

GAMING BODIES:
VIDEO GAME CORPOREALITY IN CHARACTERS, PLAYERS, AND
REPRESENTATIONS

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Dedication

This dissertation, and all of the hours of work it represents, is dedicated to my wife, Katie. Finding her was the best thing to come out of my time here in Minnesota.

Abstract

This dissertation explores the concept of bodies as it arises in various sites of video game culture. It answers the implicit call found in game studies research to define, explore, and describe video game bodies, but the varied nature of bodies and games, and the inherent lack of a foundational theory of the subject to guide its exploration, necessitates the study of several possible sites of investigation in order to propose characteristics of video game bodies. To this end, I performed four case studies within a diverse range of sites of video game culture in order to discover what video game bodies mean in these particular instances. The sites of investigation include: third-person character bodies in action video games, the game streaming website Twitch.tv, the exercise game *Wii Fit U*, and the gaming habits of mobile game players. The guiding methodologies of each case study vary depending on the site of analysis, and the variety of methods speaks to the diversity of the subject matter. However, each case study followed a similar research plan: I formed a research question aimed at focusing on the nature and role of video game bodies in the given site of analysis, and I followed a method appropriate for the question at hand. For the most part, the methods are humanistic with an emphasis on qualitative content analysis, interviews, and grounded theory. My findings suggest four preliminary characteristics of gaming corporeality, or the nature of bodies in/of video games, which share several similarities that I discuss in the conclusion. The characteristics are as follows: the aesthetics game characters' bodies, strategies of drawing awareness to game players' bodies, the gamification of game players' bodies, and the temporal/spatial agency of players' bodies. Ultimately, I argue that the four sites and characteristics of video game bodies share three commonalities, which I call the three I's of digital viscera: immersion, interactivity, and intuition.

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INTRODUCTION

The 2011 video game *Portal 2* is a puzzle game with a twist. Unlike many other puzzle games, such as *Bejeweled* or *Tetris*, *Portal 2* requires players to experience a digital, three-dimensional environment through the eyes of the protagonist. Through the use of a first-person perspective, players explore various rooms, each containing a series of puzzles in order to progress. In order to solve these puzzles, players use a portal gun which connects two points in space (see fig. 1).



Figure 1: A typical screenshot of an early puzzle room in *Portal 2*.

As seen in the image, players can create a blue portal and an orange portal, and what goes through one comes out of the other. This particular game mechanic requires a firm understanding of the room's space, dimensions, and the character's body position and aim. The first-person perspective lets players inhabit the character's body, see with

her eyes, and manipulate the virtual space as if they were the character. The phrase “now you’re thinking with portals” was a common tagline for the game’s marketing and fan base, and part of the fun of the game is coming to terms with its oddly confusing premise.

Most first-person games never allow players to see their character—the perspective of viewing the game world through the character’s eyes almost requires that the character goes unseen—but in *Portal 2* players often see their digital avatar. The first portal used in the game lets players see their character through one portal as they enter the other (see fig. 2).



Figure 2: The first portal in *Portal 2* highlights the fact that, although it is a first-person perspective game, players will see their character.

The surprise of seeing the character’s body is not an insignificant matter given its fundamentally transgressive nature within the context of first-person perspective games, and players continue to see the character throughout the game, mostly through accidental

glimpses through one portal, or by intentionally placing two portals next to each other in order to examine the character's body (see fig. 3).



Figure 3: A screenshot, taken from a player's perspective, in which the player can see the character by looking at two portals placed near each other.

Players in *Portal 2* not only inhabit a digital body, they also see that body interacting with the game world. The main character's name is Chell, and it does not require a far leap to interpret her character as a "shell" for the player to insert themselves into the game work through her presence. Chell is not just the creation of game artists: she is based on the likeness of the American voice actor and director Alésia Glidewell, and when comparing Chell and Glidewell side by side, the similarity is uncanny (see fig. 4). The game studio even photographed Glidewell while dressed in Chell's outfit and holding Chell's portal gun, and, in a very literal sense, Glidewell's body became a part of the game.



Figure 4: Chell (left) and Alésia Glidewell (right).

Portal 2 highlights an intersection of players' perceptions of their bodies, character body design, and the digital representation of actual people's bodies. The game makes the relationship between players, characters, and bodies in general a central feature of the gaming experience.

Portal 2 exhibits a concern for bodies that has existed in game studies scholarship since its inception. Game studies, as an interdisciplinary field of research, has pushed for an approach to studying gaming independent of other mass media. Just as film studies writers found new ground by moving beyond insights provided by literature studies, game studies maintains a distinct perspective on topics of central importance to gaming regardless of previous treatments on related issues. While writers such as Sherry Turkle have made great strides in the investigation of digital communities and online identity, game studies scholars continue to seek additional insights regarding the central role of

bodies in games. For instance, a recent pre-conference meeting of the Game Studies Interest Group of the International Communication Association showcased, as its theme, the nature of video game bodies.¹ But in communication studies, as well as in other fields, the focus has yet to turn to the creation of a grounded theory of video game bodies.² Game researchers have written about representations of human bodies in games in regards to identity politics, race, and gender. They have researched game movements and exercise by studying motion-controlled games, sports games, and fitness games. Articles and books have been written about the sense of physical immersion when interacting with games, including studies on how game controller types affect feelings of game involvement and instances in games that break the sense of immersion. However, these discussions of video game bodies have yet to contribute to furthering the understanding of what video game bodies are, what they mean, or how they can be defined.

Gaming bodies constitute a relatively uncharted territory that I aim to make visible through systematic examination. When I mean by “relatively uncharted” is that, although many scholars from various disciplines perform studies and analyses wherein gaming bodies are fundamental, those studies rarely, if ever, attempt to define gaming bodies as a coherent subject of study. It affects the very fabric of gaming, yet it manages to resist extensive mapping of its most basic elements. This project answers the implicit call to define, explore, and describe video game bodies, but the varied nature of bodies and games, and the inherent lack of a foundational theory of the subject to guide its exploration, necessitates the study of several possible sites of investigation in order to

propose characteristics of video game bodies. To this end, I performed four case studies within a diverse range of sites of video game culture in order to discover what video game bodies mean in these particular instances. The guiding methodologies of each case study vary depending on the site of analysis, and the variety of methods speaks to the diversity of the subject matter. However, each case study followed a similar research plan: I formed a research question aimed at focusing on the nature and role of video game bodies in the given site of analysis, and I followed a method appropriate for the question at hand. For the most part, the methods are humanistic with an emphasis on qualitative content analysis, interviews, and grounded theory.

My findings suggest four preliminary characteristics of gaming corporeality, or the nature of bodies in/of video games, which share several similarities that I discuss in the conclusion. Chapter one presents a critical literature review of the intersections of video games, bodies, and rhetorical studies, and in particular it targets the relationships between games and rhetoric, rhetoric and bodies, and bodies and video games. While not exhaustive by any means—such a pursuit would require a book-length manuscript by itself—it highlights the research and theory necessary to build a coherent discussion of video game bodies throughout the four case studies to follow. Chapter two examines the aesthetics of digital game bodies by investigating third-person action video games designed for game consoles. After selecting seven games based on how well they sold, their prevalence in gaming culture, and how recently they were released, I perform a qualitative content analysis to sort out the aesthetic qualities of digital bodies in third-person video games. I also describe the aesthetic qualities that evoke a sense of

corporeality or embodiedness to digital characters. I discuss how the games utilize three aesthetic characteristics, namely audiovisual systems, procedural systems, and production systems, in order to endow characters with a sense of weight and presence in the digital space of the games.

Chapter three is a study of the representation of human bodies—actual living, breathing people, not characters—in a website dedicated watching other people play games: Twitch.tv. Using the grounded theory approach, a method aimed at building theory from site-specific data in order to explain the phenomenon more fully, I study the strategies Twitch.tv employs to direct attention towards humans, bodies, and personalities. I discuss how the website showcases players, viewers, and the relationship between the two groups as a fundamental design element of the website, so much so that the primary act of participating on Twitch.tv entails watching people more so than games. Twitch.tv points to the real people and contexts in which gaming takes place, and further highlights how players and viewers' bodies are actively engaged in the process of gaming. Chapter four investigates the gamification of players' bodies through an autoethnographic textual analysis of the exercise game *Wii Fit U* for the Wii U. After personally participating in the fitness game for several weeks, including the use of peripherals that track fitness activity throughout the day, I identified strategies the game uses to gamify the player's body inasmuch as the game leaves the screen and enters the practice of everyday life. Through an analysis of the hardware peripherals/accessories and the game's activities/exercises, I describe the gamification of bodies through the ancient Greek rhetorical concepts of mimesis, praxis, and topos.

Chapter five studies the popular activity of playing casual, mobile games on devices such as phones and tablet computers through an analysis of interviews conducted with self-identified players of mobile games. I conducted extensive interviews with nine mobile game players, and, after transcribing the interviews, I identified consistent themes that arose throughout the interviews in order to form response categories. I discuss in the chapter how mobile gaming occurs through the spatial and temporal agency of the players in order to allow players the choice of when, where, and how to play. This corporeal agency when playing mobile games includes body positions, game input methods, gaming locations, length of gameplay sessions, and adaptability of gameplay sessions. Mobile games target players' ability to insert their gaming habits throughout their day regardless of their circumstances, and this phenomenon suggests that gaming bodies' agency regarding time and space is a fundamental design element of mobile games.

I conclude this project with a discussion of the common elements found throughout the four case studies, and I label the relationship between bodies and games as digital viscera, or the physical, visceral experiences of games and how they create corporeal involvement. Digital viscera consists of three elements, or the three I's: interactivity, intuition, and immersion. I propose that the three I's of digital viscera guide future theory-building about video game bodies inasmuch as they arose in all four, wildly diverse, sites of analysis throughout this project.

CHAPTER 1:

REVIEW OF LITERATURE

This project positions itself within three fields and objects of study: rhetoric, bodies, and video games. An introduction to the relevant literature on these topics requires a discussion of how each may relate to the other, and therefore the following sections describe the relationships of rhetoric-bodies, bodies-games, and games-rhetoric. First, I discuss how the field of rhetoric has gradually become more familiar with studying games. Second, I map rhetorical studies' involvement in materialism, specifically through the investigation of bodies. Third, I offer an extensive, though not exhaustive, review of how game studies has hitherto approached research regarding bodies. By situating my proposal within these three conversations, I hope to highlight and justify the need for a more comprehensive, rhetorical study of bodies and games, and in the conclusion I offer an architectural metaphor to describe how game writers have been investigating game bodies and their rhetoric without explicitly asking about how the relationship between games, bodies, and rhetoric functions. They have inadvertently laid a foundation for a study of the rhetoric of game bodies, and the existence of such a foundation invites a cohesive study of the topic. Specifically, I propose several avenues of investigation to build upon the work detailed in this chapter.

Rhetoric and Game Studies

Game studies had a sporadic beginning, with work from various fields and disciplines, without much focus or theoretical foundations. For many years, video games

were nothing more than living room toys for children, and, much like the histories of film or television studies, video games had to more fully saturate popular culture before becoming the subject of serious, unified inquiry by scholars. While several writers achieved headway into game studies with various major works in the 1990s, it was not until the rise of so-called serious games in the 2000s that rhetoric and media scholars began establishing grounds for their particular approaches to game studies. No summary of rhetorical video game theory would be complete without mentioning the foundational work by Ian Bogost and his concept of procedural rhetoric. Ian Bogost introduced the term “procedural rhetoric” in his first book *Unit Operations*, but it was not until his *Persuasive Games* was published in 2007 that the term became popular among game and rhetoric scholars.³

In *Persuasive Games*, Bogost argues that video games offer a unique element of rhetoricity that had hitherto gone unnoticed by scholars, namely that games operate as a set of processes or rules, and as players engage with those processes strategic communication may occur. Simply put, he claims that games necessitate processes in order to make meaning, and he defines procedural rhetoric as “the practice of using processes persuasively.”⁴ Processes define games and their rhetoric, and procedural rhetoric is a tool for understanding how games implement those processes to create meaning with players.

Alexander Galloway continues Bogost’s line of reasoning by offering a more taxonomized approach to gaming processes in his book *Gaming: Essays on Algorithmic Culture*. He describes the algorithmic thinking behind games and how they invite

comparably algorithmic engagement from players. Instead of “process” or “procedure,” his favorite terms to describe the mechanisms at work in video games include “action,” “acts,” and “algorithms.”⁵ He claims that agency within algorithms account for the unique, interactive qualities found in video games, and in the first chapter of his book, Galloway provides an intuitive framework to interpret the actions occurring in games. Galloway does an expert job of explaining and defining these terms in order to allow scholars a reasonable vocabulary to talk about what happens, the nitty-gritty so to speak, within a game.

What makes both Bogost’s and Galloway’s approaches similar in their methods for understanding games is that they address the medium’s eccentricities. In other words, they attempt to describe what makes video games different than other media. For both Bogost and Galloway, what sets games apart from, say, film, television, or literature, is that games are foundationally defined by the boundaries surrounding agency of both the player and the computer, and within those boundaries exist a myriad of options that may or may not play out. By studying the rules of procedural governance, they both seem to suggest that we can access the ways games communicate.

After Bogost’s field-altering work, the majority of rhetorical game scholarship has sprouted in journal articles, most acknowledging procedural rhetoric in some way. Books aimed at expanding rhetorical game theory have been sparse, but one such work is Christopher Paul’s *Wordplay and the Discourse of Video Games*.⁶ He claims that previous rhetorical work on video games (such as Bogost’s approach), restricts analysis of games to certain characteristics of games or particular types of games, and he instead

suggests a method of analysis that examines various aspects of games, specifically words, design, and play. He claims that scholars have the freedom to examine the words found in and around games, including the design of games and their paratextual counterparts such as advertising. Paul's umbrella term for all three is "wordplay," and his theory of analysis admits that video games require novel theories of analysis because they are a medium unlike any other. He also advocates for methods that consider various parts of the gaming experience, including more literary aspects such as words and narrative.

Several edited volumes approach rhetorical game theory through a unified focus on a theme,⁷ but the sometimes varied approaches inherent in such edited books tend to only bring attention to a rhetorical phenomenon without proposing a new vocabulary or method to the study of games. Most game journals exhibit the same limitation. However, one writer has begun to find success in proposing some theoretical grounding through consistency across his various articles. Gerald Voorhees, an increasingly popular game and rhetoric scholar, offers a model for advancing rhetorical video game theory through analysis. Specifically, Voorhees has published several essays in which he forwards a symbiotic method to assess the visual and procedural rhetoric of video games. His analyses imply a theoretical contribution by suggesting that Bogost's procedural rhetoric is not the be-all-end-all of game analysis and, in fact, it is but one part of a complex whole. For instance, in one article, Voorhees summarizes the methodology established by Bogost and Galloway as simply an investigation into algorithms, and although he takes this method as his starting point, he claims that he goes beyond the limitations of their approaches by focusing on the player-computer relationship, visibility, interaction,

engagement, and how those elements combine to form a type of subjectivity.⁸ Voorhees' other articles repeat similar claims.⁹ Put simply, Voorhees implies that the walls separating the procedural and other elements of game design are thin, if they exist at all, and rhetorical game scholars would do well not to hierarchize procedurality above all else.

Current rhetorical game theories follow the trajectory established by these and other scholars by targeting our relationship to games and what makes games function as a distinctive medium of communication.¹⁰ There exists a space within rhetoric to discuss games, and the current conversations taking place lean towards investigating the nature of people's experience with games: how games speak to people, how they immerse people, how they make people feel empowered, how they offer choices, and how the medium's capabilities work to produce persuasive messages.

Rhetoric, Materialism, and Bodies

Bodies have become a prominent concern and guiding research interest for rhetoricians in the last decade. Just as conversations about video games abound among rhetorical scholars, so too do bodies take a central position as a cutting-edge area of research, often contextualized within the vocabulary of materialism. My aim is to enter conversations about rhetoric and bodies through a study of video games, and the history and current trends among materialist scholarship justify such a project. I map my argument within a larger conversation of materialism in rhetorical studies, and I do so in an attempt to justify my focus on embodied experience in rhetorical analysis. The debates about the various manifestations of materialism are vast and rooted in a history of

philosophy, and so I highlight only the most relevant work on materiality from the perspective of rhetoric scholarship to inform my analysis.

After various Marxist advancements in materiality, mostly focused on an acknowledgement of the labor forces in capital, Michael Calvin McGee proposed a material turn for rhetoric in 1982, and his arguments have spawned a nearly continual conversation about the role of materiality in rhetoric.¹¹ McGee outlines two approaches to the study of rhetoric: one based on the practice of public oratory in the classical tradition, or a descriptive model, and another based on a philosophical tradition aimed at teaching and postulating, or a prescriptive model. He claims that rhetoric scholarship in the twentieth century had overemphasized the idealist, prescriptive approach, and he argues for a turn to the material approach with a focus on returning rhetoric to its roots in human practice. While he proposes various implications of his argument, his most influential contribution to materiality is arguably the basic premise of avoiding idealism in favor of grounded, practical, embodied rhetoric. Ronald Walter Greene's response to McGee argues for a new materialism, one which complicates and abstracts rhetoric in order to describe it as a "technology of deliberation,"¹² and as such proposes that rhetoric operates societally. Specifically, "a materialist rhetoric marks how governing institutions represent, mobilize and regulate a population in order to judge their way of life,"¹³ or, in other words, a new materialism places rhetoric as the forefront of critical discourse as a means of control. As a critical turn for materialism, Greene's essay opened a space for broader discussions about the role of materiality, including bodies.

Published the year after Greene's essay, Jack Selzer and Sharon Crowley's

Rhetorical Bodies revolutionized and reinvigorated conversations about the corporeal reality of rhetoric.¹⁴ The edited volume includes essays from the most prominent scholars in the field, and the topics covered build upon, respond to, and extend the implications of a material rhetoric as proposed by McGee. While varied in method, writing style, and the subject of study, each essay shares a concern and an appreciation of bodies' foremost role in rhetorical action. In its first chapter, Jack Selzer offers a preliminary categorization of materiality, that being a concern with "material realities, cultural practices, and physical bodies" and how they "shape and persuade."¹⁵ Each of the remaining chapters concern themselves with a study of the third category, physical bodies, while also implicitly acknowledging the realities and practices. Especially pertinent to the digital nature of games and bodies, Lester Faigley, in chapter eight, initiates a conversation about what roles digital literacy and the internet might play regarding a materially grounded discussion of bodies.¹⁶ Specifically, he considers how the text, albeit a digital one, may always have a material dimension as it necessitates the participation of human learning and design. Christina Haas' chapter also investigates the relationship between texts and the material circumstances and bodies that create and consume them when she offers a rhetorical reading of an abortion clinic and the many publically available documents and signs that cover the walls and hallways.¹⁷ The text, it seems, not only projects a material dimension, it requires a material perspective to describe its relationship to people, their bodies, and their lives. While there are other avenues of scholarly interest related to materiality, the book's publication marked a moment in communication discourse in

which the new materialism is inextricably linked to bodies, and bodies are forever linked to texts.

The 2000s saw a significant rise in work on materiality, rhetoric, and bodies, and several books have become go-to resources for creating a foundation of theory on the matter. In 2003, Martin Nystrand and John Duffy published their edited volume on what they termed the rhetoric of everyday life, a study of rhetoric in “mundane contexts” outside of the classroom.¹⁸ Although not explicitly a work on materiality, their targeting of the mundane and everyday lends itself nicely to a concern with material circumstances. The following year, Debra Hawhee published her first book regarding bodies and rhetoric with her historical study of ancient Greece and the relationship between rhetoric and athletics. In it, she argues that both rhetoric and athletics, for the ancient Greeks, were “arts of existence” and that rhetoric’s history grounds it as a physical art.¹⁹ In other words, if we are to not separate our knowledge of rhetoric and its practices from their history, we must acknowledge that rhetoric has always concerned itself with bodies, training, and athleticism. Several chapters in Lawrence J. Prelli’s 2006 edited collection *Rhetorics of Display* investigate topics regarding the body, specifically in regards to display (the selective process of what to publically show or conceal). For example, Robert Hariman and John Lucaites dissect the bodies on display in the famous Tiananmen Square protest photograph,²⁰ Richard Morris rhetorically analyzes representations of death of graveyards and monuments,²¹ and Phebe Shih Chao tackles the rhetoric of tattoos and body piercings.²²

Debra Hawhee's most prominent second project on bodies comes in 2009 with National Communication Association award-winning book *Moving Bodies: Kenneth Burke at the Edges of Language*.²³ In it, she performs a material analysis of Kenneth Burke's body, his illnesses, and his alcoholism, and she finds how his writings, including his musings on bodies, are inextricably linked to his own physical states. In a very real sense, Hawhee's "text" was a combination of text, body, and material circumstance, and both her methods and findings were monumental in forwarding materialist studies of rhetoric. Innovations in materialist philosophy and rhetoric continued the very next year with the influential edited volume *New Materialisms*.²⁴ Of all of the books thus far described in this review, *New Materialisms* is the broadest in scope, but a functional summary could describe the book as a collection of novel approaches to materialism in order to accommodate emerging technologies, economies, and methods of living. The chapters include studies of posthumanist notions of life and agency and materialist approaches ranging from geopolitical structures to biopolitical debates. If anything, the studies suggest that bodies and materialism cannot be limited to static theories when lives, bodies, and technologies evolve.

The evolution of materialism into biopolitics and emergent technology is evident in work published in the 2010's. Jeremy Packer and Stephen B. Crofts Wiley's edited book *Communication Matters* takes a look at new media and its relationship to materiality, and, specifically, its chapters organize around three concepts as sections: time/space, assemblages/networks, and mobility/immobility.²⁵ The first section examines how media creates spaces and temporalities, both inherently related to how bodies

interact with the world. The second section discusses how networks, both online and offline, play into humanity's relationship to technology. The third section dissects how new transportation technologies interact with human bodies and their ability to explore space. Kelly E. Happe continues the trend of materialist research reaching into the future of humanity with her analysis of the biological dimensions of materiality in the Human Genome Project, cancer detection, surgery, and the corporal disciplining of biopolitical bodies.²⁶ Both books offer glimpse into the future of our rhetorical understanding of materialism and bodies.

Various scholars have extended the boundaries of materiality through re-reading significant figures and discovering traces of materialism and bodies,²⁷ while other approach materiality through a critical, Marxist lens.²⁸ After Elizabeth Grosz published her 1994 essay on avoiding the mind/body, ideal/actual dualism seen throughout the history of Western thought,²⁹ most scholars share an assumption of prioritizing bodies, matter, and lived experiences. Escaping dualistic thinking is particularly difficult when confronting digital media, as the natural tendency is to separate human users from the digital information and technology with which they interact. Three years before Grosz's essay was published, Donna Haraway had addressed this tendency, albeit indirectly, with her influential "Cyborg Manifesto" in which she argues that human bodies caught in our fragmented, post-modern world are cyborgs, or a combination of organic matter, consciousness, and technology.³⁰ The cyborg body is necessary, as a concept and an embodied method of analysis, to understand the relationship between the various bodies at play in video games. Finally, new materialisms push beyond human bodies into

matters of agency of things or objects. As Laurie Gries argues in her book *Still Life with Rhetoric*, things exhibit agency or actancy through a “dynamic dance of intra-actions” between creators, viewers, things, life, and matter itself.³¹

Game Studies and Bodies

I. Space: Exercises and Movements

Released at the end of 2006, the Nintendo game console was the first of its generation to feature a controller that not only acted as a pointing device but also could also detect movement in three dimensions. The potential of player movement in 3D space, while not entirely new considering various arcade games and Nintendo’s own forays into spatial game control with the Power Glove in 1987, elevated the console’s popularity to astounding heights. More Wiis sold in the first half of 2007 than the Xbox 360 and the PlayStation 3 combined.³²

Perhaps the most attractive feature of the Wii was its applications as a means of movement, sport, and exercise. Instead of the docile gaming posture most stereotypically imagined when describing the gaming body, the Wii invited players to get up and move. The Xbox 360 and the PlayStation 3 later added movement peripherals, the Kinect and the Move respectively, and their movement-based games have mimicked the Wii insofar as the body is the center of the locus of control.

