They will remain in their respective digital homes, where they await the player. This is not just the case for video games, however, as our profiles on social media and our digital presence as a whole will also remain, regardless of our interactions with them. These digital representations of ourselves, regardless of the specific media, act as digital prostheses we can embody in order to navigate the very real realms beyond that of the physical, and their lack of upkeep does not have quite as dire consequences as the lack of upkeep for our physical bodies. With that in mind, it only makes sense that there must exist a balance between living in the physical world and the virtual. People can and should live as conceptual cyborgs within these mixed realities, but they must be aware that there is a natural privileging of the physical body over the virtual that they must navigate. People will die if they do not care for their physical bodies, but their digitally embodied representations will remain even without constant, daily upkeep and maintenance. With that in mind, we as conceptual cyborgs must reconcile that in order to live in these digital worlds, whether they be Facebook, the fictional planet earth of the *Metal Gear* series, the fantastical realm of *Dota 2*, or any other digital space we might hope to inhabit, we must also make consistent efforts to live in the physical world.

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Office of Research Integrity

April 6, 2016

Zachery Rakes
2920 4th Avenue, Apt 2
Huntington, WV 25702

Dear Mr. Rakes:

This letter is in response to the submitted thesis abstract entitled *"My Avatar, My Self: A post human examination of video games and cyborg bodies"*. After assessing the abstract it has been deemed not to be human subject research and therefore exempt from oversight of the Marshall University Institutional Review Board (IRB). The Code of Federal Regulations (45CFR46) has set forth the criteria utilized in making this determination. Since the information in this study does not involve human subjects as defined in the above referenced instruction it is not considered human subject research. If there are any changes to the abstract you provided then you would need to resubmit that information to the Office of Research Integrity for review and a determination.

I appreciate your willingness to submit the abstract for determination. Please feel free to contact the Office of Research Integrity if you have any questions regarding future protocols that may require IRB review.

Sincerely,

Bruce F. Day, ThD, CIP
Director