Getting the body to move, whether through exercise or basic exploration of space through body movement, is at the forefront of not only gaming, but also of gaming scholarship. Ian Bogost traces a history of exercise games from home consoles, to the arcade, and then back again,³³ and what he dubs exergames began long before the Wii.

For instance, the Atari 2600 and the Foot Craze controller allowed players to balance and jog in order to control an onscreen avatar. The Nintendo Entertainment System included similar exergames with the Power Pad controller (a large, double-sided floor mat with a total of twenty touch-sensitive circles), although most were running games given the limited capabilities of the peripheral controller. Years later, *Dance Dance Revolution* became one of the most popular attractions at arcades in the United States and Japan. The game utilizes rhythmic mechanics with a foot-controlled dance board, and to this day no arcade is complete without a *DDR* installation.

Other scholars have begun to inquire into the nature of sports, exercise, and games, and their methods and findings reveal a positionality concerned with observing players and their bodies in space.³⁴ However, more abstract questions arise regarding the body and space, and these inquiries primarily target spatial control and general body movement. The most direct discussion of this topic occurs in Alison Gazzard's chapter in *CTRL-ALT-PLAY* in which she describes how game theorists must approach theories of space and control outside the limits of the game screen and into the lived space of the player.³⁵ She hypothesizes that gaming bodies inhabit space not only through mimetic interfaces like the Nintendo Wii or PlayStation Move, but also through the traditional means of a handheld controller with physical buttons, directional pads, and joysticks. She concludes by arguing that as the player's body becomes the controller, it enters the game space where nothing separates the digital space of the game and the player's lived space. Similarly, Seth Giddings and Helen Kennedy argue that moving bodies in space have a history of being a primary attraction of video games since the early days of *Pong*.³⁶ Tying

a history of controllers and movement together, Giddings and Kennedy describe how the Nintendo Wii and its gestural controller provide evidence of a preoccupation with moving bodies in popular technoculture. In other words, moving bodies have always been a center point of interest during the rise of technological, popular culture, such as with the television remote or mobile phones, but only now are scholars beginning to target these phenomena in an attempt to define their parameters.

Even if bodies in motion are universally linked to technoculture, the spaces in which they move may traverse various locations. As evidence of a variety of spaces in which gaming bodies move, Irene Chien maps a trajectory of dancing bodies in different locations with a case study of *Dance Dance Revolution*.³⁷ She provides a history of the game in arcades, but then discusses current trends in gaming spaces:

However, as the shift between theatrical arcade performance to decentralized home-console playing has shown, gameplay configurations are neither stable nor pure. Even the relegation of home-console gameplay to “home” is problematic, since in addition to the remote spaces that the Internet opens up to them, home consoles are also set up at community and institutional social events for public play that borrows from the performative modes of the arcade.³⁸

As games such as *DDR* traverse public, private, and digital-public spaces so do the bodies that participate in the game’s high-energy movement. In this case, the both the body and the game become objects in motion in an increasingly fragmented cultural landscape.

Scholars have described gaming movement not only as a question of “where,” but also as a question of “who,” meaning the identity politics related to spatial movement.

While I dedicate a section of my review to identity and bodies, it is worth noting how movement has the unique capability to both discipline bodies and influence identity perceptions. For example, Brad Millington conducts a Foucault-esque critique of the Wii's capability to become an autonomous risk expert, or a machine that determines how healthy or unhealthy a body is, and as such it disciplines bodies into motion and health.³⁹ Such ramifications are ignored in light of the pleasure of movement and health, and thus the Wii evolves into a technology of body modification. According to Derek Burrill, the Wii also performs an extension of self-identity by drastically reducing that which separates the player, controller, and character, and it therefore combines gaming identities into a contiguous, yet fractured, identity.⁴⁰ The body's performance of synchronized movement with the controller (or lack thereof) and the game character on the screen unifies digital and lived bodies into a temporary whole. In this way, movement itself implements identity.

While games, consoles, and controllers have begun requiring the increased utility of space through the movement of gaming bodies, it would be wise to remember that games have always invited consideration of movement in space. From distances between players and screens to the movement of hands on a controller, not to mention the act of occupying space by sitting in a relatively stationary position, movement in space has always been at the center of video games. The popularity of gestural gaming systems simply highlights space as a necessary element of gaming, and the recent advent of mobile gaming systems such as with smart phones and portable tablet computers continues to push the boundaries of the relationship between bodies, games, and spaces.

II. Identity: Gender and Race

Who are gamers? Marketing agencies and game production companies would both benefit from answering this question, and they often resort to a notion of a “gamer” tied to normative notions of identity: the gamer is white, male, straight, and young.

Adrienne Shaw describes the misconstrued efforts to label minority or disenfranchised groups as gamers through marketing demographics.⁴¹ Shaw argues that the act of labeling bodies as gaming bodies is a faulty process, and instead she claims that content producers should focus on creating and portraying these identities. Her article is but one example of the second mode of describing the gaming body, namely through identity politics.

Scholars have described the means through which the corporeality of identity manifests itself onto the apparatus of gaming culture, specifically through gender and race.

Research on gender identity and gaming seems to be divided into three equally important foci, producers, game characters, and players, although the lines between each may become blurred. First, the gendered body of game production tends to attract attention by the very fact of its existence; in other words, the male-dominated space of creating video games invites investigations into those instances when women assert their presence in that realm. Such a presence may not always be through typical means, as evidenced by video game modders. A modder is someone who alters games—modifies them—for any number of purposes, including fixing coding bugs, changing gameplay mechanics, enhancing visual fidelity, or creating entirely new games from the already-built game engines of published games. Hanna Wirman describes how a group of female modders have taken it upon themselves to mod *The Sims 2*, and why they feel the act of

re-skinning, or changing how characters look, is not only a form of play but also a means of being productive.⁴² Based on her interviews with sixteen players, Wirman contends that these modders/players/hacktivists related gender identity with the act of being creative and subversive. Wirman's findings may shed light on gaming and gender, but it is her focus on finding and showcasing women through her scholarship that calls attention to the ways academics describe the gaming body in gendered terms. For example, Alison Harvey and Stephanie Fisher target an incubator in Toronto, Canada that supports women as they develop their own games.⁴³ While Harvey and Fisher reveal problematic relationships of control and immaterial labor as performed through gender, it is their goal of telling the stories of women game producers that showcases the troubled history and current state of gender politics and game production.

Game characters, sometimes referred to as avatars when speaking of the relationship between players and their fictional game identities, is another means of describing the gendered gaming body. Ewan Kirkland offers a prime example of this mode of inquiry by discussing the implications of the character Fiona in the PlayStation 2 horror game *Haunting Ground* and the character's gendered and hetero-sexualized body (see fig. 5).⁴⁴ He describes Fiona's sexualized portrayal as not being unlike the female protagonists of 1980's horror movies, but unlike in movies, players may interact with and control Fiona as a manifestation of themselves as well as an object of the male gaze. Not only is her appearance problematic, but also her personality, as revealed through movement and dialogue, is feisty and feminine, and the game mechanics of hiding and witnessing position her as less empowered as male characters in other horror games.

Kirkland's attention to portrayal contrasts nicely with Rosa Martey's and her colleagues' work on gender-switching and game avatars.⁴⁵ They describe instances when women and men choose to play characters of different genders, and how that gender performance interacts with the players' identities.



Figure 5: Fiona in one of six different unlockable costumes, "the cowgirl."

They found that male players tended to not hide their gender when playing a female character, although the performance of that character may align with traditional, normative notions of gender. The avatar may be an opportunity for expression, but it may also be simply a choice regarding gameplay styles. Regardless, character gender informs players' choices when playing games.

At the center of the gendered gaming body is the player. Social customs and expectations surrounding games often dictate how individuals choose to relate to games as participants. Helen Thornham performed ethnographic interviews in order to dissect popular notions of who counts as "proper" players of various genres of games.⁴⁶ She

reports how both men and women construct gendered barriers of entry to games, especially in terms of genre. For example, women are perceived to be more appropriate players of social games, like *Dance Dance Revolution*, and many male subjects in the study reported feeling as if sports games like the popular FIFA series of soccer titles were made for them. The theme of gendered appropriateness of game players continues in two studies concerning media literacy, and, as with previous articles, these studies are meaningful not for their findings as much as their subject matter targeting issues of gender and games. For instance, Carolyn Cunningham investigated a game design workshop for female producers who aim to make games for young women. Through a case study of the workshop, she found that the organization's approach to technological literacy was potentially limiting how the participants understood gender norms and game design. As an example, one game designed in the workshop was a clone of popular online fashion doll games in which players style a woman's makeup, hair, and clothing. While her findings are revealing of the prevalent gender norms in gaming culture, the fact that Cunningham studied gender identity from both the design and the players' perspectives speaks to a concern with the gendered body.⁴⁷ Similarly, Jennifer Jenson and Suzanne de Castell targeted gender expectations about gaming in their multi-year study of girls and boys who play video games.⁴⁸ Through interviews and recording gameplay sessions, the researchers discovered various unspoken rules regarding gendered play, such as what types of genres girls may play with each other versus what games they play with boys. The study's concern with the gendered body, as well as observing groups of boys of girls actually playing games, highlights gender as a salient aspect of the gaming body.

Race also appears to be on the radar of game analysts and theorists as another part of identity politics and the body, although it is far less popular a topic in media and game journals. However, the journal *Games and Culture* has a consistent track record of publishing articles that address topics of race and gaming identity, and in particular about players' raced bodies and racial representation in games. As an extension of this research concern, Betsy DiSalvo interviewed players in order to describe young, male, Black players' experiences with games, and they found that games function more as a social enterprise for these players than for White players. They also found that games acted as extensions of other interests, such as sports.⁴⁹ Ben DeVane and Kurt D. Squire also interviewed players, but their article discusses the methods young, male, White players utilize when resisting racial stereotypes of Black and Latino characters in the game *Grand Theft Auto: San Andreas*.⁵⁰ Both articles attempt to discover the relationship between racial identity and gameplay, as by so doing they foreground race as a prominent concern when describing players' bodies.

Racial representation of video game characters, and the problematic portrayals that seem to continue in modern games, has not been ignored by scholars. André Brock engages in an extensive analysis and discussion of race in the game *Resident Evil 5*, and he goes as far as to investigate not only the diegetic aspects of the game, such as narrative and imagery, but also describes how the genre, play mechanics, and paratextual discourse all contribute to digital, racial subjects in the form of game characters.⁵¹ The game takes place in Africa, and not only does it pit the player against hordes of Black zombies, it creates an exotic other in the form of the protagonist's counterpart, a sexualized, African

woman. Similarly, Nathaniel Poor approaches representation by examining the role of elves in popular fantasy games, specifically *World of Warcraft*, *Everquest II*, and *The Elder Scrolls* series, and he argues that the elves in games are portrayed as an ideal, historicized, other.⁵² Narrative representation continues to provide meaningful investigations into the nature of race, games, and bodies, and it ties together the experience of players with the portrayals of race through the interactive art of gameplay.

III. Engagement: Immersion and Interactivity

The last thematic knot of concepts regarding the body and video games concerns itself with the relationship between the player and the game space, the tenuous balancing act of forgetting about the body entirely through immersion and interactivity. The means through which the player engages with the game raises questions of the body's position in at least two areas of study that often imply the body is left behind while the mind interacts with the video game. However, as there is no justifiable reason to support such an arbitrary dualism;⁵³ engagement is a question of the entire body, including player perception and involvement. For instance, several psychological studies have linked levels of immersion to the type of controller used in games,⁵⁴ especially with motion-controlled games. However, the work described in this section forgoes the psychological in favor of more expansive approaches to gaming and engagement.

Immersion implies the uniting of the body's perceptions and the game's fictional world. For instance, various researchers have written about motion-controlled games' ability to increase a feeling of immersion for players.⁵⁵ Removed from the realm of media effects research, immersion enters a gray area wherein questions about the nature of

simulation enter into the conversation. Two essays in the edited book *Joystick Soldiers* deal with these and other questions regarding immersion and the body's performance in the game, one tackling the role of realism while the other describes immersion-breaking activities within a simulation. Dan Leopard discusses the nature of what he calls performative realism as the primary mode of immersion in military simulations and video games, and he argues that, through the act of playing the game/simulation, the player enacts a verisimilitude by linking the virtual world of the game—often designed with an aesthetic of reality—and the world of lived experience.⁵⁶ Therefore, not only does the game invite immersion, the player enacts it through performance of actions based in reality. Later in the book, Dean Chan writes about the digital protest movement *Dead-in-Iraq* wherein performance artist Joseph DeLappe, beginning in 2006, periodically logged into the online, multiplayer military shooter *America's Army* and typed the names of fallen military service persons.⁵⁷



Figure 6: Screenshot of a dead-in-iraq message, cropped to target text.

He would log in with the name “dead-in-iraq,” and, using the chat function that scrolls lines of text on the screen for all on the server to see, he would type the name, age, service branch, and the date of death of one U.S. service person at a time (see fig. 6). By including the date of death, the names stood for more than just members of the military, but also the consequence of corporeal violence. Much like grave stones, they are more than just a memorial, but a reminder of the existence of a corpse. Through these implications, DeLappe broke the immersive quality of the game for other players attempting to recreate a pseudo-realistic military simulation. When real bodies were involved, the immersive space of the game protest that affected the level of perceptual unity between the fictional game world and other players’ conceptions of the real world. By breaking that unity, DeLappe foregrounded the tenuous relationship between immersion and bodies, and the moment others’ dead bodies became involved, the game lost its immersive quality.

Interactivity, the second form of engagement discussed here, is perhaps the quality of games most taken for granted as scholars simply assume that interactivity is a fundamental characteristic of gameplay. However, some researchers have begun to investigate the body’s relationship to interactivity, and their questions may illuminate current notions of the body’s influence in gaming. Several chapters of Jesper Juul’s book *A Casual Revolution* deal with bodies and interactivity, and each offers new insights stemming from a study of the recent popularity of casual gaming.⁵⁸ For instance, Juul argues that mimetic controllers such as the Wiimote or the *Guitar Hero* guitar controller greatly influenced the rise of casual gaming to the forefront of popular culture, inasmuch

as they allowed for a much more accessible entryway in terms of how the player interacts with the game.⁵⁹ In other words, if the body cannot access the game through intuitive interaction, then the game does not get played. In the next chapter, he discusses how social gaming, such as through online social networks like Facebook, influence how player's interact with games and each other,⁶⁰ and other chapters follow suit by furthering his arguments about the nature of interactivity and bodies. Ultimately, Juul contends that the ways casual games invite player's bodies to interact with digital media has fundamentally changed how players perceive games and themselves.

Not only does interactivity dictate if and how players' bodies may access games, but it also affects levels of enjoyment, thus inviting further play through affective reinforcement. Paul Skalski and his colleagues compared players' levels of enjoyment when playing with mimetic controllers, such as a steering wheel or Wiimote, and traditional gamepads, and the results were as expected: the more natural or mimetic a controller was the more enjoyment players derived from playing the game.⁶¹ With the abundance of studies about players' bodies and how they play games, the main motivator of playing games, the fun of play, is often left outside of the discussion. Skalski's study simply brings games back to their roots in affect; players played games, and often still play games today, because they are fun to play. Lest we forget, a feeling of fun is an emotional response, one grounded in the body's ability to enjoy the experience. With the history of games and scholarship about them developing into various areas of inquiry, perhaps it is healthy to remember that the gaming body has always been present in video games through the simple characteristic of fun.

Implications

Through this survey of pertinent literature, I contend that video games and game studies theory have something to say regarding bodies in rhetorical studies and materiality, and that my project investigating the portrayal, immersion, and interaction of bodies proposes an exciting and needed conversation about the role of bodies in gaming rhetoric. Bodies matter for rhetoric, and they present a little discussed aspect of game studies outside of media effects and psychology research. My dissertation aims not only to fill a gap in game studies literature but also to justify and promote the embodied nature of gaming rhetoric.

The articles and books synthesized in the preceding paragraphs identify two key nodes of theoretical work: first, there exists a body of literature concerned with investigating how video games function as a unique mass medium of communication, and, second, rhetorical and materialist approaches to these investigations seem to permeate game studies. Plenty of work has been done on video games and bodies, yet, in a way, none of them specifically target video game bodies. Therein resides the implied necessity of such a study insofar as plenty of scholars are attempting to answer a question, sometimes implicitly, that few if any are explicitly asking: how do popular video games rhetorically construct and interact with bodies?

Even with the widespread interest in games' interactions with bodies, such a question is beyond the scope of my project. Instead of a comprehensive study of all things corporeal in video games, to investigate several areas in gaming that show promise in explaining the inherent relationship between bodies and games. I also ask additional,

more specific, questions about gaming bodies, and throughout my analysis I hope to begin to discover how games, bodies, and rhetoric align. Thankfully, where to begin such an investigation is easy to find given the body of work already summarized in this chapter.

First, scholars have written about avatars and have critiqued game characters' bodies, and therefore there already is an avenue of study of in-game, digital bodies and the tropes that define their operation and portrayal. My project includes a study of third-person, console-based character bodies, their athleticism, their limitations, and how they relate to players. Such a study is a step toward further understanding the digital bodies of games, and it is not far removed from the questions already being asked by writers. Second, the review of literature reveals that the novelty of streaming games online to viewers has made it so it has yet to catch up with scholars' publishing schedules. Streaming gameplay is at the forefront of gaming culture, and with it comes the opportunity to study players' bodies as they project themselves into online space. The audio/video recording of players' bodies while they play games offers a chance to study the performative aspects of embodied gaming. Third, much has been written on mimetically-controlled game such as the Nintendo Wii and Wii U, but there has yet to be a study of rhetorical strategies in the games themselves, specifically exercise games, and how they get players' bodies moving. The relationship between the rhetorical and the material is remarkably salient in such games, and an investigation beyond the control scheme and into game design is the logical next step. Lastly, the increased popularity of casual touch-screen games has led to more being written about the topic, but the focus on

bodies, including players' bodies, leads me to ask where, when, and how players are playing these games. My study aims to seek out players' personal experiences with casual, mobile games in an attempt to continue to realign gaming to focus on players as much, if not more so, than the games themselves.

To begin, the existence and importance of players' bodies on screens suggest an examination of how non-human bodies are portrayed in games. In contrast to human players' bodies, the following chapter takes as its subject the digital materiality of game characters' bodies and the strategies employed to distance them from the abstract or digital and construct them in such a way as to make them empathically human, real, present, and embodied. I turn my attention to the domestic realm of game consoles, controllers, and third-person perspective bodies so prominent in console gaming in order to examine the aesthetics of game character bodies.

CHAPTER 2:

AESTHETICS OF VIDEO GAME CHARACTERS' BODIES

The representation of bodies in video games has undergone a significant transformation over the last three decades. In the arcade cabinets and home consoles of the 1980s the primary method game designers employed to depict bodies was a system of caricatures consisting of pixel art. The images were called sprites, and the flat appearance and boxy outlines of the characters did not hinder players' identification with the characters' bodies. The pixelated people still felt like people, people who could walk, jump, roll, suffer injuries, and die. However, over the course of the 1990s, several visual technologies developed which replaced the pixel sprite with a 3D model: a collection of polygons in a virtual, three-dimensional space. As 3D models took the center stage in popular games, so did other design elements intended to further create a sense of reality, elements such as voice acting, particle effects for blood and other liquids, and, relatively recently, motion-capture technology. Millions of dollars have been poured into producing digital video game bodies that look, sound, and play like people with living, breathing bodies.

Third-person perspective games—games in which players see their characters, usually from behind the character's back with a high-angle camera—is one of the most popular genres in video game culture, especially on home consoles (see fig. 7). A cursory search on most game retail websites reveals prevalence of third-person games, an unsurprising fact considering that third-person perspective allows for a more intuitive

control scheme with a lessened possibility of motion sickness accompanies some first-person games. Third-person games also invite players to identify with distinct visual cues stemming from the main character; a Batman game would not be the same if the player could not see the Batman's costume and gadgets, a perspective made possible through third-person gaming.



Figure 7: Example of a third-person perspective in the 2010 game *Fallout: New Vegas*. A player sees the character's body, usually from behind, with the option to rotate the game's camera around for a complete view of the character and environment.

Video game character bodies are a staple of contemporary game culture and design, and with their popularity come techniques and tropes to help create a sense of reality to the bodies.

An aesthetic of corporeality pervades third-person action games—one of, if not the most popular—genres on video game consoles. This aesthetic is unsurprising considering that the defining characteristic of third-person games is the near constant

audio/visual/interactive presence of a digital body representing the player's character. In this chapter, I discuss and analyze the most prominent tropes of the corporeal aesthetic in third-person action games through a qualitative content analysis of several popular titles. I argue that not only does this aesthetic exist within this medium-defining genre, but its themes and tropes dictate the digital corporeality of video games. Specifically, this aesthetic produces what I call embodiedness, a characteristic of a video game body that lends it a sense of reality. I would like to distinguish how I use the term embodiedness from the philosophical notions of embodiedness or embodiment, terms more closely related to ontology and phenomenology.⁶² Instead I propose a procedural embodiedness, an embodiedness that implies the construction of an empathic person out of a collection of digital materials in a game: an interactive, audiovisual, humanized body. A character body endowed with embodiedness is one which gives off an impression of presence, weight, realism, or, for lack of a better term, existence. While not a physical body, a digital character with embodiedness produces a reaction from players: this character feels real, like it is an actual body. Without the tropes that produce embodiedness, digital corporeality would fail at capturing the visceral activity of interactive action. In this chapter, I first describe my specific analysis scheme utilized to perform the qualitative content analysis. I spend the remainder of the chapter discussing the findings of the analysis and specifically citing and describing examples of three primary categories of tropes that constitute the aesthetics of third-person corporeality. I conclude by summarizing the implications of my findings including a discussion of how embodiedness points to what I call the three I's of digital viscera.

Qualitative Video Game Content Analysis

In an attempt to categorize and describe the aesthetics of digital video game corporeality, the following research questions guided the analysis:

1) What are the aesthetic qualities of digital bodies in third-person video games?

2) How do the aesthetic qualities evoke a sense of corporeality or embodiedness to digital characters?

In order to address these questions, a variety of games would need to be examined in order to identify the common characteristics and tropes which define an aesthetic of corporeality. An analysis attempting to extract and distill a variety of design elements in a number of games will, out of necessity, rely on a method that allows for exploration of the texts, and Steven Malliet in his article “Adapting the Principles of Ludology to the Method of Video Game Content Analysis” suggests that qualitative content analysis provides the proper tools in order to access recurring themes in various aspects of design.⁶³ For instance, instead of coding whether a visual cue is “violent vs. not violent,” a qualitative approach to a content analysis opens doors to seeing how several parts of a game manifest a specific concept or trope. Malliet adapts qualitative content analysis by providing an analysis scheme centered around seven topics of interest: audiovisual style, narration, complexity of controls, game goals, character and object structure, balance between input and pre-programmed rules (or what I call procedurality, inspired by Ian Bogost’s writings on the subject),⁶⁴ and spatial properties of the game world. While not every topic might emerge when gathering data because of the specific requirements of the

research questions at hand, Malliet's list provides a vocabulary around which to organize findings. In addition to the seven topics, I propose an eighth topic: production systems, or aspects of the game's production that are both salient to the research at hand as well as evident to players of the game.

Adapted from Malliet's method, the following process constituted the qualitative content analysis of the games selected for the study:

- 1) Play the games. Perfect proficiency or 100% completion are not necessary given that such an approach is not typical of the majority of gaming experiences.
- 2) Collect examples of aspects of the game related to the research questions. A comprehensive list of every example possible in every game is both unnecessary and prohibitively time-consuming. Instead, a game was played until categories of data were sufficiently formed.
- 3) Replay games and additional research. It is necessary to return to games in order to clarify examples and categories while also doing additional researching, which means drawing upon other resources to gather additional information about the games, such as online wikis and walkthroughs.
- 4) Identify and categorize the data. The categories may fit within the seven topics of interest proposed by Malliet or they might create additional topics.
- 5) Identify patterns across the data and categories. Any patterns form the basis of possible arguments inspired by the research questions.

The games chosen for the analysis were selected based on how well they sold, their prevalence in gaming culture, and how recently they were released. Though not necessarily relevant, it is worth noting that the games can be divided by subgenre: open-world crime games, fantasy roleplaying games, and action-adventure games. Seven games total were chosen with at least two games in each sub-genre. Brief descriptions of the games follow to provide context for the discussion of examples and findings.

Grand Theft Auto V: First released in September, 2013 for Xbox 360 and Playstation 3, the game saw subsequent releases on Xbox One and Playstation 4 in November, 2014 and on PC in April, 2015. One of the best-selling video games of all time, *Grand Theft Auto V* sold over 11 million copies within the first 24 hours of release, and within the first week it had passed \$1 billion in sales.⁶⁵ It is currently the fastest selling entertainment media product ever released.⁶⁶ The game takes place in the fictional city of Los Santos, a parody southern California, and it follows three protagonists as they complete a variety of story-based missions in order to grow their criminal influence in the city. Along with the single-player experience, an online feature was added in 2014, introducing a character creation system and multiplayer missions.

Saints Row: The Third and *Saints Row 4*: Often called clones of the *Grand Theft Auto* series, the *Saints Row* series grew into its own in 2011 when *Saints Row: The Third* was released on Xbox 360, Playstation 3, and PC. The game became an unexpected hit selling 5.5 million copies after a year being released,⁶⁷ and it quickly distinguished itself from other similar titles through its zany missions and visuals. While also an open-world crime game, *Saints Row: The Third* eschewed the more serious tone of other crime games

in favor of extravagant costumes, unprecedented character customization, and over-the-top missions. *Saints Row IV* was released in August, 2013 on Xbox 360, Playstation 3, and PC, and it later saw a re-release in January 2015 on Xbox One and Playstation 4. The game pushed the boundaries of silliness established in the previous entry in the series. Set in a computer simulation of the same fictional city as *Saints Row: The Third*, the game includes for superpowers, alien battles, and the destruction of the entire planet. While updated sales figures are currently unavailable, the game sold over one million copies in its first week.⁶⁸

Dark Souls and *Dark Souls II*: As a Japanese-made, Western-fantasy style roleplaying game, *Dark Souls* is one of the more unique games to break into popular gaming culture. A spiritual successor to the only somewhat successful 2008 game *Demon's Souls*, *Dark Souls* sprang onto the market in 2011 on Xbox 360 and Playstation 3 with a successful word-of-mouth campaign lauding its entertaining difficulty and deeply ambiguous lore. It was later ported to PC in 2012. For a game with supposedly only niche appeal, it sold remarkably well with sales totaling over 2.3 million copies,⁶⁹ and its influence on gaming culture is just as astounding as its success. The game draws heavily on Western European fantasy and lore, including knights, swords, dragons, ancient castles, and magic. The game's protagonist is a character of the player's creation who has been cursed as an undead warrior, and death often comes easily as the player explores the open world. Repeatedly dying while attempting to defeat difficult enemies is the game's defining mechanic, and the story only emerges through bits and pieces of dialogue and item descriptions. The sequel, *Dark Souls II*, was released in March 2014 on

Xbox 360, Xbox One, Playstation 3, Playstation 4, and PC, and it follows the same formula as its predecessor with only minor alterations. It sold over 2.5 million copies worldwide.⁷⁰

Tomb Raider: Released for Xbox 360, Playstation 3, and PC in March of 2013, *Tomb Raider* was re-released for Xbox One, Playstation 4, and Mac OS X in January, 2014. The first game in the series was released in 1996, and this 2013 version is a reboot of the franchise. *Tomb Raider* sold 1 million copies within the first 48 hours of release and over 8.5 million copies to date.⁷¹ The game finds the player's character, Lara Croft, traversing a dangerous island filled with violent enemies and perilous landscapes in order to escape while rescuing her shipwrecked colleagues. Received with sweeping critical acclaim, the game plays like an *Indiana Jones* film with an emphasis on platforming and combat gameplay.

Middle-earth: Shadow of Mordor: Published for Xbox One, Playstation 4, and PC in September, 2014, and then retroactively released for Xbox 360 and Playstation 3 in November, 2014, the game performed well both commercially and critically, selling an estimated 4 million units in physical copies alone (sales data for this game is currently unavailable, but it may be surmised that the actual sales data exceeds 4 million copies sold given the popularity of digital distribution platforms).⁷² Set between the events of *The Hobbit* and *The Lord of the Rings*, *Shadow of Mordor* melds the open world and enemy assassination mechanics from *Assassin's Creed* games with the stealth and combat of the *Batman: Arkham* series, and in many ways it honed those elements while also including a procedurally generated story. *Shadow of Mordor* best typifies third-person

action games developed for consoles given how much it borrows from console games that came before it.

Embodiedness of Third-Person Video Game Bodies

Three primary categories emerged regarding the aesthetics of corporeality in third-person video games, and while the first two categories fit within Malliet's seven topics of interest the third supports the addition of an eighth topic: 1) audiovisual aesthetic of corporeality, 2) procedural aesthetic of corporeality, and 3) production aesthetic of corporeality.

Audiovisual System: Violence and Athleticism

All seven games exhibit audiovisual elements centered on giving weight and realism to digital bodies. Two techniques emerged in this category as common tropes among the games, namely the audiovisual presentation of violence and athleticism.

Violence is a consistent trope among all seven games, and one of the most prominent techniques to portray violence is showing bodily harm. The games depict harm to digital bodies through various visual and aural strategies, but several methods appeared more often than others. Depictions of blood were one such method, and it often served as a shortcut to visually communicate pain, diminishing health, and injury. When characters *Grand Theft Auto V*, for instance, suffer injuries, splotches of blood on clothing or skin appear and then fade away after several minutes. When characters are under fire from gunshots, blood very briefly spurts to indicate that a bullet found its mark. Both of the *Saints Row* games include blood spurts without the inclusion of splotches on clothing or skin, and blood spurts in *Dark Souls* games are more visible and consistent than other

games to indicate when a melee weapon has landed on a target. Blood is used more extravagantly in *Tomb Raider* and *Shadow of Mordor*: enemies in both games bleed profusely when shot or hit by the player's character, and both games include execution moves that portray graphic, bloody deaths.

Blood is the go-to symbol for bodily harm in these games making it an expected element to add realism and presence to digital video game bodies. A character's physical form is simply the application of a character skin, an image made to look like clothing, skin, and facial features, on top of a three-dimensional model. The inclusion of blood as a signifier of injury or violence makes character models appear as if there is something more to the characters as if there were organs and blood under the skin. Blood is a hidden characteristic of human bodies inasmuch as it tends not to be seen publically, and bringing it before the eyes reinforces the illusion that these video game characters are more than just digital puppets. Seeing blood as a result of physical harm lets the video game bodies seem more alive and more vulnerable than they actually are. Blood is metonymic for a living human body, and it stands in for injury and harm as a strategy to make video game bodies feel more like bodies and to give weight to their presence, ultimately to lend them a sense of embodiedness.

Characters also tend to provide audiovisual reactions when suffering bodily harm. When characters are hit, shot, fell, or suffer any type of injury resulting in a loss of health, an audio cue plays of the character's voice evoking a type of groan or scream. The vocal exclamations of pain would feel flat if it was not for a visual identifier to complete the reaction, and all seven games include a "stun" animation whenever

characters are hit. A stun animation is when a character visually reacts from a hit—such as stumbling backwards, bending forward, etc.—while also removing combat inputs from the player for a moment. As an example, when the player's character in *Grand Theft Auto V* is punched, the character stumbles backwards, and the player is unable to control the character for a second or two. When combined with an additional visual signifier such as the appearance of blood, the illusion of physical harm appears complete. Both audio and visual markers gave weight and presence to the characters' bodies and to invite empathy for their pain and injuries.

These audiovisual reactions create embodiedness to character bodies primarily as a method to create a sense of realism. Bodies, when hurt, produce sounds and movements indicative of pain and injury, and to ignore such a primal aspect of human behavior would otherwise make the character bodies appear robotic and inhuman. Much like Arnold Schwarzenegger performance in the *Terminator* films, a body that does not react to pain with vocal exclamations or stunned movement does not feel human. The stun animations and the audio cues tap into an aspect of human behavior that is universally experienced across cultures and history: humans visually and aurally react to pain and injury. Humans have very little control over such reactions; they are enacted often involuntarily as a natural response to pain. A marked characteristic of human bodies is the fact that many bodily behaviors occur without much or any conscious control: breathing, heartbeat, swallowing, facial expressions, and, of course, reactions to pain. The primal nature of these reactions, when performed by a video game character, suggest that

the character's body is just as reactionary, vulnerable, and sometimes uncontrollable as an actual human.

Unlike the appearance of blood or the audio reactions by characters, both of which are strategies employed to depict a single moment of pain or injury, low health signifiers portray the results of bodily harm over time. Both *Dark Souls* games rely on a health bar (see fig. 8), but the other five games in the study utilize other strategies that relate to the corporeal presence of the characters.

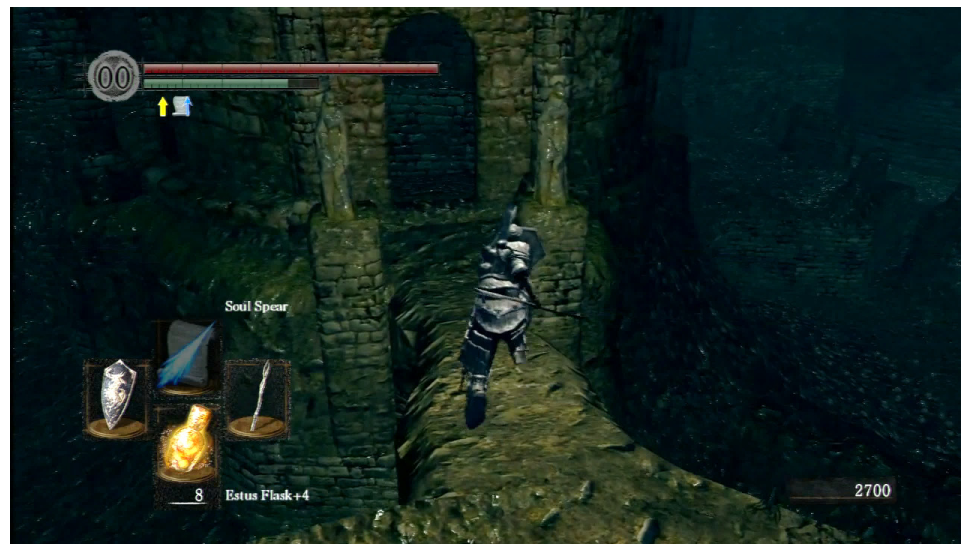


Figure 8: Screenshot from the first Dark Souls game. The red health bar is located at the upper-right corner.

To illustrate, all the games but the two *Dark Souls* games change the colors on the player's screen to a type of monochrome overlay, portraying the dulling of the senses as the player's character comes closer to death. The sound mix also dampens in addition to the monochromatic colors, once again demonstrating the common use of both visual and aural signifiers to create corporeal presence. While the games do differ slightly in how

they implement these tactics—such as *Tomb Raider* including a bloody outline around the screen—the consistency of the tropes stood out as a common strategy among the third-person games in the study. These tactics extend the supposed experience of the character body into the experience of the player’s body by utilizing the immersive nature of video games to make it feel as if the player is seeing and hearing the same things as the character. When the sound dampens, players might feel that their own hearing is dampening as a result of the character’s injuries because the majority of players’ focus is on the sound from the game. An analogy in movies would be when a bomb or loud gunshot goes off near the protagonist and the film’s sound dulls and replaces the typical sound mix with a high pitched ringing noise, all to help the audience feel what the character is experiencing. The changes in color and sound from the game screen help players empathize directly with the character’s body, and doing so suggests that the character’s body is just as alive and present as players’ bodies.

The fourth trope employed to portray violence is character death. Death not only provides a convenient metaphor for a “game over,” it establishes the consequences of the player’s choices as grounded in their character’s body: if the player does not play the game properly, the player’s character—the character’s body—suffers death. Each game approaches death differently, but some commonalities were found. Both of the *Dark Souls* games include a scream or moan from the character, followed by the body collapsing to the ground, a monochrome screen, and the text “YOU DIED” appearing. However, the basic premise of the *Dark Souls* series is that the player’s character is undead, meaning no matter how many times the character dies, s/he always reappears

ready to try again. Death is a method through which the player may attempt new strategies or hone skills, and therefore way to improve at the game directly related to the character's body: you only get better and have another opportunity to improve when the character dies. Such a technique might be taken for granted, but when compared to other methods of restarting a section of the game such as navigating through an in-game menu, death as a means of improving gameplay delineates the third-person game experience as one reliant on the existence and experience of a pseudo-living character body.

Both *Tomb Raider* and *Shadow of Mordor* include death cinematics, which are movie-like moments when the game takes control away from the player, changes the camera angle, and briefly shows an action as if it was a close-up in a film. Both games use cinematics when the player's character dies at the hands of an enemy, and *Tomb Raider* uses cinematics for environmental or other gameplay deaths as well. When a character's health reaches zero or when something else triggers death—such as making a mistake during a quick time event, like when a game requires the player to press a button in a short amount of time to avoid an enemy's blow—both games change the camera position and take over control of the scene. Usually, a death cinematic shows an enemy striking a final blow to the player's character, but even more dramatic examples can be found in *Tomb Raider*. For instance, near the beginning of the game, the game's protagonist is careening down a river filled with dangerously sharp branches and other pieces of wood. If the player does not properly avoid the obstacles, a death cinematic plays showing the character being skewered in the neck. Regardless of the cause of death, both games' death cinematics showcase graphic violence, and graphic violence, when

portrayed correctly, produces an intense empathetic response in players. Players may place their own feelings and reactions into the character's body in order to unconsciously scream, "What is happening?! This is horrible?!" As a result, the character's body appears as real, living, and, most importantly, feeling as any actual person, and hence the character's body transforms into a relatable human body worthy of empathy.

While *Grand Theft Auto V* and the *Saints Row* series include situations where characters would certainly die, after a character loses all health the screen becomes monochrome, fades to black, and then returns after a loading screen with the character at or leaving a hospital. While the situations that lead to death in these games are exaggerated for the purpose of entertainment, their recovery is linked to reality through hospitals: the character's bodies need medical attention just like human bodies need medical attention. Unlike the other games wherein death signifies that the player has to restart at a previous point in the story, the crime games imply that nothing is "restarted" per se, instead suggesting that even when a character supposedly dies the actions of the player still matter and remain a part of the game world. The games rely on the use of hospitals to create a diegetic explanation for why the world continues even when the player fails, much like the immortal characters in the *Dark Souls* games.

In addition to the use of exaggerated violence in games to give presence to digital bodies, the games also showcase character movement as a mechanism of drawing focus to the centrality of third-person character bodies. Specifically, the games utilize and allow a parkour-level of fluidity and athleticism to character movements—parkour being the gymnastic sport of navigating, jumping, rolling, and running through urban

environments—while also highlighting superhuman strength and agility. What is noteworthy about such strategies is not simply that they are employed but that the games manage to effectively portray those movements as natural extensions of the characters' bodies and abilities. The athleticism these games portray also focuses attention on the characters' bodies, making bodies and their movements the most prominent aspect of the games. Such a focus is understandable considering that the player must watch a character's body and its movements for almost the entirety of a game, and therefore athleticism would be an expected addition in order to entertain and impress the player. However, as well as being expected, athleticism contributes to the sense of presence to these bodies targeting players' attention to these bodies' feats. By drawing attention to bodies, the bodies appear present and alive. Each impressive athletic moment performed by a video game body recalibrates players to the sense that these bodies feel real, they are present, they exist, and they move bodies instead of through artificial or mechanical means.

For example, the *Dark Souls* games' movement mechanics foreground fluid movement as a fundamental part of the combat and navigation systems. A prominent feature is the ability of the player's character to roll, whether to dodge an enemy attack or to make a smoother transition when jumping or falling. The character will take damage after falling to the ground if the distance of the fall exceeds a predetermined height; the greater the height, the more damage is dealt to the character's health. However, if the player executes a roll command at the right moment, namely upon impact to the ground, the character will finish the fall with a roll and the amount of damage taken will be

greatly reduced. This mechanism to reduce fall damage mimics common parkour and gymnastics movements in which participants will roll when falling in order to distribute the shock of the fall to a larger portion of the body instead of just to the feet or legs. Similarly, whenever the player's character jumps in the *Dark Souls* games, the jump ends in a roll, again mimicking parkour movement.

While *Shadow of Mordor* also portrays parkour-quality movements by the main character—a feature born from the *Prince of Persia* and *Assassin's Creed* series and now a common element in action-adventure games—the main character's strength and agility is what most draws attention to the digital body. Athleticism features prominently in *Shadow of Mordor*, and the main character often performs feats well beyond typical human abilities such as jumping from tall towers, scaling large cliff faces, and walking effortlessly on top of ropes and other small paths. The character animations manage to portray superhuman abilities while also making the character still move and act like a human body. When the character jumps from a tall building, the landing is brutal and hard, and the character extends his arm and uses his knee to absorb the shock of the fall. For a brief moment, the character pauses and the player is unable to start moving him immediately as if to give weight to the impact. Similar effort is expressed when climbing over objects or up walls: even though the character has superhuman strength, each movement is animated to show deliberateness, weight, and effort.

Similarly, *Tomb Raider* is a game based on death-defying jumps, perilous climbing, and other extreme feats of athleticism and strength. The character often must jump over large gaps or grab onto the smallest ledges with just her fingertips. At one

point in the game, she has to cross a ravine by climbing on a crashed airplane hanging vertically against a cliff face. She shimmies across the wings, tosses herself from one part to another using only her hands and arms, and lands safely right as the plane crashes to the ground. Much like *Shadow of Mordor*, her superhuman strength and agility draw attention to the body, but the character animations make her movements appear natural and human. Each jump and climb seems difficult and scary because the character struggles and evokes effort, not just through the animations but also through near constant grunts, gasps, and heavy breathing.

Not only do such animations add realism to the game, and excluding them might prove to be a distraction, but they also emphasize the body's central position as the main focus of the game's action and the player's attention. The animations, sound cues, and other game elements used to portray athleticism add presence to the video game bodies. They could perform similar feats with a mechanical suit like in the *Iron Man* films, but instead these game bodies climb mountains, fall at great distances, run, roll, and jump as bodies. Of course, the feats performed by these characters could not be recreated by real people, but the question is not whether the portrayals are grounded in reality but whether the actions feel real. While extreme in their nature, these characters' bodies and their athletic performance is produced in such a way as to magnify the embodiedness of the characters. The characters' bodies always feel like they have weight, like they are alive, and like they could be real even though they are not.

The *Saints Row* games and *Grand Theft Auto V* also endow embodiedness to character bodies through the technique of athleticism, but they do so primarily by

portraying proficiency at a variety of difficult tasks: all of the characters are proficient runners, bikers, driver, shooters, skydivers, etc. There is very little superhuman about these characters' movements or abilities, but the fact that they can effortlessly perform almost any activity set before them is worth noting.

Procedural System: Character Creation and Customization

Fashioning how a character appears has become a staple of third-person gaming. Perhaps owing its popularity to the *Sims* series of games, such systems enforce the importance of both the visuality of the body as well as the player's control over the body. The third-person body becomes the location of an interactive and creative experience, and it very literally manifests producers' and players' expectations regarding what constitutes a playable digital body. Creating and customizing the digital body is a game in itself, and it features prominently in several of the games chosen for this study. Specifically, *Grand Theft Auto V*, the *Saints Row* games, and the *Dark Souls* games all include character creation and customization as a significant element of the gameplay experience. Neither *Tomb Raider* nor *Shadow of Mordor* includes a character creation mini-game or system, however both the presence and consistency of character creation systems in the other games merit inclusion in this study.

Character customization in itself is not salient to the topic of embodiedness in third-person games, however the specific functions and structures found in character creation menus speaks to these games' attempts to make character bodies seem like bodies. In other words, various procedural elements in the character creation menus approach corporeality in such a way as to reinforce the illusion that these bodies are alive

and real. In order to access procedural design, simple questions are asked, question such as what is allowed versus not allowed, available as an option versus not available, what are the boundaries of the player's interactive experience? These questions reveal that the character creation menus operate under an assumption that the character bodies should exist within the limits of human experience.

The use of raced or sexed bodies is one strategy the games employ to portray the characters' bodies as grounded in players' cultural reality. For instance, all four of the *Dark Souls* and *Saints Row* games present default characters that reflect race in one form or another. The games' default characters were all male, White, and athletically built. While each of these traits can be modified throughout the creation and customization process, they may also be easily skipped to begin the game more quickly. All four games feature a "gender" or "sex" selection option as the first trait to be modified, followed by either by "race" ("face" or "homeland" in the *Dark Souls* games) or body build. Considering their prominence in the games' character creation screens, they could be considered primary characteristics, or at least the characteristics most valued by the games' procedural rhetoric.

The *Saints Row* games let the player choose between four races, labeled as African American, Asian, Caucasian, and Hispanic, and selecting any of these races changes the default skin tone and several facial and hair features. All of the default characteristics may be modified, including skin color, but the selection of races code the digital body through passivity: it is easier to choose a race and customize from that point than to alter every single option to the player's liking. The two *Dark Souls* games take a

slightly different approach to portraying race during character creation. As fantasy games, the descriptions of the races reside within the game's lore, including parts of the game world where non-playable characters and items come from. This phenomenon is particularly evident in the first *Dark Souls* game with ten races, each with a unique name and description. Several of the names and descriptions reside within culturally coded racial constructs, such as (see fig. 9; the descriptions are from the game, while the bracketed labels are what could be surmised as the race the game is attempting to portray):



Figure 9: Top row, from left to right: [White] "Commoner: Very average commoner face." [Latina/o] "Detla Farmer: Commonly seen face in the FiveFinger Delta." Bottom row, from left to right: [Black] "Jubilant Catarina: Jovial features of Catarina, known for festivity and drink." [East Asian] "Far East Traveler: Face from a distant Eastern land of almond skin and thick lips."

Dark Souls II abandons the labels and descriptions for the races, and while its predecessor includes ten faces/races, *Dark Souls II* limits the selection to four (see fig. 10).



Figure 10: Choices for "homeland" in *Dark Souls II*.

It is worthwhile to note that the four races that remain in *Dark Souls II* correlate with the four types of faces in *Dark Souls* that included racially and culturally codified labels, descriptions, or features.

The raced bodies in these games reflect the cultural experience of players' realities: race matters to players of various cultures wherein it signifies physical attributes, genetics, abilities, and appearance. While the reality of race is far more

nuanced and culturally constructed than portrayed in video games—and popular media in general—the games are products of the cultures from which they were produced, and, in those cultures, race is a deeply and historically rooted marker of corporeal identity. The inclusion of codified races in the character creation menus speaks a complex, yet culturally defined, method of making these digital bodies seem real by drawing on beliefs and assumptions about raced bodies, and therefore they make various visual features such as skin tone elements of the characters' embodiedness by relating those features to societal beliefs about how race influences corporeal identity.

Body build is particularly salient to the embodiedness of video game characters considering the United States', and other nations', obsession with weight, appearance, health, and size, and the option to customize body build suggests that size and shape are critical identifiers of corporal identity. The options for customizing the build of the body—such as how athletic, thin, muscular, large, or small the body is—are similar among the *Saints Row* and *Dark Souls* games, even if the games approach the interactive process in different ways. The first *Dark Souls* game includes nine discrete options for body build: average, slim, very slim, large, very large, large upper body, large lower body, top-heavy, and tiny head. The appearances of the different builds do not signify the character being overweight or fat inasmuch as the body and skin, without armor, is still smooth and proportional. *Dark Souls II* lets the player choose between four builds, each a variation of size, and two types of musculature: smooth skin or muscular. Both of the *Saints Row* games utilize a triangle system which lets players move a cursor to adjust how muscular, fat, or skinny a character is (see fig. 11). The procedural meaning to be

had from the body shaping options in both the *Saints Row* and *Dark Souls* games is conflicted yet significant. The size or shape of the characters does not directly affect gameplay: the characters still run, jump, and otherwise move in the exact same way whether they are muscular or smooth, larger or smaller.

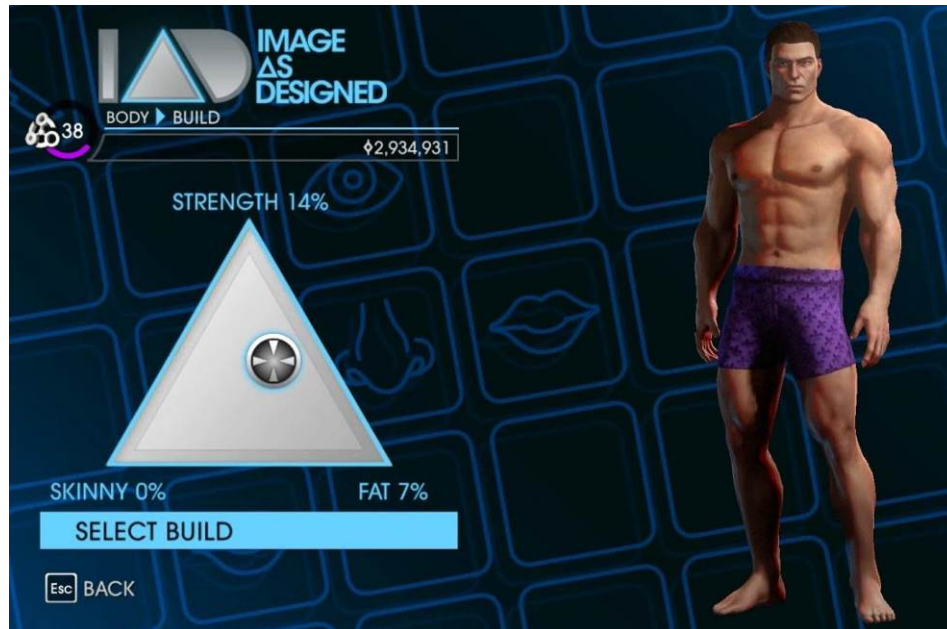


Figure 11: The body build triangle from *Saints Row 4*. The same system is used in *Saints Row: The Third*.

But it is the very fact that these options do not affect gameplay that makes their inclusion so meaningful insofar as the games are implicitly suggesting that a body does not feel like a real, relatable body unless size and shape are just as customizable as race and gender. The amount of public commentary on weight, size, and health has made body shape a meaningful and critical element of corporeal identity, and therefore its inclusion as a customizable option in these games denotes that embodiedness requires the

acknowledgement of body build as one of the go-to traits that make bodies feel real and alive.

While the *Dark Souls* the *Saints Row* games feature a traditional character creation screen before the majority of gameplay gets underway, *Grand Theft Auto V* departs from typical options or creation screens in order to accommodate its character driven story, but the differences simply emphasize a genetic approach over total player control when portraying video game corporeality. Before continuing, it must be understood that *Grand Theft Auto V* can be divided into two experiences: the single-player experience and *GTA Online*. The single-player experience is the basis of the game while the online experience makes the world of *Grand Theft Auto V* into something resembling a massively multiplayer, open world game, and both sides of the game approach character creation and customization uniquely. The single-player game includes three playable characters that the player switches between throughout the story, and a part of the open world feel of the game is the ability to purchase a great variety of clothes, tattoos, and hair styles. The characters remain essentially the same apart from these customizable elements, but their inclusion still emphasizes the centrality of bodies and appearance as the foundation of the game.

The online experience is *Grand Theft Auto V*, simply referred to as *GTA Online*, was added several months after the initial release of the game, and one of its central features is that players may, for the first time in the history of the series, create their own characters. It should be noted that the character creation system differs between the version of the game created for the older generation of consoles (Xbox 360 and

Playstation 3) as many additional options were added to the Xbox One, Playstation 4, and PC versions of the game, and this project studied the updated version. *GTA Online* begins in a police station where a default character appears to have been arrested, standing in front of a height chart and holding a placard with a criminal record number (see fig. 12).

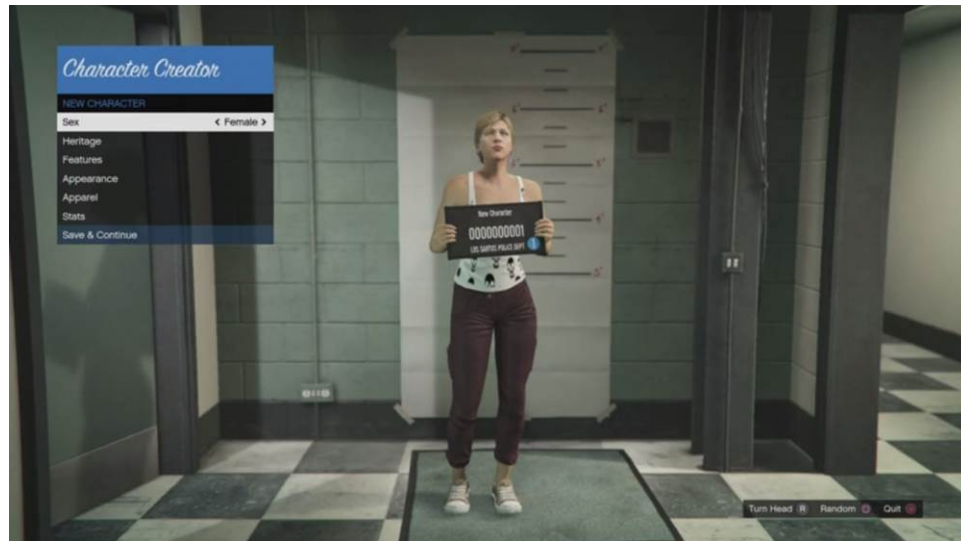


Figure 12: The character creation screen in *GTA Online*.

The player may customize the character's body with a menu in the top-right corner of the screen, and the options include sex, heritage, features, appearance, apparel, and stats.

While the sex option offers a typical binary of male or female, the heritage option is a singularly new approach and a departure from most character creation conventions.

Under the heritage option, players choose from a selection of mothers and fathers and the character's facial characteristics change to resemble the chosen parents (see fig. 13). Two sliders are present in which the player may select how much the character resembles the mother or father in terms of facial characteristics and skin tone.

The heritage option brings genetics into a system historically concerned with offering as much control as possible to players, and it further grounds the game in a world centered on the corporeality of characters. While the sex option is a binary, heritage branches into the realm of biology and race (labeled “skin tone”).



Figure 13: The heritage option in the *GTA Online* character creation screen.

The remaining options are more typical of character creation systems found in the other games in this study, but the manner in which the game foregrounds heritage cements bodies at the center of the game’s online experience.

Through the inclusion of genetics and parental heritage, the game grounds the digital body to a system that mimics the biological systems that control appearance in the

real world. It demarcates these bodies as products of history and biology instead of just avatars made to appear human, and it focuses player awareness on what makes the characters embodied individuals. In the case of this game, sex, race and other customization options contribute to characters' embodiedness through the same technique seen in other games, namely showcasing culturally codified identifiers of corporeal identity. However, in addition to this strategy, *Grand Theft Auto V* singles out genetics and biology as being an underrepresented aspect of embodiedness in video games.

A notable exclusion from the character creation screen is any option to alter body height, weight, or build. Considering how prominently body shape is featured as a customizable option in four other games in this study, its absence in *Grand Theft Auto V* demonstrates that video games need not represent every strategy discussed in order to achieve a sense of embodiedness for the characters. Video game bodies do not need to accurately reflect reality to provide interactive character bodies that feel real and present, and instead they simply must address the need in such a way as to put it over a tipping point that separates game bodies that feel empty and robotic and bodies that look, sound, and play like living things. *Tomb Raider* and *Shadow of Mordor* focus more on the portrayal of violence and athletics, while the *Dark Souls* and *Saints Row* games showcase more in-depth character creation systems when compared to the other games. In the case of *Grand Theft Auto V*, the game's design showcases genetics, biology, and heritage, along with various other audiovisual strategies, in order to push the game bodies beyond the tipping point.

Production System: Real Bodies Creating Digital Characters

Before concluding the chapter with a discussion of the implications of the findings, brief mention should be made of the presence and influence of human actors on 3D, third-person bodies. With recent technological advancements making the inclusion of motion capture animation and voice acting relatively cheap in terms of overall production budgets, it is no surprise that the majority of the games in this study rely on these actor-driven elements to infuse a sense of corporeal presence and reality to third-person bodies. In fact, of the seven games studied, all extensively use voice acting and all but the first *Dark Souls* game utilize motion capture technology for the human character animations. Motion capture is the process by which actors' movements are recorded and transcribed into animation, and it is usually accomplished by tracking specific points on an actor's body as they perform an action or scene in a large, mostly empty studio. Various cameras capture the movements so that information may replace animating by hand. The fluidity and natural look of movements made possible by motion capture lends a sense of realism to the bodies, and when combined with voice acting, these technologies bring actual, human bodies into a direct relationship to the aesthetics of video game bodies.

These production technologies also connect digital bodies to living, breathing people, and the line between the two is blurred when much of what players see of the character comes directly from either the appearance or performance of an actor. In *Grand Theft Auto V*, for example, the three protagonists look nearly identical to the actors who portrayed them, and the actors' voices and body movements comprise the majority of corporeal identifiers witnessed by players. The rolls, jumps, falls, fights, and other moments in these games which focus attention on the characters' bodies were performed,

to at least some degree, by actual people who had to exert their energy to showcase their own talents and athleticism.

Aesthetics of Corporeality: Theoretical Implications

Given this chapter's position as the first in a series of case studies, its implications must be the first to introduce the overarching concept of this project: digital viscera. I am only able to offer a cursory description here, and a more comprehensive discussion of the concept's defining characteristics may be found in the concluding chapter. Digital viscera is the physical, visceral experiences of games and how they create corporeal, or bodied, involvement, and the three characteristics of digital viscera are what I dub the three I's: interactivity, intuition, and immersion. Each case study's final section points to some ways in which the salient subject matter points to digital viscera. In the instance of this case study, interactivity emerges as players interact with, and manipulate, the digital bodies on the game screen. For intuition, the games' aesthetics function to make controlling the third-person bodies as intuitive of an experience as possible. And for immersion, the aesthetics of third-person bodies help make players feel as if they are the body they are controlling in the virtual world. These three I's of digital viscera continue, albeit sometimes implicitly, throughout the following discussion of this study's theoretical implications, but I tease out the concepts related to digital viscera in the concluding chapter of this project.

The findings from the seven games in this chapter suggest that the tropes of digital, third-person bodies lend embodiedness to otherwise weightless, non-existent characters, and they create an empathic person out of a collection of digital materials. The

audiovisual designs of violence and athleticism make characters both worthy of empathy and admiration. The character creation systems allow interactivity and customization to help players feel invested in how their characters' bodies appear on the screen. The motion capture and vocal performances of real actors contribute by grounding the characters' bodies to reality. As just one example of this phenomenon, one could compare the two *Dark Souls* games insofar as the first game lacked motion capture for the characters' movements. After playing the games, a stark difference arose regarding the feel of the characters, not just how they looked but how they played. The character in *Dark Souls II* seemed more lifelike, more fluid in the transitions between walking and running, more naturally athletic when jumping and rolling, and more adept and strong when fighting. The motion capture technology used in *Dark Souls II* helped make the character's body feel more present and alive when compared to its hand-animated predecessor. Without this and the other tropes described throughout this chapter, bodies in the games might come off as lifeless objects: more like dolls or action figures than interactive, AI-driven, lifelike digital bodies.

The aesthetics of corporeality in third-person video games lend a materiality to the immaterial, and, unlike other media, video games require that materiality to extend beyond just how characters appear or sound.⁷³ Video games are an interactive medium. The bodies that inhabit these games function as extensions of players' thoughts and actions, or, in other words, as extensions of the players' bodies. Embodiedness makes video game bodies feel real while also creating an empathetic connection with players, and each of the systems found in the study sheds a little more light on the construction of

these aesthetics. For instance, the production systems of voice acting and motion capture performance emphasize the importance of how video game bodies move and sound, and how the subtle humanity added through human performance may contribute to players' experiences when playing as these characters for dozens of hours. Motion capture and voice acting reduces what makes a body feel real to a handful of characteristics: how a character walks, talks, fights, moves, etc. In a way, these production systems form a type of synecdoche for bodies inasmuch as several distinct parts of what makes a body look and play like a real human are showcased as a substitution for the presence of an actual body.

However, the synecdoche does not complete the picture, so to speak. The audiovisual systems, namely violence and athleticism, emphasize the presence of bodies by highlighting the extremes of corporeal capabilities. When a character plunges hundreds of feet to the ground only to land safely with an impressive roll or pose, the act reminds players that they are playing as human bodies, not just characters. If, for example, the character fell from the same distance and landed safely without any show of athleticism—no parkour roll or powerful three-point pose—the character loses all semblance of corporeality and simply becomes a 3D model in a computer. Watching, hearing, and playing a character as she draws blood from her enemies with her sword, climbs dangerous precipices, and sustains injuries allows the game to invite attention to the body as the central feature of the game. The audiovisual embodiedness makes the game about bodies, and it does so by pushing beyond the limits of typical human ability to draw attention to the characters' corporeal presence. The same tropes found in human

characters also emerge for non-human characters, such as the orcs or giant trolls in *Shadow of Mordor*. The game allows players to hop onto the back of a large troll, called a Graug, approximately four or five times the size of the main character, and wreak havoc on enemies (see fig. 14).

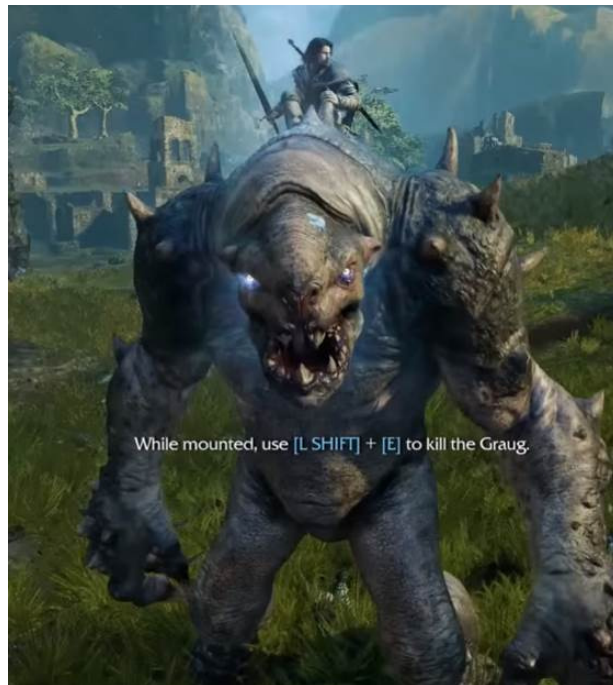


Figure 14: The protagonist in *Shadow of Mordor* riding a Graug.

The movement, sound design, and various visual effects draw attention to the troll's size and weight, and by doing so they make the troll embodied and a presence that feels alive and real within the digital space of the game.

Interactive systems such as the character creation menus showcase the boundaries, limits, rules, and requirements of what we consider a human body within the context of a video game, and those limits contribute to the embodiedness of characters by

structuring the character creation process in such a way as to ground characters' bodies to the reality constructed in the game. Throughout the process of character creation, the interactivity and options provided to players helps galvanize the embodiedness of that character by limiting and guiding the experience for players. The procedurality of the system makes characters' bodies feel alive and present by structuring players' inputs: the characters can only weigh so little or so much, be so muscular or lithe, be so tall or short, etc. Furthermore, identifiers such as sex, race, heredity, body build, and cosmetics demarcate what game producers deem the features most necessary to visually describe a body. The system, being interactive and procedural, puts bodies at the forefront of these gaming experiences: not only does extensive character customization options single out the fundamental place the character's body inhabits in the game, but also these character creation systems occur as one of the first experiences in the games. In other words, character creation and customization are worth noting for making third-person bodies one of the first interactive systems players encounter as well as portraying bodies as games. Players not only play as these bodies, but they play the bodies through character creation and customization.

This project suggests several theoretical implications, not the least of which is how embodiedness relates to Kenneth Burke's notion of identification.⁷⁴ The rhetorical term suggests in its most limiting definition that persuasion cannot occur without a connection between the persuader and the audience, yet more broadly the term implies that communication and media in general necessitate an empathic link in order to convey meaning most potently. The existence of embodiedness in third-person gaming may be

attributed to this end, and therefore identification can help explain the need for an aesthetic of corporeality in games that heavily feature the player's character body. The bodies in third-person games need an avenue to reach a state of identification with players, and that avenue is the embodiedness of the character design so that players feel the weight and presence of the characters. In other words, embodiedness is a process of identification between players and characters, with the medium being characters' bodies.

Another, more specific, application of current theory to embodiedness is Ian Bogost's concept of procedural rhetoric, it being particularly relevant to the role of interactivity in character creation. Character creation systems could be described as interactive processes, the kind of processes that inhabit the majority of video games, and Bogost describes procedural rhetoric as "the practice of using processes persuasively."⁷⁵ As such, it could be asked if a message exists within the procedurality of character creation, and if that message relates to video game bodies. To find the message of a procedural system, one needs only to look at the boundaries of gameplay: what is the player allowed to do, not allowed to do, and what are the consequences of player choices? In the character creation systems studied for this project, the limits of gameplay dictate the signifiers of digital bodies inasmuch as those signifiers form the options players have access to when creating a character. Options or modifiers such as race, sex, and body build offer the most direct commentary on what a third-person body may be: a summation of culturally mandated visual identifiers. Much like within typical day-to-day life, what these games consider the most significant elements of video games bodies are sex, race, and size.

Procedurality does not exist in a vacuum, and another implication of this study is the way it supports the way procedural rhetoric may interact with other design elements to produce coherent rhetorics. Gerald Voorhees argues that procedural rhetoric may quite naturally intersect with visual design to produce messages within a game,⁷⁶ and this project's findings support that assessment. Specifically, the games' portrayal of athleticism and violence speaks to how procedurality and visual design cannot be easily separated, and many instances from the games suggest that the two work in tandem to produce a rhetoric about third-person bodies. For example, the parkour-style movements in the *Dark Souls* games are visual markers of athleticism and exaggerated corporeal ability while also forming a basic gameplay mechanic that influences how players interact with the bodies on screen. Movements such as rolling to dodge, running, jumping, and falling form a process of gameplay, and as such they provide an interactive rhetoric regarding the nature of third-person bodies. Meanwhile, the same movements provide an impressive visual experience to players in which the third-person bodies demonstrate their capabilities. In turn, the visual information acts as feedback to players in order to inform gameplay decisions.

Lastly, Timothy Crick's phenomenological approach to the game body can be further explicated in light of this project's findings.⁷⁷ In his 2011 article, "The Game Body: Toward a Phenomenology of Contemporary Video Gaming," Crick discusses Vivian Sobchack's influential essay about the film body, a subject-object body that sees—through the subjective perspective the film offers—and is seen by the audience.⁷⁸ While Sobchack suggests that digital images do not capture the same subject-object of

film, she does argue that video games have adopted the aesthetics of film, and Crick uses this concession as a jumping off point to argue that video games, like films, are experienced as subject-object bodies. He writes:

Moreover, the typical Renaissance-like linear perspectives used in most first- and third-person videogames creates a subjective perspective of a world that has much in common with the cinematic perspective that implicates Sobchack's film body. It could be argued, then, that videogame perspectives also implicate some kind of invisible "game body." That is, the software-simulated mobile camera that follows (or inhabits) a game character in a virtual world serves double duty as the perspective organ of a "game body" situated within the diegesis.⁷⁹

Crick's game body refers to an invisible subject-object body grounded in the philosophy of phenomenology, but the game bodies—third-person bodies—may be put in conversation with Crick's arguments. Specifically, the tropes of video game bodies (or bodies in video games) found throughout this study add further subjectivity to Crick's game body, or the subject-object of a phenomenological approach to gaming. For instance, Crick discusses how the camera angles in third-person games position the player's perspective so that the player's character body, or avatar as Crick calls it, is almost always in view. However, the camera angle is also behind and/or above the character's body so that the world the player sees resembles the world the character sees. The third-person body in video games, therefore, becomes a lens through which Crick's game body (as subject) sees the world. Additionally, the third-person body acts as the central game body (as object) that the player observes during gameplay. As stated

throughout this chapter, the third-person video game body, the body of the character, is the unifying aspect of the gaming experience, and it may serve as the foundational phenomenological subject-object in Crick's game body, perhaps only shared with the game camera.

Third-person bodies exist in a metaphorical, digital space, making access to their influence on the nature of the rhetorics of gaming bodies, the overarching topic guiding this and other studies in this project, somewhat difficult. However, their presence and popularity in gaming culture given the mass-marketed appeal of these games demand that third-person bodies be acknowledged as meaningful entry point to discussing corporeality in games. Unlike in other media such as online videos or movies, these bodies are not just experienced as objects witnessed by players. The immersive and interactive nature of video games creates a somewhat ethereal relationship between players and their digitally modeled avatars on the screen. In some ways, third-person bodies are extensions of a player's consciousness, and therefore the aesthetics that guide their production and implementation in games directly influence players' own lived experiences.

Having discussed the role of the digital body in video games, the role of players' bodies becomes even more salient to this project. Players control characters on the screen, but that does not mean that players, or game viewers or audiences, are not also represented in digital spaces. Game streaming websites such as Twitch.tv allow viewers to log on and watch other people play games, and the strategies the website employs to showcase players, viewers, and the relationship between the two suggest that actual, human bodies, as represented online, form a part of gaming corporeality.

CHAPTER 3:

AWARENESS OF PLAYERS' AND VIEWERS' BODIES ON TWITCH.TV

“Broadcasting and watching gameplay is a global phenomenon, and Twitch has built a platform that brings together tens of millions of people who watch billions of minutes of games each month.”⁸⁰

Jeff Bezos, the chief executive of Amazon.com, made this statement after the online retailer purchased the game streaming website Twitch.tv for over \$1 billion. It was Bezos’s job to promote the acquisition as a wise decision for the company, and his statement accurately depicts the website’s prominence. Launched in 2011, Twitch was a spin-off website from the other, more broadly focused, streaming site Justin.tv, but its focus on video game playthroughs and commentary helped launch Twitch into an untapped market of video game viewership. As of the mid-2014, Twitch was using the eighth most internet bandwidth out of all websites in the world,⁸¹ and it was its massive popularity that inspired its acquisition by Amazon.com in August later that year.

The website is home to a variety of game streaming content, including footage of live video game tournaments, casual playthroughs with colorful commentary, and technically proficient speedruns. But what distinguishes Twitch from other video hosting and streaming websites with video game content, including YouTube, is the presence and participation of the players and viewers. It is difficult to find video streams on Twitch without, at bare minimum, an audio feed of the player, and the chat box is constantly updated with messages from eager viewers. In a mass medium most often considered

inhuman, robotic, or purely digital such as video gaming, Twitch has foregrounded the human element, and doing so has distinguished it from other streaming services. While the goal of this project is to describe the corporeal nature of video gaming, it is important to note that corporeality can exist without a physical presence. The human element online, including and especially on Twitch, can and often does occur through the representation of personhood and human identity.

In this chapter, I apply the Grounded Theory Approach to studying human behavior in an attempt to discover and describe how Twitch portrays an awareness of bodies, and I do this by distinguishing the human aspects of the website from the digital content of the video games being played. Specifically, I describe the strategies the website employs to direct attention towards humans, persons, and personalities outside of games. I first discuss what limited literature has been written on video streams of gaming content, including its history in the e-sports community and how online content helped give rise to game viewing audiences. I then provide a brief description of my method before spending the rest of the chapter detailing the categories of corporeal awareness that emerged from the study. The final section of this chapter addresses the interconnections between categories as well as touches on how the study illuminates aspects of digital viscera.

E-Sports, Game Audiences, and Streaming

One cannot fully understand the nature of game streaming without appreciating the history of game audiences. Games have traditionally been artifacts of solitary enjoyment or of social entertainment, not unlike board or card games. Nintendo even

began as a playing card company before delving into the untapped market of consumer electronics and digital games. However, early in video gaming history, there arose an interest in competitive games, now called e-sports, which was born in the arcades of the 1980's. The 2007 documentary *King of Kong: A Fistful of Quarters* brought to popular awareness the somewhat underground culture of competitive arcade gaming, based around achieving high scores, and such a culture necessitates groups of people admiring and even witnessing the games as audiences. During the 2000's, e-sports began to codify which games were best suited for tournament-style competition, but even today the list of games played competitively and professionally often varies from year to year.

Tournaments draw audiences, but with the popularity of the internet and newly founded streaming services developed in the early 2010's, audiences for competitive gaming have only grown.

Much like its cultural relevance, scholarly interest in studying e-sports and game audiences has only recently begun to emerge, although articles and books on these topics are still difficult to find. Garry Crawford and his colleague Victoria Gosling have found some success in relating e-sports and game audiences to other disciplines in media studies, and by drawing on the ethos of those fields they are able to create foundational theories and discussions. In their 2009 article "More Than a Game," they target identity construction and social narratives in order to create an audience-centered approach to studying sports video games.⁸² In other words, they use sports games as a genre to relate game playing to participation in popular sports culture. Other scholars take a broad approach to studying e-sports in an attempt to simply define and describe the

phenomenon. Both Brett Hutchins and T. L. Taylor investigate the World Cyber Games, considered by some to be the Olympics of e-sports, to study the relationship between sports, viewership, games, mass media, and professional players.⁸³ T. L. Taylor's book is now a fundamental text when beginning any study of e-sports, considering it is the first of its kind.⁸⁴ The questions inspiring these studies are remarkably similar: how do e-sports function as hobbies, sites of viewership, and professional labor? There remains much to be studied regarding e-sports, but as continued popular interest grows and its relevance increases more scholarly work will be published on the topic.

What separates e-sports from casual play in living rooms is the ability to attract audiences, but game audiences have expanded beyond just competitions. Online video streaming services on websites like Twitch and YouTube allow for game audiences to connect online and participate in the culture from nearly anywhere in the world. Some scholarly attention has turned towards how game viewers may form a unique type of media audience, unlike any studied before, because of their multiple roles as participant, creator, commenter, and viewer. For instance, Gifford Cheung and Jeff Huang dissect the game audience experience into three areas of study: types of spectators, dominant stakeholders that influence spectating, and reasons why viewers enjoy watching games.⁸⁵ The relationship between viewers and games, and how viewers engage with game streams as well as other players, has evoked several studies attempting to describe that relationship. Victoria K. Gosling and Garry Crawford position gamers as a type of fan audience in which the social narratives of their culture exists in everyday life while also amplifying in certain physical locations, such as game tournaments.⁸⁶ René Glas also

attends to the question of how viewers relate to viewing games, and in his study he suggests that game audiences are similar to early cinema goers inasmuch as the viewing experience offers a vicarious experience.⁸⁷ In terms of video games, streamed games invite viewers to experience a vicarious form of play. However, audiences are not only consuming games, they are influencing them. Nicholas Bowman and his colleagues suggest that the presence of viewers interacts with game performance, sometimes even increasing performance.⁸⁸ Throughout their article, they reinforce the often ignored social elements of video gaming, claiming that game viewership and player interactions are integral to the gaming experience.

Several preliminary studies presented at conferences in the early 2010's begin to specifically investigate Twitch audiences.⁸⁹ While their conclusions are broad, they represent a positive first step to discovering what makes game streaming such an unexpectedly rich site of analysis. In a medium designed for personal experience and immersion, enjoying watching somebody else play games seems counterintuitive. While the heart of the phenomenon is game viewership, the other side of the social interaction, namely the game player or streamer, cannot be ignored. If there is a corporeal rhetoric to the game streaming experience, it involves both players and viewers.

Grounded Theory, Rhetorical Analysis, and “Site-Specific Data”

The purpose of this study was to discover and describe how Twitch portrays an awareness of bodies. Because of the digital, online nature of the subject matter, the following research question guided the methodological considerations of this project:

1) What strategies does Twitch.tv employ to direct attention towards humans, bodies, and personalities?

As the subject matter has not been extensively studied, especially in the fields of media and rhetorical studies, a qualitative method was chosen that would act as a guide to understanding the phenomena as they emerged naturally throughout the data gathering process. The “grounded theory approach” (GTA) to qualitative research has a rich, complicated, and branching history, and its sprawling variety of applications make it best described as a methodology rather than a method.⁹⁰ Developed by Barry Glaser and Anselm Strauss,⁹¹ the primary objective of GTA is the creation of “grounded theory,” an explanation of data derived inductively from the data itself with the advantage of being constantly refined through further analysis and additional data. Normally reserved for the social sciences, Christina Haas successfully adopted GTA for her rhetorical analysis of an abortion clinic, suggesting that the methodology is not far removed from traditional textual analysis.⁹² GTA contributes categorization and comparison to traditional descriptive analysis of texts while also allowing for a wider variety of objects of study: GTA may be applied to interviews, documents, spaces, interactions, and nearly anything else germane to a study of human communication.

According to GTA, researchers identify an activity or behavior to study, and, without an *a priori* hypothesis, they begin with thorough observation. Data emerges from observation, usually in the form of taking note of the circumstances and performance of the activity being studied, and subsequently the researchers begin to develop theoretical categories to describe the data. Finally, researchers “dimensionalize” the categories,

meaning they compare the categories with each other, before returning to the data or gathering more data to continue to refine the categories. The goal of the process is to build an explanation of the activity being studied by comparing and describing categories of data, and hence the “theory” is “grounded” to the data. What Christina Haas calls the “site-specific” theory is optimized to explain the particular phenomenon with the potential to compare the theory to other phenomena.

For the purposes of this study, I spent one week familiarizing myself with Twitch.tv and its video content. After achieving a general knowledge of how the site functioned, I utilized the “Top Live Channels” directory which is accessible from the front page. The directory provides a ranking list with links to the most viewed video streams at that moment on the website, and from this list I was able to peruse and view a variety of streaming content. A comprehensive investigation of every popular stream would be impossible even with a large team of researchers, but since the goal of the study was to categorize consistent features found in the streams, I was able to locate said consistencies across various streams and channels in a few weeks’ time. I took notes of any regularly occurring feature found across several streams that pointed towards the human elements of streaming and viewing game content, and after my period of data collection was over, I went through my notes and began to categorize the data. After categorizing my notes, I returned to gathering additional data on Twitch to expand, add to, and revise my categories. I then took note of any relationships between the categories. The categories that emerged from this study were:

1) Showcasing players/streamers: features on Twitch that draw attention to the players and commentators on the video streams.

2) Showcasing viewers: features on Twitch that draw attention to the website users, viewers, or chatters.

3) Showcasing the relationship between players and viewers: features on Twitch that draw attention to the interplay between players/streamers and viewers.

The following section details these categories of data and the relationships between them.

It is important to note that the amount of data, and subsequently my description of the categories, is not equally represented among the three sections. As GTA requires that the categories emerge from the data collected, some categories will naturally emerge as more prominent than others. In this instance, the category “showcasing players/streamers” greatly outweighs the other two in terms data collected, and the length of my description reflects that fact.

Corporeal Awareness and Twitch Streams

Before a thorough description and discussion of the study’s findings, a preliminary understanding of Twitch’s streaming format and visual layout must be in place. An audio/video stream takes place on a web page much like many other online video sites, except for several key differences (see fig. 15). On the left of the screen is a dark grey navigation menu wherein the viewer may navigate between different game streams, and a prominent chat box resides on the far right of the screen which provides a live feed of viewer’s comments. Above the video stream, found at the center of the screen, is the title of the stream, the player’s profile picture, and a description that details

the name of the player/streamer, which game is being played, and the “team” to which the stream belongs. A Twitch team is simply a collection of different streaming channels.

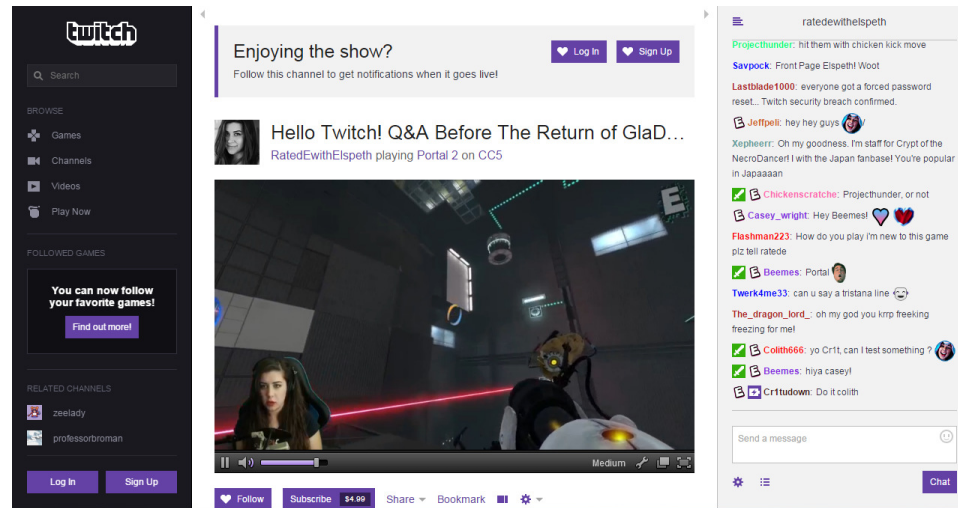


Figure 15: A video stream on Twitch.tv which typifies the streaming format and layout.

The study revealed three distinct categories of data regarding the corporeal nature of game streaming on Twitch, namely how the Twitch format showcases players/streamers, how it showcases viewers, and how it showcases the relationship between the two groups. The absence of visual representations of bodies in some instances might tempt the reader to assume a lack of corporeal presence in these Twitch streams, but I would like emphasize the non-dualistic approach to corporeality this project employs which treats identities, minds, names, and other aspects of personhood as being inextricably linked to bodies. In other words, every human element highlighted on Twitch is fair game for studying the nature of bodies in game streaming inasmuch as a focus on people makes a move away from studying games without acknowledging the human experiences that make them possible. As a final note, I utilize past tense when

describing my findings during data collection, but I switch to present tense when discussing Twitch's general characteristics and functionality or when engaging in an analysis of the findings.

Showcasing Players/Streamers

The majority of the data orbited around how Twitch highlighted the role of the player/streamer as the central focus of the streaming experience. Twitch viewers may often choose between many different streams featuring the same game, and so what sets some streams apart from others is the presence and identity of the streamer. My study revealed five sub-categories of strategies for showcasing the player/streaming on Twitch, and I describe each in turn.

1. Streamer profile images. Each game stream featured a profile picture that accompanies each stream page as well as every search result when searching for a game or streamer. On the stream page, the profile picture occupied a prominent place to the left of the stream title and the name of the streamer. On the search results pages, the profile picture was placed in the bottom, right corner of a screenshot of the game currently being played. The profile picture did not always feature the face of the streamer, although it often did. For instance, many profile pictures were of stream/brand logos or abbreviations of the streamer's username.

Regardless of the contents of the picture, it pointed to the identity of the streamer and it served several functions when delineating to viewers which streams to watch. When searching for a game currently being streamed, each stream channel screenshot was always accompanied by a profile picture. The truncated representation of streamers'

identities was useful for sorting through game streams since a screenshot of the game looked relatively similar across various streams. It is only the profile picture and the name of the stream that set each channel apart. Therefore, the profile picture served a fundamental purpose when showcasing the player/streamer by directing attention away from the game itself—or at least a visual representation of the game—towards the streamer, and thus towards the human element of gaming. In many cases, the profile picture was of the streamer's face or upper body, thus tapping into corporeal aspects of the streamer that may draw viewership, such as physical attractiveness, production quality of the photograph, gender, race, etc. While seemingly innocuous, these identity clues may have some influence on whether viewers choose one stream over another. For instance, there is a very large community of female streamers on Twitch, and their popularity might speak to the desire from the gaming community to watch women play video games. Whether attributed to voyeurism, the male gaze, or simply perhaps a desire to support breaking away from the stereotype that only males play video games, the simple fact of the matter is that a profile picture which delineates identity traits such as gender may influence viewership.

2. Streamer labels. While the title of the stream sometimes changed from one moment to another, the tagline description underneath the title and to the right of the profile picture offered consistent insight into several important characteristics of the stream (see the tagline description underneath the stream title in fig. 16). The description always followed the format of “streamer” playing “game” on “team,” with each name or title being a bright purple color indicating that they may be clicked to see more content.

For instance, one description seen during the study was “RatedEwithElspeth playing Portal 2 on CC5,” whereas RatedEwithElspeth was the streamer, a popular female Twitch personality, *Portal 2* was the game, and CC5 was the team—or the collection or organization of other streamers—with which RatedEwithElspeth affiliates.

Much like the profile picture, the fact that the streamer name is the first piece of information provided to viewers is indicative of the person-centered approach to gaming on Twitch. The game being played may change from day to day, but the unifying element of a game stream is the player. The streamer’s username is more than just a substitute for their “real” name; while on Twitch, the username represents the streamer’s corporeal presence in the stream, delineating the difference between the game itself and the streamer’s personality, appearance, and overall physical occupation of the game space. “RatedEwithElspeth” is the person players are watching, considering that often there are many hundreds of different streams of the same game. It is unsurprising, therefore, that the username would be placed first before the game being played so that players may distinguish by streamer first and game second. While viewers have many dozen, or sometimes hundreds, of choices for watching the same game being played, it is the streamers’ names that distinguish between the great varieties of content available.

The team name is another human element prominently featured on the website, although it deserves more description here. A Twitch team is a collection of different streamers who have unified together under a broader brand or title. For example, one popular team is Elite Gaming Network, or EGN. EGN is an organization with individuals governing how it is run and which streamers may join the team. It includes over fifty

streamers so that if viewers appreciate the content on one stream they may see what other streams are available on the same team. Much like streamer/player names, teams and team names present a move away from a game-only focus for streaming content to a person-centered approach in which people are at the forefront. But unlike streamers' usernames, the team highlights a collection of people unified in types of content, games played, or personalities. Corporeal presence does not need to be limited to the individual body of a single video game player, and instead it might be also understood as a group of bodies that, while not visible on the current stream, are nonetheless accessible on their respective streams. The current streamer might attract most of the viewer's attention, but the team name acts as a reminder of the many other bodies currently being heard or seen on the various other streams on Twitch.

3. Streamer video. The website hosted a great variety of gaming content, but one of its most popular features was that many streams included a video feed of the player. Usually appearing in a corner of the video feed, the player appeared either in a boxed-off area or a green-screen overlay much like a weather reporter on a television news station. While other elements of corporeal awareness deserve recognition and analysis, such as those already discussed, the video feed of players' bodies was the most salient sub-category to the topic at hand. With the inclusion of video feeds of players, viewers are no longer just watching games, they are watching people, and the player's movements, facial expressions, body positions, gestures, expression of emotion, gender, race, and clothing are all on display as fundamental aspects of the stream's content.

In some more rare instances, several bodies were present on the screen at a time, such as in the following example from an international *Hearthstone* tournament (see fig. 16). The torso of the female announcer occupied a portion of the bottom left of the screen. It was her stream and self-fashioned brand that formed the most visually distinct element of the image, evidenced by the video stream of her torso and face being green-screened and more central than the other two bodies present on the screen.



Figure 16

It is necessary to note that this tournament was being streamed on many different channels, and so it is the announcer's brand and visual image that distinguished her stream from the rest. The other two people on the screen were the players facing off in the tournament match with the male on the left being shown in a live video feed while the male in the top right being represented as a static image. The images of people on the

screen filled a significant portion of the screen real estate, only further highlighting the focus on people and their identities.

Unlike when playing a game at home, a game on Twitch featuring a video feed of a player or announcer is not only seen but also occupies the game space. Their bodies enter and inhabit the video game, and their specific placement on the screen demonstrates an awareness of the need to be a central focus of entertainment while not hiding any pertinent gameplay. With streamers within the visual space of the game, their bodies offer a stark contrast between the bright, digital, and stylized images of the game and the grounded, physical, and canny presence of streamers' bodies. In other words, by virtue of appearing different or out of place, the visual presence of bodies further showcase a general awareness of the corporeality of games. They are not the game, but they are in the game, and "they" are the physical, living, breathing bodies of actual people.

Video feeds of players are sometimes problematic to analyze inasmuch as they bring to the forefront some of the identity politics and conflicts currently present in gaming culture. For instance, as mentioned above, female streamers and players were not difficult to find on Twitch, and streams hosted or games played by females sometimes made up the most popular content on the website. However, several of these streams featured video feeds of women in sexualizing outfits, with camera angles targeting breast cleavage with low-hanging tank tops, or many other portrayals that are difficult to describe or analyze without delving into a more complete critique of gaming culture and gender politics. However, the visual presence of sexualized streamers only further justifies the corporeal awareness on Twitch inasmuch as the popularity of such streams

speaks to the fact that viewers watch Twitch streams not just for games but also for the visual presentation of streamers. Sexualizing outfits and camera angles remove any pretense that viewers are primarily watching streams for the gaming content. Instead, it frankly addresses the point of Twitch: viewers watching *people* who happen to be playing games. Video feeds of players may influence viewership, especially when such complicated and conflicted aspects such as gender in gaming and sexualization appear as some of the culturally problematic strategies streamers use to attract viewers.

4. Streamer audio. While related to video feeds inasmuch as video allows for viewers to see player's talking, streaming audio may be divorced from video because many streams only included audio for players or announcers to communicate to viewers. In competitive tournaments, announcers' voices commentated on players' actions in the game, and in typical or casual gameplay the audio feed allowed for a less technically prohibitive entry point for streamers to communicate to viewers since video equipment costs significantly more to purchase and maintain than audio equipment.

Perhaps the most salient element of the audio feed, in both audio-only and audio/video feeds, was how players referred to themselves and the games they played. Perhaps because of the player-centered focus of Twitch content, players rarely described what is happening in a game in terms of a third-person or removed perspective. Instead, streamers tended to focus on first-person language when referring to their game characters or actions. For instance, in one stream the player was not performing as well as she thought she could, so she repeated, in one form or another, "I'm not doing so good today." When her character was being attacked, she stated, "Ahh! They're getting me! I

gotta get out of the way!” She always referred to her character’s actions as her own, and she consistently described what was happening in terms of her choices and performance. Similarly, when in competitive tournaments, announcers referred to the competing players or teams by their individual names, and when a game character underwent some action such as being attacked, announcers described the events in terms of the players: “They’re attacking! They’re attacking! They’re pushing them back! [team] CDEC is finally making some headway after [team] DG destroyed their first push.”

Players’ actions took precedence over the narratological or third-person approach to describing the actions taking place in the game, and the audio feeds consistently focused on players, their choices, and their identities. In a digital space wherein many hundreds of actions are being performed per minute, the audio feed contextualizes those actions as extensions of the player’s body, and said contextualization occurs through the player’s body by virtue of it occurring through the spoken word. When a character charges towards a goal, artfully attacking enemies that enter its path, and then succeeds in the game, the success is not attributed to the skill of the character but to the skill of the player, and the player’s voice confirms that fact by speaking in the first person to narrate what is happening.

5. Streamer places. Also related to video feeds, but deserving of its own sub-category given the amount of instances found in the data, was the presence of extra-human elements in pictures and video not related to the games being played. This sub-category includes the presentation of streamer’s rooms or apartments in the backgrounds of video feeds as well as gaming accessories such as expensive gaming chairs and

headphones. Without a green screen, the space behind streamers in video feeds was often visible, and its presence emphasized the contextual nature of gaming: gaming takes place in a real space, not just on a screen. While many streams only included an audio feed or a green screen video feed, many others presented clear views of where players were sitting, what was hanging on their walls, the size of the room they were in, etc. For instance, one stream featured not only a video feed of the player, but also showed the gaming space: a red couch where the player was sitting, the gaming headphones and microphone resting to the player's head, the slightly unkempt room with various papers or articles of clothing on the couch and floor, and the decorations on the wall behind the player.

The presentation of place provided further evidence of the embodied nature of the gaming experience, even on game streams, so that viewers not only watched the game or the player, they also were allowed a glimpse into the living space of the streamer. Viewers may figuratively enter the physical spaces which contextualize the video gaming experience, and the existence of such places, or at least the visual identifiers of such places, contrasts against the hyper-real, digital, and stylized spaces seen in games. The visual portrayal of physical gaming spaces announces the grounded, corporeal reality of gaming which is, as stated above, that gaming exists in real places inhabited by real people, not just characters in fantasy locations on a screen.

Showcasing Viewers

While not nearly as prominent to the overall design of the website, viewership involvement has carved out a space through which stream viewers may participate as

distinct, human elements to video gaming on Twitch. My study revealed two primary sub-categories of data related to the topic at hand.

1. Viewer labels. Just as usernames are a required element of being Twitch streamer, usernames are a prerequisite to participating in the large chat box to the right of the video stream. When creating a Twitch account, the username is the first piece of information the viewer must fill in, and the username allows for viewers to participate more fully in the Twitch culture. A viewer cannot subscribe to, mark as a “favorite,” or follow a video stream without a username, and thus it acts as a portal into interacting as an individual on the site.

The username not only permitted a variety of activities on the site, the actual name itself may become a mark of identity. In other words, the username becomes the viewer’s name on the site, an easy to miss element of the Twitch community unless one pays attention to how streamers refer to their audience. Unlike video content that is hosted, the live streaming video on Twitch let streamers interact with individual viewers, and streamers often spoke to those watching by referring to individual usernames. For example, when playing the newly released game *Bloodborne* to 557 viewers, the streamer TangentGaming was responding to viewer questions, often including their usernames in his responses: “Forbjork, do I like the sack guys? I love the sack guys.” Usernames are a salient identity marker on Twitch, thus avoiding the greater anonymity on other video sites such as YouTube. Through this design element, viewers are more than just a number or statistic at the bottom of the video stream declaring how many people are currently watching. Instead, the username as seen in the chat box humanizes

viewers and the back-and-forth between viewers chatting combined with a streamer's mentioning of viewer's usernames during the stream mark it as more of a community event rather than simply a top-down content delivery system. The presence of usernames are so pivotal to the experience that many streamers set up second computer monitor screens so that they can watch the chat box as attentively as they are watching their own gameplay. As an aside, one formerly popular streamer visited my home, and when seeing my computer and monitor, as well as learning about this project, he remarked that he was disappointed that I did not have a dual monitor setup since it is the norm for Twitch streamers. The chat box and the usernames that inhabit it merit a dedicated screen so that streamers may more frequently interact with viewers as people with names instead of an anonymous audience.

The chat box occupied a large portion of the video stream screen, taking up approximately 25% of the screen when not in full screen video mode. While many sites place their comment sections underneath the video content, Twitch's live feed of viewer chatting appeared to continually draw attention whenever a new message was posted. Individual viewers expressed their thoughts through text and emoticons, often responding to what is happening in the game or something the streamer said. The chat comments align with the human-focused elements of the website's design, allowing yet another avenue for the people involved in the entire process, from streamers to viewers, to manifest both their presence and their identity. A subscriber or viewer count number represents a mass of faceless individuals, but the chat is where that mass is allowed to have a voice, albeit a small one.

2. Viewer presence in streams. In some of the more popular streams, algorithms were in place to recognize whenever a viewer subscribed, favorited, or donated to the stream, and any one of those actions would be rewarded through a pop-up announcement on the video stream (see fig. 17).



Figure 17: Some streams incentivize donations or subscriptions by having usernames appear on the stream, sometimes with messages written by the viewer.

The pop-up would often include the username of the viewer, and sometimes, especially in the case of donating to the stream, the viewer could include a message to appear on the video stream itself. In a popular stream with many hundreds of viewers in chat, receiving on-screen recognition meant that everybody actively watching the stream saw the username and the action the viewer took. Such actions were often recognized by the streamer/player with an expression of gratitude or a response to the message included in the donation text. In this small way, viewers were sometimes not limited to the chat box

and could become a part of the video stream itself through their participating in one way or another.

With the ability to enter the space of the video stream, viewers are not only casual consumers but contributors to content. A chat message may or may not be seen by other viewers, especially in streams with massive audiences and large amounts of chatting viewers, but by entering the stream through favoriting, donating, or subscribing, viewers' usernames and messages are the content being consumed. The human element in the stream is not limited to the streamer, and the presence of visible audience participation within the video highlights Twitch's human-oriented design.

Showcasing the Relationship between Players and Viewers

While the chat box supplies plentiful opportunities for viewers to address the streamer/player, it does not inevitably signify an interaction between the two. However, there were subtle, yet consistent, instances of interactions that acknowledged the relationship between players and viewers. Perhaps most significant of these was streamers addressing individual viewers. Among the barrage of chat text in the more popular streams, the players/streamers would often take time to look at the chat box and answer specific questions or address particular viewers. Oftentimes streamers use a second screen, apart from the monitor with which they play video games, to keep track of the viewers' chat messages. In streams with a video feed of the streamer, the feed shows the streamers sometimes glancing to the left or right where the second screen is set up so that they can seamlessly keep track of their gameplay while also reading chat messages. For instance, one streamer placed his camera above his gaming monitor and placed a

second chat screen to his right so that it was readily apparent when he was reading viewers' messages and responding to their questions and comments (see fig. 18).



Figure 18: Streamers will often use a second screen (apart from their game monitor) to read chat messages.



Figure 19: A streamer takes a break after 12 hours of streaming to talk to his viewers and ask them what they would like him to play next.

His eye line and turn of his head were visual cues that he was interacting with his audience, and after doing so he would usually make a comment about something a viewer had written. That same streamer, after twelve consecutive hours of streaming, ended a game and took his hands away from his keyboard and mouse in order to talk to the viewers with his full attention. He gestured with his hands, looked straight at the camera, and asked several questions including a request for what he should play next. He then read the chat responses to gauge his viewers' reactions (see fig. 19).

The physical feedback the streamer through the video stream transforms the interaction into something human and recognizably physical. The eye movements to read chat messages, the head shakes, the hand gestures, and the various non-verbal communication cues present in face-to-face communication all denote that the interaction is between people instead of from a content creator to a nameless, anonymous audience. The physicality of the interaction, besides foregrounding the streamer's corporeal presence, humanizes an otherwise sterile and disconnected communication environment. Although the messages which respond to the streamer do not include the same level of non-verbal feedback, the streamer's behavior is sufficient to recognize the humanity and existence of the non-visible participants.

These interactions are not isolated incidents, and it was the frequency of these interactions across a wide variety of different streams that made them stand apart from gameplay commentary: many of the most popular streamers made a consistent effort to respond to and interact with individual viewers. In these interactions, it was not

uncommon for the streamer to mention the viewer's username and wait for a response from that same user later in the chat box.

For example, after one German streamer finished a match of *League of Legends*, her video feed box changed positions and increased in size marking that this was time for her to interact with her viewers (see fig. 20).



Figure 20: Streamer's response to highlighted chat message: "I don't understand any words.' Poor ninja; you're watching a German stream!"

After laughing, she read the message out loud followed by the comment, “Poor ninja; you’re watching a German stream!” It is the informality and the prominence of the back-and-forth that stands out in this instance, as well as in many other similar moments on Twitch. On a website dedicated to streaming video games, the games take a backseat to the relationship formed between streamers and viewers. The questions, jokes, and discussions take precedence over games. The relatable humanity of these interactions make the relationship between streamers and viewers an attractive reason to visit and

participate in the website, and where there is a human relationship there are people, living and breathing people, who stand apart from the games being played. Corporeality exists not just in where bodies are sitting, standing, or otherwise existing; corporeality is the overall emphasis of people over character, of bodies over pixel sprites and models, of humanity over the digital space of games. The informal conversations that arise in streams between the player and viewers showcase the corporeality of the stream by grounding the interaction in the presence of real people.

Lastly, apart from the responding to chat messages and the video feed highlighting the streamers' attention to viewers, some streams also utilized advertisement space in the video stream to indirectly interact with their audiences. These advertisements were in the form of a small box with rotating logos and promotions from a stream's various sponsors (see fig. 21).

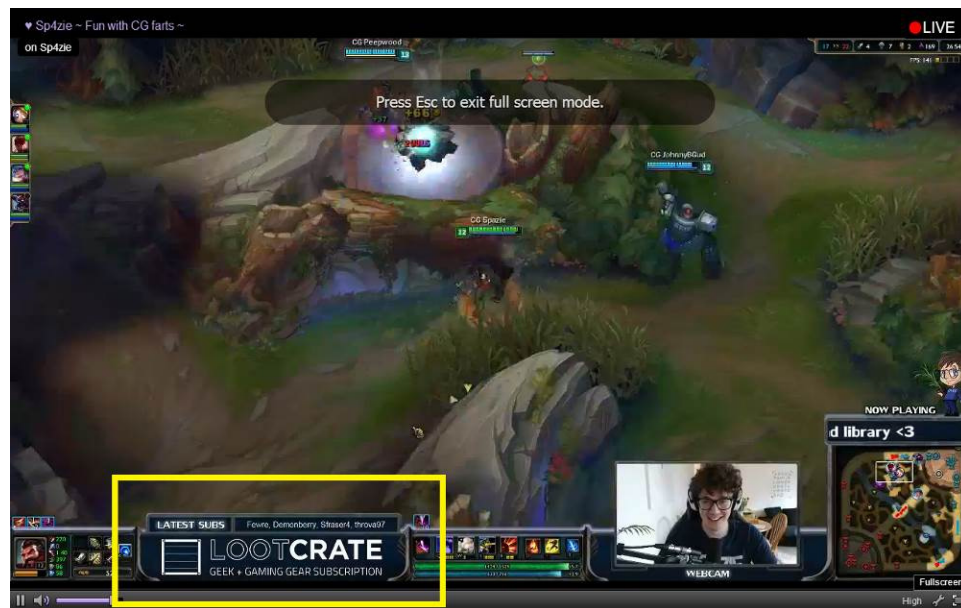


Figure 21: An advertisement added by the streamer.

For example, rotating text in one stream advertised Logitech computer equipment, Intel processors, and the streamer's logo. The sponsorships, it can be assumed, benefited the streamer while also directly addressing the viewers as consumers. This formal recognition of the relationship between players and viewers is less of an interaction and more of a visual identifier of the importance of the streamer-viewer presence in the game space. Without the viewers, the streamer would not have been sponsored to advertise for Logitech or Intel, and without the sponsorship the viewers might not have been able to watch the streamer if s/he could not afford to dedicate the large amount of time game streaming requires. While such a symbiotic relationship seems logical, it was mostly implicit in many of the streams viewed for this study. The advertisement spaces delineate that relationship as a formal aspect of the video stream.

Interconnections between Categories

Twitch's design includes various elements that support my claim that gaming on Twitch is about people watching and interacting with other people, thus grounding video games in the corporeal, embodied context in which they actually exist. Streamer's profile pictures acted as summaries of personhood, or a minimalist representation of the streamer's corporeal presence, and their placement directed attention away from the game being played and refocused it on the presence of the player. By highlighting characteristics of bodies, such as gender, race, age, and other physical characteristics, Twitch lets players choose game streams based on the corporeality of the player instead of the game being played. The labels or names for streamers are ubiquitously showcased

before the title of the video game being streamed, and labels such as usernames and team names suggest that the corporeal presence of players on Twitch supersedes specific mention of the streamed games. Video feeds of players place players' bodies directly into the game stream, and their visual presence, including movements, facial expressions, gender, race, and clothing, make up a significant element of the stream. The contrast between the digital or cartoonish design of the games and the video streams of players offers a stark contrast that draws attention to itself: players' bodies do not blend into the background, they are one of the primary visual elements of the stream window. The occasional inclusion of sexualizing outfits or camera angles further emphasizes the body-focused design of Twitch in which people watch people who happen to be playing games. Streamers' audio presence not only adds to their corporeal presence, but their particular words or phrases re-direct attention to the streamer by using first-person pronouns to describe the action taking place in the game. Without a green screen, video streams of players also allowed visual access to the physical spaces the players inhabit. Viewers may witness the actual, physical places in which gaming takes place, suggesting that gaming does not take place on a screen but in lived spaces such as living rooms and offices.

Viewers are able to pronounce their humanity and individuality through their usernames and chat comments. Unlike a simple statistic at the bottom of the video detailing the current number of viewers or subscribers, the chat box showcased the people watching the stream. Even the size and location of the chat box, which resides directly to the right of the video stream, reject any pretense that viewers somehow less important in the viewing experience. In fact viewers may watch the video stream and the chat box in

tandem, making the usernames and comments, and the people behind them, a fundamental aspect of the viewing experience. Similarly, viewers are allowed to enter the video stream by donating, subscribing, or favoriting, which occasionally let viewers add personal messages to pop into the stream for all to see. Both streamers and viewers would override the game content with their own identity markers, be they usernames, messages, or video feeds. The interactions between players and viewers humanized the experience by closing in the relational distance with people who often are many thousands of miles away from each other. Whenever the streamer answered a viewer's question or when viewers responded to the streamer, all watching may witness the person-focused content at work.

Two broad comparisons can be made between the categories described in this study. First, all categories highlight naming, labeling, and self-identity as primary factors in the materiality of playing/viewing games on Twitch. When physical presence is not feasible, it is understandable how other methods might be employed to represent both the individual and collective humanity of the gaming experience online. All three categories of data that showcase personhood on Twitch (showcasing streamers, showcasing viewers, and showcasing their relationship) include data that present the importance of labeling and naming as methods to communicate identity and human presence. Players/streamers named and labeled their online personae through their Twitch channel name and profile picture. Viewers utilize their usernames and their interaction options—subscribing, donating, and favoriting—and by so doing are able to make their presence on the stream.

The relationship between streamers and viewers relied on naming and labeling in order to create individual interactions among a cacophony of participation on all sides.

Second, as expected, instances of how Twitch streams showcase the player/streamer greatly outweigh the number of data points found in the other two categories. Twitch is a streamer-focused enterprise, and it is that emphasis that distinguishes it from other online venues to view gameplay content. While it may have supported my argument to have a more symmetrical representation of data from both streamers and viewers, it would have diluted the fact that Twitch is more of a venue for streamers' and their content than viewers and their participation. Perhaps it is a result of the somewhat passive experience of watching gameplay content, but Twitch's design and content production relies on streamers and the human presence they bring to digital gaming. As a result, I gather significantly more data originating from streamers/players than any other source, and it is necessary to note that, if there is a human element to Twitch, it primarily comes from the presence of players/streamers.

The various arguments made throughout the analysis may speak to larger issues of bodies and humanity in gaming, and it is at this point that I wish to turn attention to those issues in order to suggest what may be learned from the findings. What we find here is that the presence of people's bodies need not be limited to being in the same physical location in order to be compelling to players and viewers of video games. Even the smallest, perhaps what some would call insignificant, representation of people's corporeal identity such as usernames denote the presence of bodies. The nature of video games has led to the invention or invigoration of various strategies to place people into

the process of games. People are not satisfied with just the game; they are interested in the people surrounding it: the players at the helm and the viewers who appreciate the performance. Twitch demonstrates what the popularity of multiplayer games, including those online, have been suggesting for years, specifically that gaming is a method of human interaction and communication, and one of the most compelling aspects of games is how people play, view, comment, and otherwise relate to each other. Within this emphasis on people implicitly lies the importance of corporeality in gaming. Video games are, by nature, digital, mechanical, and electric. They seem removed from physical experience, instead widely described in cultural discourse as a series of 1's and 0's rather than something natural or physical. Perhaps because they feel so alien or ethereal do humans necessitate the acknowledgement of humanity in order to tie gaming back into what humans are inherently most familiar with: their own lived experiences with bodies. Even within the most abstract method of human interaction in gaming, that being online instead of at the same location such as in a living room or gaming cafe, gaming culture emerges with methods of showcasing of humans and bodies.

The purpose of the study was to discover what strategies Twitch employs to direct attention towards humans, bodies, and personalities, and the findings of the study provide strong evidence that game streaming as seen on Twitch necessitates a human touch, so to speak, to ground the online game viewing experience to something familiar. The general design of the website, and the content streamed therein, directs attention to the human, corporeal, offline realities within which gaming occurs. Perhaps in order to better conceptualize and contextualize the findings, it is helpful to imagine what Twitch is

specifically not: a website that hosts videos of games being played without commentary, without video of the player, without a chat box updated in real time. Such content can be found on other, somewhat less successful, game video websites. It is the fact that the streaming is live, the player is visible/audible, and the viewers can participate that creates a corporeal awareness within the game streaming website (see fig. 22).

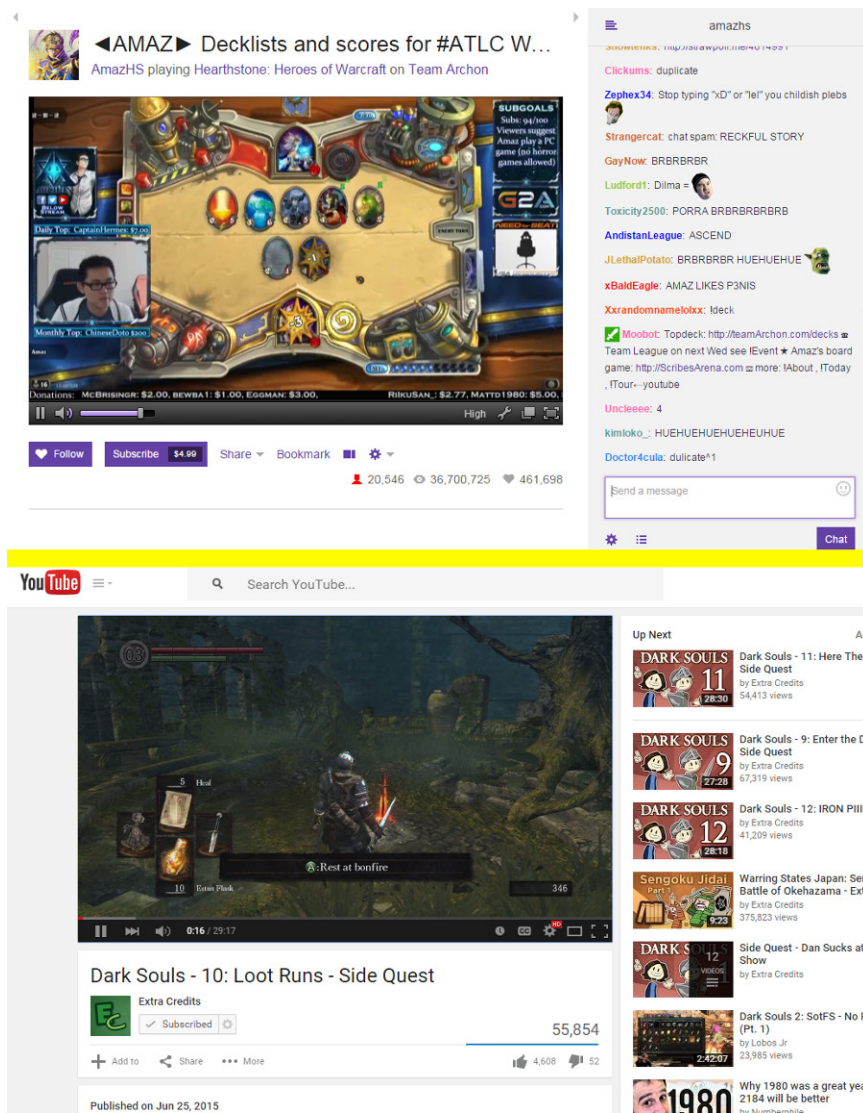


Figure 22: Top: Twitch.tv. Bottom: Youtube.com. The contrast between the two designs emphasizes the human-oriented design of Twitch.

Corporeal awareness arises from the extent to which Twitch showcases people more so than games. Yes, at its most simplistic description Twitch is a game streaming website. But the sheer number of data points surrounding the presence of people, human beings, and bodies speaks to the corporeal nature of gaming, even if participation does not include actually playing the game. In more ways than one, as the findings of this study suggest, game viewership is not just about watching games being played. It is about watching something with other people, not unlike what draws audiences together to watch films in cinemas or a live broadcast of a professional sporting match on television. Streamers do not just play games; they play games for an audience of viewers and fellow gaming enthusiasts. What draws people to the phenomenon of game streaming may be a complex and worthwhile area to research, but perhaps my study demonstrates that one element that binds the disparate elements together is not the games, but the bodies participating together to watch and play games.

Twitch.tv and corporeal awareness exhibit the three I's of digital viscera in various ways. First, in terms of interactivity, the entire site is one of interacting between people, on a digital platform, regarding games. Perhaps those streamers and viewers are so familiarized with the gaming convention of interactivity that, as it extends into the website experience, it feels like it fits the theme of gaming. Second, for intuition, the players on Twitch include some of the most skilled in the world, including professional, competitive players. Their intuitive control of the games, often at a speed difficult to reproduce by casual players, is one of the most attractive features for viewers. Third, for immersion, the website plays with the idea of immersion inasmuch as the games being

played tend to be quite immersive, but the website highlights the permeability of the magic circle, especially as streamers and viewers pop into and out of the game's fictional world to comment and react to it.

Several implications arise from the conclusions offered here, including new directions of study. First, the question with which I began this chapter regarding the strategies Twitch employs to direct attention towards humans, bodies, and personalities, is settled only insofar as my findings suggest that such strategies exist and are in full display throughout the website's design. While I propose several specific strategies, several of which are undeniable to even untrained observers, the overarching implication is that Twitch, and by extension other streaming sites, use various methods to draw viewers' and players' attention to the human element of gaming. Second, further questions may be asked regarding the corporeal awareness in video game streaming, such as the following:

- 1) How do game streaming viewers think or feel about corporeal awareness on game streaming websites?
- 2) Why do video streams of players, in particular, hold an especially important place in game streaming above other strategies aimed at bringing awareness to bodies?
- 3) How are culturally coded aspects of corporeality, such as race and gender, constructed through game streaming?

These and other questions stemming from this project would further establish the nature of corporeal identity in gaming and game streaming. Third, the particular strategies

discussed in this chapter suggest that humans feel a need to insert their corporeal identity into that which is abstractly digital, perhaps in order to make it more familiar to their day-to-day embodied existence. Therefore, researchers would be wise to direct future research endeavors to studying other domains, online or otherwise, in which similar phenomena occur, including in multiplayer gaming, online social media, virtual tour websites, and cellphone interactions, among many others possible avenues of investigation.

While these and other implications merit further description, and hopefully extensive investigation, the conclusions drawn from this study implicitly point towards other, even more physically manifest, aspects of gaming corporeality. Players' bodies have infiltrated online spaces, but the games still takes place on the screen, in one form or another, meaning that they conform to traditional conceptions of players' relationship to games: players interact with an input device, the device allows a computer to make calculations that appear on a screen, and the player receives that feedback to continue their gameplay decisions. There exists, however, a form of gaming that straddles the barrier between traditional console gaming and a form of gaming that moves beyond the screen entirely. Motion-controlled gaming, while having a history stemming from the arcade era, expanded in popularity in the 2000's, and now exercise games are a common feature of many players' homes. The following chapter investigates how players' bodies transform into games themselves through a process of motion-controlled gamification.

CHAPTER 4:
GAMIFYING PLAYERS' BODIES AND *WII FIT U*

Given the somewhat autoethnographic elements of this particular study, a personal anecdote seems an appropriate segue into the subject matter. When I started running in 2012, I could not even finish one mile. I was never very athletic growing up, failing at most sports and embarrassing myself when family or friends play pickup games outdoors. I never scored a single basket in my youth league basketball team, and I dropped out of the baseball team because I kept missing the ball and getting hit in the head. When I lived in Honduras after my first year at college, I tried my best to keep up during soccer matches with friends, but I would often relegate my efforts to defense in an attempt to stay away from the ball. It is probably not surprising that I felt at home consuming popular culture from the safety of my living room, such as movies, books, and video games. It was after I finished my MA thesis, a study of religious films, that I made two conscious life changing decisions: I would return to playing video games after a seven year hiatus, and I would begin learning how to be more athletic. Returning to video games was easy enough after fumbling around with an Xbox 360 controller for a few days, but it took over a week before I was able to finish running one mile without stopping to rest. It took several more weeks before I ran two consecutive miles. That summer, I began to run four miles at a time, a plateau I did not surpass until moving to Minnesota for my PhD studies.

A fundamental tool during my runs was an app for my phone that tracked my route, pace, and distance. By utilizing the phone's GPS capabilities and its built in accelerometer, the app could update me through my headphones about various aspects of my performance. After finishing a run, the app recorded the distance and any personal records I had broken. The app had essentially gamified my morning runs, complete with the same progress bars and experience points that I would see in any fantasy RPG or action video game (see fig. 23).

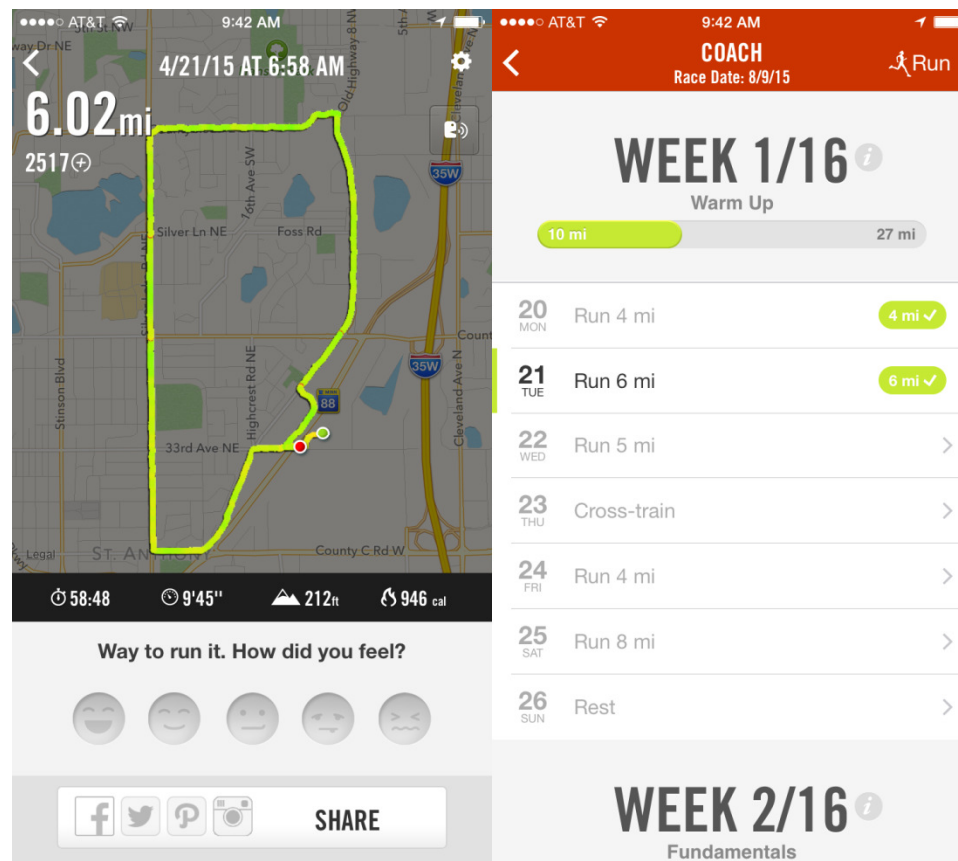


Figure 23: Two screens of the Nike Running app showing one of my runs and progress.

The game was not played on my phone; the game was the physical experience itself within the context provided by my phone's app. Of course, very few users of the app would describe it as a game regardless of its game-like characteristics. But what if a similar approach to gamifying exercise and fitness was found in a traditional gaming platform? What happens when gaming leaves the screen and takes place primarily in the player's body? How would the gaming experience in the living room interact with the rituals of everyday living with a body attempting to transform itself?

Motion-controlled gaming saw a sharp rise in popularity with the release of Nintendo's Wii console, selling more systems in the first half of 2007 than the Xbox 360 and the PlayStation 3 combined.⁹³ Both the Xbox and PlayStation quickly developed and released motion-controlled peripherals, the Kinect and Move respectively, in order to take advantage of consumers' seemingly endless appetite for this novel form of gameplay interaction. With the rise in popularity of motion-controlled gaming came a variety of exercise or sports-oriented games that appeared to contradict the stereotypical image of the docile video game player. However, as Ian Bogost clarifies, exercise games have existed since the Atari 2600 and video arcades of the 1980's,⁹⁴ and continuing through the 1990's with Nintendo's Power Pad controller and the Japanese rhythm games of the 2000's, exercise games have always had a place in gaming culture.

Although exercise games, and the general gamifying of bodies through exercise, present fruitful avenues of discussion, up to this point the majority of research on exercise video games has primarily concerned itself with one overarching concept: effectiveness. With the advent and implementation of motion-controlled gaming on

popular consoles with the Xbox Kinect, the Playstation Move, and Nintendo's Wii and Wii U, researchers in the health sciences have begun to inquire into the possibility of these games for improving health and fitness. Most of the research on exercise games targets health and education of children. For instance, several studies have examined the utility and effectiveness of exercise games for school-aged children, such as comparing Nintendo Wii games to traditional physical education lessons,⁹⁵ how *Wii Sports* and *Dance Dance Revolution* may increase the energy expenditure of children,⁹⁶ or whether motion-controlled games may increase activity levels.⁹⁷ Other studies target the possible benefits of motion-controlled and other exercise games for elderly adults, like how exercise games may accommodate various levels of user mobility and physical ability,⁹⁸ or how motion-controlled games may be a low-cost wellness solution for limited-income elderly adults.⁹⁹

While studying the effectiveness of exercise games is certainly beneficial for a variety of reasons, not the least of which is accessing the implied claims that these games are useful for improving or maintaining physical wellness, my project approaches the topic from a more abstract yet theoretical positionality. While motion-controlled games in general, and exercise games specifically, have become a mainstay in gaming culture, there has yet to be a discussion or investigation of the implications of how the player-game relationship changes when compared to more traditional gaming experiences. Specifically, this chapter addresses how "living," instead of "playing," a video game operates in terms of rhetorics of corporeality. The game around which this study is organized is *Wii Fit U*, the most prominent and popular exercise game on Nintendo's Wii

U console. A spiritual successor to the original Wii exercise game *Wii Fit*, the game provides a unique opportunity to study the corporeality of gaming in its most explicit form by virtue of its making the body the site of gameplay. To limit the potentially broad scope of the study, the following research questions guided the methodology and analysis:

- 1) How do various elements of *Wii Fit U* create an embodied experience?**
- 2) How may these instances of corporeal gaming influence how the game addresses and relates to the player?**

The nature of the questions at hand necessitates a method of investigation that allows for direct, personal engagement with the game, including close observation of how it engages a player's typical everyday life. To this end, I engage in a mixed methods approach that combines textual analysis and autoethnography: textual analysis to study the design of the game on the screen and autoethnography to describe how the game interacts with life, spaces, and the body.

I ultimately argue that *Wii Fit U* gamifies bodies, meaning the game, through its audiovisual, interactive, and hardware designs, place the gaming experience in the player's body as opposed to focusing attention and the gaming experience away from the body through abstract gameplay on a screen. In other words, the game is what the body does instead of what the body tells a character on a screen to do. Motion-controlled games, as exemplified by *Wii Fit U*, gamify bodies through the hardware peripherals and screen-guided activities, and several rhetorical terms originating from ancient Greece best

describe the phenomena at work. First, the game utilizes specific hardware peripherals and accessories that create a physically interactive topos in which the hardware provides the necessary spatial context for gamifying the player's body. Second, within the space created by the corporeally-centered hardware, the activities and exercises in the game depend on mimetic associations with widely recognized exercise behaviors as well as the praxis of actual exercises like yoga and strength training. Put simply, the hardware makes a space in which only a gamified body could engage in the game, and the game activities rely on the player's body mimicking or fully performing actual exercises. I conclude by describing the ways in which the combination of topos, mimesis, and praxis redefines the relationship between game and player by gamifying the player's body. Before delving into a more thorough exploration of my findings, I first describe several methodological considerations, followed by the remainder of the chapter in which I discuss my findings and the practice of gamifying everyday life. The final section of this chapter addresses various implications of my findings including how gamifying bodies relates to digital viscera.

Methodological Considerations

The nature of topic at hand invites a more subjective, personal approach to exploring a phenomenon that extends into everyday life. As I ultimately argue throughout this chapter, the majority of the game takes place not on the screen but in everyday practice, and so, in a way, the player's body is the site of the game and thus the site of study. I therefore included elements of autoethnography into the process of gathering data for the analysis, and by so doing I must also occasionally include my personal

narrative as I participated as the subject and player of *Wii Fit U*. Garance Maréchal calls autoethnography a “method of research that involves self-observation and reflexive investigation” that may be a “reflexive accounting of the narrator’s subjective experience and subjectivity.”¹⁰⁰ An outcome of the reflexive turn in ethnography, autoethnography allows researchers to more readily access a level of depth and intimacy of the subject matter than through interviews or other, more clinical, approaches. In particular, analytic autoethnography is a subgenre of the method which positions the researcher as both a self-aware scholar and an active participant in the culture or activity being studied, and it is this approach I adopted when engaging with *Wii Fit U*.

While including such obvious subjective elements into the study might give pause to some readers, I wish to mitigate concern by emphasizing that I ground my findings and analysis in the generalizable experience of the game. I only include as pertinent data that which could be discovered or experienced by most researchers or players. Akin to the qualitative content analysis adapted from Malliet’s method in the chapter investigating third-person bodies, perfect proficiency is not necessary to discover the gameplay experience typical for the majority of players. *Wii Fit U* is very much a game that exists as both living room entertainment as well as behaviors included in day-to-day life, and it would be a disservice to the study to ignore not only a prominent element of the game but perhaps its defining feature. If anything, the autoethnographic elements of the chapter should be interpreted as a boon to the topic and research questions at hand insofar as a strictly screen-oriented textual analysis would only consider those experiences grounded to the game’s digital interface, and it would most likely only include some visual and

procedural elements before arriving at forgone conclusions. The inclusion of an autoethnographic approach serves to highlight how much of the game does not take place behind the screen, but instead as part of the lived experience of a gamified body.

Corporeal Gaming and *Wii Fit U*

Wii Fit U includes many hardware and software design elements that are different than more standard gaming experiences, and therefore a basic understanding of the game's format and equipment must be in place before the discussion of the corporeal nature of playing the game. The previous iteration of the game, *Wii Fit*, for the Nintendo Wii console was one of the best-selling video games of the late 2000s, and so it stood to reason to expect an updated version for Nintendo's newest console, the Wii U. *Wii Fit U* was released at the end of 2013, but it was not available with all of its hardware accessories at most retail locations until January 2014. The game includes the game software and requires, at minimum, the Wii U GamePad and the Balance Board, but it also may utilize the Fit Meter—a prominently featured element of the game's design—and up to two WiiMotes. Each of these pieces of hardware is critical to the gaming experience if one is to play *Wii Fit U* in its entirety.

After the initial setup, starting the game on any given day is reduced to a prompt to transmit data from the Fit Meter to the game via the GamePad, and the rest of the game's options are open for the player to explore as carousel of options through which the player may scroll (see fig. 24). For my exercises, I predominantly used the "select exercise" option under the "training" menu to allow easy access to every activity in the game, although I often also used "personal trainer"—also in the "training" menu—to

simplify the activity selection process inasmuch as that option lets the game software choose the activities based on time available.

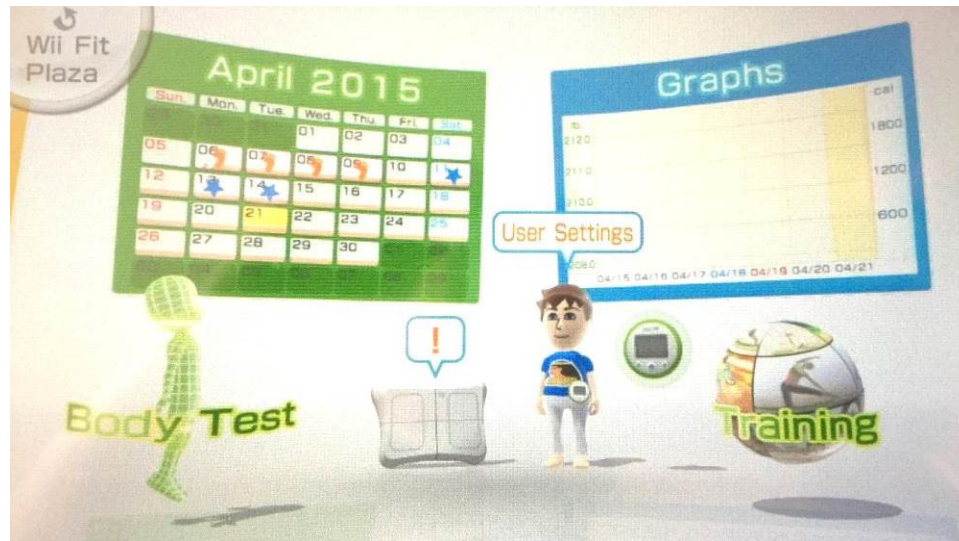


Figure 24: The main menu in *Wii Fit U*, featuring my overweight avatar.

The activities usually require the use of the Balance Board, but many of the activities require the player to use WiiMotes or the GamePad. For instance, the game may monitor the player's form during a yoga pose by measuring how much pressure the right foot is putting on the Balance Board, or a dance routine will require the player to hold a WiiMote in each hand while standing on the Balance Board to track movement and rhythm. A more detailed description of both the hardware and the activities follows in the analysis of my findings.

Hardware Peripherals and Accessories

The hardware of *Wii Fit U* acts to constantly ground the player in real, physical space to emphasize the fact that the game takes place in the player's body instead of on

the screen. The hardware therefore gamifies the body through by creating a rhetorical space, drawing on the ancient Greek concept of topos (τόπος), creating a corporeal gaming experience instead of simply using the body as a method of game control. The term topos or the plural topoi, as used by the ancient Greeks, literally meant a place or location, and it became associated with the concept of argumentative form.¹⁰¹ The association probably arose given the ancient Greek and Roman practices of memorizing lists of topics by assigning them to the mental image of various places, such as in a home or around a city. However, while typically used to describe a rote rhetorical form, various modern scholars have returned to using it to describe the rhetoric of spaces and places, such as Dickenson, Blair, and Ott in the introduction to their edited book on public memory.¹⁰² I use the term in the more modern interpretations, given its literal translation meaning place, in order to describe how the game's hardware and accessories create a rhetorical place in which the game may more fully gamify players' bodies with the activities and exercises that take place therein. In other words, the hardware and accessories gamify bodies by manipulating the context of the place of the gaming experience, specifically by breaking immersion and brining attention to the body's role in participating in *Wii Fit U*.

The game initially influences the topos of corporeal gamification through the Wii U's primary methods of control and input: the GamePad and the WiiMote. The GamePad is a large controller with button inputs on the left and right as well as four additional "trigger/bumper" type buttons on the top (see fig. 25).



Figure 25: The Wii U GamePad, which is 5.3 × 0.9 × 10.2 inches in size. The screen is 6.2 inches measured diagonally.

The button arrangement is typical of other game console controllers, such as for the Xbox One or the PlayStation 4, but what differentiates the GamePad is the large touchscreen and front-facing camera, not unlike a computer tablet. The screen is one of the primary means of interacting with WiiU games. For example, the GamePad screen oftentimes mimics exactly what the TV screen shows, and all of the options in *Wii Fit U* are accessible by touching and scrolling on the touchscreen. The WiiMote was first introduced with the original Nintendo Wii, and the Wii U not only supports its use, the system suggests only using one GamePad while using WiiMotes for additional players. The WiiMote includes several button inputs, but its defining feature is the infrared sensor with which one may point to the screen and move a cursor. The WiiMote also utilizes an accelerometer to track movement and tilt, both of which may be utilized in various parts of Wii U games.

Both types of controllers—neither of which is uniquely used in *Wii Fit U* as they are the standard method of input for most Wii U games, especially the GamePad—rely

on bringing attention to the corporeal and spatial context in which they are utilized. *Wii Fit U* only amplifies that awareness by combining the physicality of the control schema with the focus on the body in the game. The controllers introduce a topos in which the body takes a more central and visible role in the gaming space, thus gamifying the body through several strategies, some of which are particular to the specific type of controller. First, both require physical interaction removed from the abstract control of more typical game controllers. The fatigue in arms and wrists is a common phenomenon when using the WiiMote, and moving the controller as simply a cursor pointer, or more fully with the accelerometer feature, provides a near constant reminder of one's corporeal interaction with the game as well as one's presence in the physical gaming space. Warnings often pop up on the screen to remind the player to be aware of where the WiiMote, and by an arm or a hand, is being moved in order to avoid any collisions resulting in property damage or injuries. The GamePad continues the process of gamifying the physical game space and players' bodies with the design of the controller and the game interface: the design of the menus for the Wii U and the game *Wii Fit U* invite the player to touch the screen as the primary method of inputting commands even though a secondary option for using the direction pad, joysticks, or other buttons is available. Each touch requires players to not only focus on where their arm, wrist, hand, and finger are moving, but the wide design of the GamePad makes it nearly impossible to input commands on the touchscreen without holding the controller with one hand while the other touches the screen. All of these design elements invite actions that remove the player's locus of control from an abstract, immersive space where button presses and finger presses are

forgotten, and instead the game places the player in a corporeally aware, physically grounded gaming topos.

Second, the GamePad reminds players of their physical presence by taking photos of the player's head and face, thus breaking immersion entirely in favor of drawing attention to the corporeal topos of the situation. The entire process contributes to this awareness, not least of which is the photo itself. The game prompts the player to hold the gamepad at arm's length and point the camera at the player's face. A line guide appears on the gamepad screen while showing a live video feed of what the camera is capturing. After a short countdown, the GamePad takes the picture, but it queries the player if they would like to re-take it, and the option to do so is confirmed with a touch press by the player's finger on the screen. The game is direct at calling attention to not only players' presence in the game space but also targeting their appearance as a key indicator of their overall health, and the players' relationship to the game is defined by their balance, steps, weight, and facial appearance. In an act that few if any mass media have ever attempted, *Wii Fit U* often visually reminds players of the physically-focused nature of the game, thus using players' own physical appearance as a strategy to establish a corporeally grounded topos of gaming.

Third, the WiiMote, through its use in various *Wii Fit U* activities, functions as an arm and body monitoring system, and the feedback the game provides regarding the use of the WiiMote places players' physical movements into the topos of gaming. In a gaming culture almost defined by limited physical movement to control the game, the WiiMote emphasizes players' physical involvement in real space to establish a topos in

which embodied gaming is more acceptable. For instance, the dance activities require two WiiMotes, and they primarily use the accelerometer feature in the controllers in order to monitor where hands are, where they are moving, how fast, and in what direction. The game instructs players to move their arms faster or slower to match the tempo of the dance, it tells players how and where to move their arms and hands and in which way to flick their wrists. All the while players must maintain a firm grip on both WiiMotes, and, in my personal experience playing the game, the tension in my hands focused my attention on my physical body instead of being immersed in the game space. In the middle of a dance, players may not pause or stop the game without ruining several expected movements of their arms and receiving negative feedback from the game. The combined elements of arm and hand motion feedback in this and many other instances in the game establish a clear spatial context and expectation that this game occurs in both real space and the player's body.

While both the GamePad and WiiMote are required to participate in *Wii Fit U* activities, both are standard controllers used for other games. *Wii Fit U*'s defining piece of hardware is the Balance Board, a 10 pound, 20 inch wide platform that measures pressure from four floor sensors (see fig. 26). After starting *Wii Fit U* for the first time, the game prompts players to stand on the balance board, and the textures of the hard plastic cover not only help players not slip, it serves to target players' attention on body and leg position. The board works only when standing on it, and so the simple act of standing for longer than a few moments, nearly still, with no place for feet to move or shift, creates an odd sensation of awareness of movements and the body's location in

space. Many Wii and Wii U games require the player to stand in order to safely move the controllers, but the Balance Board institutes a level of discipline into motion-controlled gaming that is so different from its comparable counterparts on other consoles that it merits its own consideration.



Figure 26: The Balance Board, measuring in at $2 \times 20 \times 12.5$ inches and weighing 10 pounds.

While on the board, players are not allowed to move from that one 20 inch spot with their feet in their respective, somewhat roughly textured, places, and the discipline involved with standing on the Balance Board acts as a background, almost unconscious, clue as to the physical nature of the gaming experience.

The board is used for almost every activity in *Wii Fit U*, but the yoga exercises in particular utilize various aspects of its functionality. For example, one pose requires

players to stand on one foot while on the board. The board can sense foot placement and balance stability, and so the game monitored my shaky, unfamiliar stance while also giving feedback as to when I should switch feet. The monitoring function most often took the form of keeping a red dot in a circle on the TV screen representing my weight distribution, and the goal would be to shift my balance or remain stable enough to keep that dot within the designated space. If I was leaning too far to the left, the dot would move to the left near the edge of the circle on the TV screen, and a voice would remind me to focus to return the dot to the center of the space. This and many other experiences in *Wii Fit U* invite an awareness of the body in space opposed to the immersive experiences of other games in which players might stop focusing on their own body in order to psychologically inhabit the digital body of their avatar. The board itself inhabits a noticeable amount of physical space in a living room, at least when compared to more traditional video game controllers, and its appearance, textures, and use in activities and exercises invite attention away from the TV screen and into the physical space of the player's home.

Players' living spaces form a space for the game, and the Balance Board announces that fact repeatedly by requiring players to move it, stand on it, put it away, and be aware of their surroundings while using it in order to avoid injury. *Wii Fit U* gamifies the space the body inhabits by making it a consistently present element of the game's corporeal topos. The board often requires players to interact with the physical space of the living room, thus making the living space an important spatial context for the game. For example, several exercises with the Balance Board necessitate elongating arms

and legs, both on and off the board, in such a way as to take up a significant amount of the game space. It accomplishes this by measuring a percentage of total body weight while the rest of the body is off of the board. One yoga pose requires players to stand off the board at the beginning of the pose, after which they must place one foot on the board while stretching according to the game's instruction. In this pose, the game asks players to place 30% of their weight on the foot placed on the board, and a slider bar on the screen provides feedback about whether more or less weight needs to be applied by the foot on the board. Other positions mimic this function, including poses with hands on the board. While engaged in poses like these, or when preparing for a different pose, players may have to move the Balance Board around the living room in order to accommodate for space. If one pose requires players to stand on the right side of the board, they would need to move the board so it gives space to stand in front of the TV, or if another pose requires players to stand in front of the board, they would need to move the board behind them. Some poses do not require the Balance Board at all, and so players would need to move it to the side so it would not be in the way.

The Balance Board also functions as a disciplining device, in the Foucauldian sense, inasmuch as it is the instrument through which all progress is measured in *Wii Fit U*, and that disciplining force takes place within the realm of topos rather than as an in-game activity. In other words, the moments wherein progress is measured, recorded, and displayed occur around the exercise activities in the game, and by so doing they create a spatial context of corporeal awareness and measurement. For instance, the game suggests that the body test take place before any actual gameplay gets underway. The body test

consists of measuring changes in balance stability and weight, both of which were recorded by standing on the Balance Board, followed by a prominent graph showing weight progress whenever the player starts the game. A large “body test” option continually rests on the main menu of the game, and it serves as a constant reminder to players to let the Balance Board test their health through only two variables: weight and balance. After selecting the body test option on the main menu, the game prompts players to step on the board. After standing still for a few moments, the game screen shows players how much their balance had shifted during the test. It shows weight, BMI measurement, and it then concludes by offering what the game calls “Wii Fit Age,” a somewhat arbitrary number meant to combine balance scores and weight to a single number. My Wii Fit Age would shift from 24 to 41 given the test day—and how much ice cream I had eaten the night before—and finally the size of my avatar’s torso would adjust to what the game considered my size given my weight and height.

Even when the body test is not currently active, it is the context within which all the other activities take place inasmuch as it functions as the overseer of weight and fitness progress. Before any gameplay takes place, the body test appears every day to remind the player of the game-given goals of *Wii Fit U* and players’ progress in those goals. It functions as temporal context by preempting any gameplay, it functions as context spatially by occupying space in the living room and requiring near constant movement and management, and it functions as context by providing oversight and discipline through goals and progress feedback.

The Fit Meter, when compared to the Balance Board, is less invasive about measuring health, but it is also the feature that makes *Wii Fit U* a game of lived experience beyond the screen (see fig. 27). The small, round piece of hardware is a new addition to the Wii U's fitness accessories, and it acts like an advanced pedometer: an accelerometer measures footsteps taken throughout the day as well as changes in altitude to approximate how far up or down players walk, such as when taking stairs or choosing to run up a hill during a run.



Figure 27: My Fit Meter, 1.2 × 3 × 3.3 inches.

If the Balance Board gamifies the topos of the living room, the Fit Meter gamifies the topos of everyday life. In other words, just as the Balance Board contextualizes the living room as a space for corporeally-oriented gaming, the Fit Meter contextualizes the spaces wherein day-to-day activities take place as a part of a lived gaming experience. I started wearing the Fit Meter on my belt beginning with my first day with *Wii Fit U*, and

I wore it during my morning runs, shopping errands, dates with my wife, teaching on campus, and all typical day-to-day activities. Its small design suggests that it is meant to not interfere with everyday tasks and perhaps it should be forgotten until needing to be removed at the end of the day. Like the Balance Board, by situating itself somewhat beyond the central focus of the game, it provides an embodied, spatial context of fitness-oriented living without becoming the main activity in and of itself. It never entirely disappears from consciousness because of the need to put it on in the morning, take it off at night, and load the data to the Wii U, but it is always behind the scenes, making everyday decisions important to the game. In my personal experience, the simple act of wearing it tended to remind me to take more stairs and park further away from the grocery store. All movement, especially out of my home, was recorded by this little device, and by doing so it made my body in everyday life a context for the game, a game to walk more steps, burn more calories, or walk up more stairs.

Like with the Balance Board, *Wii Fit U* reminds players upon starting the game to use the Fit Meter with the GamePad to transfer data to the game. By reminding players to handle the Fit Meter specifically before the in-game activities, it adds to the spatial context of fitness and health awareness. Upon starting up *Wii Fit U*, the game prompts players to transmit data from the Fit Meter to the infrared sensor on the GamePad. By simply holding a button on the Fit Meter, the GamePad receives the data and transmits it, once again, to the Wii U console. The game then allows players to open Fit Meter Challenges to track my progress. The Fit Meter adds to the discipline initiated by the Balance Board by presenting graphs, charts, and progress records as informational and

graphical elements to exercise activities. Its contribution suggests that players' bodies necessitate constant reminders of the need to exercise, improve, and play the game.

Wii Fit U's hardware accessories provide a material context in which the most opportune action is the fitness activities provided by the game. The game's approach to topos is comparable to a soccer pitch or a basketball stadium: by foregrounding the material situation made specifically for the activities about to take place, the materiality of game spaces signify a mind space or an attitude for players to inhabit, an attitude conducive to targeting bodies as the primary focus of the gaming experience. And just as stadiums and fields invite the game, but they are not the game, the hardware accessories designate a specific response from players, and that response takes place within the activities and exercises in the game.

Activities: Mimesis and Praxis

The design of the exercises and activities in *Wii Fit U* invite embodied gaming through various strategies that could best be categorized using the two ancient Greek concepts of mimesis and praxis. A thorough discussion of either of these topics, but especially mimesis, would require a book-length manuscript of its own considering that several generations of great minds have written extensively about them. But for the sake of clarity and brevity, I address these terms and their meanings in their most literal and historical sense as written by the ancient Greeks and predominantly codified by Aristotle. Two game design strategies lead to an embodied experience in *Wii Fit U*: imitative (mimesis) processes or actual/practical (praxis) processes.

Mimesis, or in the Greek μίμησις, signifies an instance of something imitating or mimicking the natural/real world. For example, a somewhat realistic painting of a tree is mimetic of trees seen by people in everyday life, and while the tree may not be an imitation of a particular tree, it evokes the essence of a notion of real trees. Mimesis is a term often used when engaged in an analysis or philosophical discussion of art, and many writers have engaged in a debate about its utility as a benchmark of quality: is a work of art better by more closely imitating actuality? I do not engage in that debate here, and I use the term simply to describe the design strategies of exercises and how it may explain a corporeal gaming experience somewhat removed from exercises it is imitating. Praxis, or πρᾶξις in the Greek, is rarely, if ever, put in direct conversation with mimesis, and I do not wish to compare the two directly. Instead, it serves as an adequate explanation of a second category of activities in *Wii Fit U* which are not imitations at all and instead are what they are purporting to be. Praxis has historically been defined as practical action inasmuch as the actual doing of something is different than seeing it performed, discussing it, theorizing about it, recreating it artificially, etc. For example, giving a new employee a 30 pound crate of bricks to move as a test to see if they can move heavy objects is not praxis. Instead, praxis is putting that employee on the job and letting her move the actual heavy objects as real work.

Perhaps as expected in a video game, many if not most of the activities are mimetic in how they invite corporeal action on the part of the player. Given the many different activities available, I describe three here as exemplary and typical of mimetic exercises in *Wii Fit U*. First, the game's approach to running activities stood out to me as

particularly memorable as it contrasted with my daily practice of running outside nearly every day. The game instructs players to step off the Balance Board and hold a single WiiMote, and after doing so a message appears on the screen stating that the WiiMote will sense movement as players run in place. The game moves an avatar on a virtual track to imitate players' supposed running speed. In my personal experience, the running speed of my avatar proved to be fruitful motivation, and I often would burst into "sprints" in place, bringing my knees up higher and quicker than normal, in order to boost my avatar past the many other computer-controlled people on the same digital track. If the activity were to be judged for how well it mimicked the exercise that inspired it, it would not be ranked highly, however it managed to provide some form of motivation to move.

However, it is the difference, or contrast, between the activity and the exercise it imitates that makes players aware of the gamification of their bodies. There is no attempt at immersion, the magic circle of gaming, and the sharp distinction between players' actions and the screen display gamifies bodies through attention to the fact that it is occurring. The running activity, for example, highlights the differences between actual running and the motions of running in place in a living room in front of a TV screen, and by so doing the game invites players to consider the experience as one almost entirely targeted at the body instead of the screen.

The dancing activity more closely resembled actual dancing, although the mental and physical barrier created by the presence of the hardware, screen, and the physical location of the living room, along with the presentation of dancing avatars in various fictional locations, again suggest to players that the game taking place is not occurring on

the screen, but through the actions, movement, and presence of players' bodies. The dancing activity shows a dance instructor in the center of the screen standing on a virtual Balance Board, and, the game instructs the player on how to move through the instructor's movements to the music (see fig. 28).

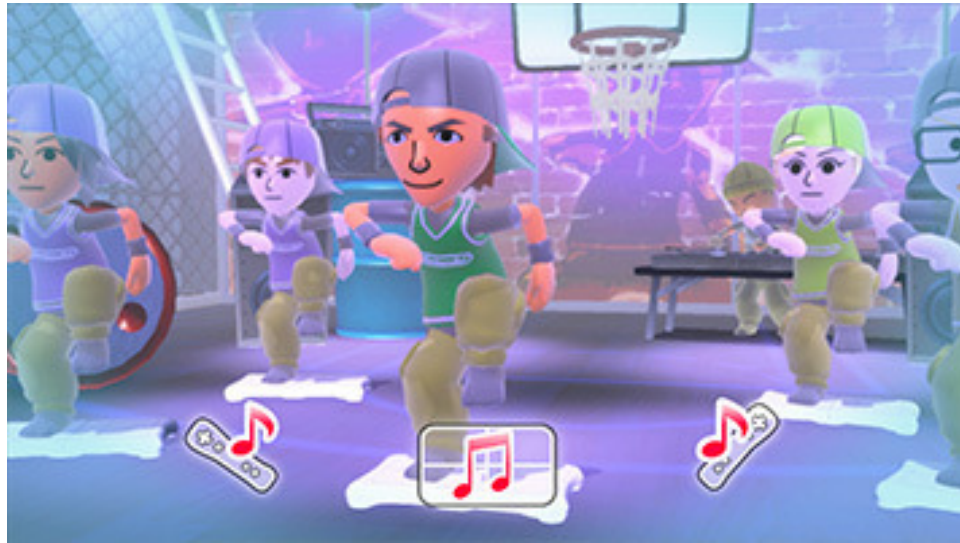


Figure 28: The hip hop dance activity, one of eight dance activities available. Other dances include beginner dance, jazz, hula, locking, salsa, burning beats, and flamenco.

The player follows along by holding a WiiMote in each hand to track arm movement, and the Balance Board tracks any steps or shifts in weight to track body movement. A voice also will sometimes provide feedback and instructions. While the virtual environment and the instructors' costumes on the screen are appropriate for each dance, such as the hip hop décor in figure six, the player's involvement appears much more like a general cardio work out. Several aspects of the activity that function properly as exercise and entertainment, but others create a distinct barrier between the activity and actual dancing. The movements in the dances are repetitive, with each dance focusing on one or two

actions, making players' bodies behave less like dancing and more like they would during an at-home cardio routine. The activity alienated the sense of creativity or fun associated with dancing inasmuch as players' clothing or game location would not normally match the clothing or location used by the game's virtual dance instructors. The dance activity utilizes dance as a digital context for exercise, and it succeeds in this regard. However, it is important to emphasize its mimetic qualities before admitting that any practical dancing takes place, and it is through mimesis and the contrast between what is happening on the screen and how players' are actually moving that brings the game away from the screen and into players' bodies.

The Fit Meter Challenges bridge the gap between mimesis and praxis by disregarding any attempts to too closely imitate the action shown in the activity in favor of simply using the game as motivation to perform the action in real life (engage in praxis). After selecting the Fit Meter Challenges option, the game provides maps and courses that players may choose for their avatar to run or climb (see fig. 29).



Figure 29: A completed running course in the Fit Meter Challenges.

For instance, one of the courses was the Chicago running course, and the map includes a grey track for the avatar to run that includes various landmarks and other significant locations in the city. After transmitting movement and elevation data from the Fit Meter to *Wii Fit U*, players may choose to apply their distance traveled in real life to this particular virtual running course. After pressing a button labeled “Enter Data” on the GamePad, the avatar runs on the course, mimicking the distance players had run and walked since the last time data was transmitted to the game. The climbing challenges are similar, but instead of a running track in a famous location or city, the game uses tall landmarks across the world as benchmarks for how much altitude players have ascended or descended.

The mimetic elements of the Fit Meter Challenges seem obvious: maps, images of landmarks, the use of an avatar, etc. However, it is the relationship between the mimesis and praxis of this activity which makes it worth further inspection. The only way to access the mimetic elements, or participate in the activity in the game, is to engage in the praxis of walking, running, and climbing, all of which take place away from the screen and the living room wherein the digital and virtual elements of the game take place. The landmarks strewn across a virtual running track around Chicago serve as motivating achievements to encourage additional movement in everyday life such as walking slightly further than normal. They aid in visualizing the small changes in lifestyle that are normally difficult to quantify, and therefore the game’s mimesis extends into my world of lived experience, a world of praxis. Fit Meter Challenges utilize mimesis to draw attention to the game taking place away from the screen, namely through the contrast

between the actual movements of the body against cartoonish, bright, and exotic locations. At the same time, they require the actual doing of running, walking, or climbing in order to participate in the mimesis of the game. The praxis of the Fit Meter Challenges use a second strategy to gamify players' bodies, that of emphasizing the fact that players are doing the exercises independent of the game itself.

The distancing of the player's body from the immersive qualities of gaming is particularly evident in those activities that use praxis as a strategy to gamify bodies. Several activities in *Wii Fit U*, especially strength training and yoga, demonstrate how a video game may utilize praxis as a strategy to engage the player's participation while at the same time suggesting to players that the actions taking place are not happening on the screen, but solely by the player. These activities act more as measurement systems or guides rather than games to the point where several of the exercises require no input whatsoever from the player. Instead players may participate at will devoid of any feedback or input for the game to track progress or player involvement. Both the strength training and yoga activities act as the actual exercises they purport to be instead of a mimetic context to motivate or entertain, and by so doing they gamify bodies by fully placing the responsibility and attention of the game into players' bodies. In both activities, the game uses the Balance Board for most, but not all, of the exercises or positions, but the Balance Board is not interpreting actions as a method of game input. Instead, the Balance Board is there to provide feedback to the player as they engage in the activity. Perhaps the phenomenon is best understood through examples inasmuch as they provide evidence for how games may extend beyond a virtual experience and may

be directly enjoyed as praxis. Each activity includes a variety of specific poses or exercises, and a collection of these exercises may be combined into a routine lasting several minutes. While doing yoga, players learn the pose by following the instructions of a virtual trainer, a more human-like body than the cartoonish figures in other activities. The same trainer is used for the strength training exercises (see fig. 30).



Figure 30: The player may select a female or male trainer for yoga and strength training, and the character model is more like a figure or illustration when compared to the other activities' cartoonish avatars.

After learning the pose, players may get in position and follow the trainer's movements. While most of these exercises and poses utilize the Balance Board, it is noteworthy to mention that several of the yoga poses do not have any game input at all. Instead, the player simply follows the trainer's instructions as if one was watching a yoga instruction video at home.

Players learn many poses or strength training movement by using the Balance Board to show how much weight they place on a certain leg or arm as well as overall balance. The exercises taught are not an imitation form of yoga or strength training; they are as much a form of yoga or strength training as any exercise video or at home workout could be. Overall, the visual design of these activities emphasize the praxis of yoga and strength training over the gamification of an exercise: the trainer appears more human and less cartoonish than the other activities, the trainer has a voice that talks and gives live feedback, the virtual environment appears more like an exercise studio than an exotic video game environment, and much of the visual feedback is displayed on the screen in the form of bars, lines, and other graphical data akin to a fitness “report.” While *Wii Fit U* is not the first game to extend beyond mimesis and into the world of praxis,¹⁰³ it emphasizes the players’ bodies as not the means to control the game but as the central locus of behavior, learning, and everyday activity. The game emphasizes that players’ bodies, and their movements, are the game, and *Wii Fit U* is simply there to guide, teach, and track progress. In a way, both the use mimesis and praxis create a distancing effect that focuses players’ attention on their own bodies, movements, and spaces instead of the virtual bodies, movements, and spaces within the game. The activities and exercises gamify bodies above any gaming interaction taking place on the screen, making bodies both the locus of control as well as the game itself.

Gamifying Bodies and Embodying Games

As an exercise game, *Wii Fit U* explicitly demonstrates gaming in the body instead of on the screen so much so that even many game elements on the screen are

metaphorically structured around bodies, including the player's corporeal presence, such as when standing on the Balance Board or holding the Gamepad. Motion-controlled games in general may rely on similar methods of gamifying players' bodies, but an exercise game such as *Wii Fit U* does not hide those strategies behind a veil of narrative or entertainment. It is what it purports to be: a game of moving bodies in real spaces. My findings suggest that *Wii Fit U* demonstrates how video games may gamify bodies. Specifically, *Wii Fit U* utilizes various hardware peripherals and accessories to create a material topos to prepare players for a gaming experience grounded in physical presence. These hardware accessories emphasize and draw attention to bodies, thus inviting a gaming experience opposite of immersion: instead of forgetting physical presence within the magic bubble of a gaming world, the player is constantly reminded of their body's involvement in the game. Also, the game's activities and exercises draw upon mimesis and praxis as two general strategies to gamify players' bodies by engaging them in real space through actual movement. Many of the game's activities use instances of mimesis to motivate body movement and entertain, and the game is successful at utilizing the abstraction of mimesis to allow the player to move and exercise in ways dissimilar to the activity being portrayed while maintaining player involvement. Other activities, such as yoga and strength training, are themselves the very action the player attempts to perform. The yoga poses the player performs are, in fact, yoga poses, and the strength exercises are strength exercises. In these instances the game leaves the virtual and enters the praxis of culturally codified exercises, and *Wii Fit U* simply adds to these actual exercises by providing additional feedback through data provided by the Balance Board.

My findings offer a perspective on the relationship between players' bodies and motion-controlled gaming that beyond the widely held assumption that motion-controlled gaming increased player immersion.¹⁰⁴ This assumption arises in a series of questions Derek Burrill asks regarding how video games construct identity:

How does the body interpret and interface with a simulation that is built to obfuscate its own simulatedness? What tactics are required? Is the body implicit in keeping the "man behind the curtain"? And how does this "man," in the real and virtual, keep control of what our bodies do and desire? The question becomes not just "Who am I?" but "Who am I when I am where I am, doing what I will?"¹⁰⁵

Perhaps these questions do not acknowledge the ways motion-controlled gaming necessitates players' awareness of their own physical participation. No curtain needs to hide who is in control for the sake of immersion. In fact, *Wii Fit U*'s use of material topos, mimesis, and praxis suggests that motion-controlled gaming produces the opposite of immersion: it draws the player away from the game on the screen to engage with the game of the body, in real space, through actual movement. It is through the distancing of players by emphasizing their bodies that motion-controlled game software and hardware gamify bodies, and, by distancing players from the immersive or abstract qualities of gaming, motion-controlled games provide strong evidence of the corporeally and materially-grounded nature of gaming.¹⁰⁶ The relationship between players, their bodies, the controller, the game, and the screen fundamentally change in the presence of motion-controlled games, a fact that has attracted many researchers and popular commentators to

discuss the eccentricities of this hitherto untraditional gaming platform. But the dynamic of that relationship constructs gamified bodies in a way unseen in other game contexts. It therefore becomes less useful to study and describe how motion-controlled games increase immersion or reinforce particular paradigms about gaming when its existence and popularity changes the paradigm. Games do not need to draw attention away from the material, corporeal, embodied, and lived experience of players and their bodies. Instead, my findings offer a new paradigm, one that invites investigation into how games may emphasize the distance between the digital and the physical, as well as how both are material experiences.

Various implications arise given the altered game-player relationship found in this study. First, the game provides evidence that the cyborgification of health may take place in the form of the gamifying of bodies.¹⁰⁷ The game's activities and feedback, along with the presence of wearable technology in the form of the Fit Meter, construct a symbiosis of machine and body as the player aims to improve health and fitness. Health technology has a familiar presence in hospitals, but recently, with the increasing popularity of wearable tech, health monitoring has entered mainstream culture. Jawbone and FitBit are two companies that have exploded onto the wearable health tech scene, and more familiar companies such as Apple have introduced gadgets aimed at addressing consumer demand for a merging of the convenience of modern, mobile tech with an emphasis on improving health. *Wii Fit U* provides a fitting example of how the cyborgification of health may also be interpreted as the gamification of bodies and the embodying of games. Jawbone, FitBit, and Apple's gadgets include gamified features, an unsurprising fact considering

how motivating games are to humans, and *Wii Fit U* exemplifies this gamification by explicitly calling it a game played on a video game console.

Second, the methods through which players interact and identify with games extend far beyond the hardware or TV in the home. Video games have traditionally been located in living rooms given the relatively large and heavy equipment required to play them. Gaming PCs require large cases, computer monitors, keyboards, mice, and a power supply, and video game consoles necessitate many of the same limitations. *Wii Fit U*'s approach to games and health suggest a new paradigm to understand the relationship between players, or more specifically bodies, and the games they play. Many of the game's activities take place in the living room, but the Fit Meter gamifies the body well beyond the home and into the everyday life of work, school, errands, shopping, and general living. The Fit Meter formed a near constant connection to the game, or, in other words, the game never leaves the player's side. It is a game played continually through simply monitoring steps that can be rewarded through achievements upon returning home. Again, *Wii Fit U* is not the only instance of the transformation of gaming space, and any smart phone with a health app can become a means to gamify the body outside of the living room.

Third, my analysis suggests that *Wii Fit U* exemplifies the embodied experience of all video games, not as images on a screen—the very phenomenon through which video games got their name—but as corporeal experiences that happen to consciously interact with the screen. Much of this chapter addressed how the game's hardware peripherals focus attention on the player's body, or at least draws attention to it, but I

argue that this is not unique to *Wii Fit U*. The entirety of the Wii U necessitates acknowledging bodies' explicit involvement in the gaming processes, and other methods of playing games on other consoles or computer devices do not eschew the body. If anything, bodies are always at the forefront of the game. The novelty of video interaction seems to have distracted both players and commentators from unanimously addressing this fact. *Wii Fit U* excels at highlighting the foundation and reality of video games: bodies have always been the controller, bodies have always been the locus of the experience, and bodies have always been the subjects of the game. The gamification of bodies is simply a logical extension from the current state of popular gaming culture since games have always been embodied.

Finally, the subject matter of this study points to the ways in which the three I's of digital viscera describe the relationship between bodies and games. First, exercise games take interactivity to a different level wherein the entire body, or the player's everyday lifestyle, is gamified through the interactions. Second, these games capitalize on the intuition of living life, taking "muscle memory" more literally. The exercises performed become intuitive through familiarity, and thus the games and exercises themselves are a matter of intuition. And third, since the game, players' bodies, and everyday life work together, players immerse themselves in the game within the context of life and real exercise. This happens by inviting players to think about, and think through, the actions they are taking as a part of the game. I dedicate the remaining pages in this chapter to summarizing and teasing out the blurred lines between gamifying bodies and embodying games, both of which rely on digital viscera as a central tenet.

The manner in which motion-controlled games foreground players bodies may stand in stark contrast to the stereotypical image of the living room gamer, slouched on a couch staring blankly into a TV screen. However, games reach far beyond the living room, as the following chapter will demonstrate, and the somewhat sudden popularity and cultural acceptance of mobile, touchscreen games on phones and tablet computers proves that players' bodies may not be as sedentary as previously imagined. From the console controller in the living room, we now enter the world of mobile gaming in order to investigate the nature of gaming bodies in time, space, and place, and how freedom from the typical spatial and temporal restrictions of gaming may construct players' bodies as more elusive subjects than previously thought.

CHAPTER 5:

TEMPORAL AND SPATIAL AGENCY AND MOBILE GAME PLAYERS

Texas Instrument's TI-83 Plus graphing calculator, and the related TI-84 and TI-89, could be found in almost every backpack of high school and college math students for several decades. When attending high school, my parents purchased the required TI-83 Plus calculator for my geometry class, and being acquainted with the nerdiest, but arguably the smartest, students in that class, it was not long before I was playing games like *Breakout*, *Bowling*, and *Blockman* on the dimly-lit graphing screen. The calculator included its own, simplified coding language, thus allowing for the creation of these simplified arcade-style games. The games were shared over a transmission cable that could connect two calculators together, and through this system games were shared across the country. My first exposure to game design and coding came from my learning of the coding language to design my own RPG-inspired game on the TI-83. Several characteristics distinguished gaming on the TI-83 from the Nintendo Gameboy which I also owned at the time: the calculator was in no way designed as a gaming machine, it constantly was by my side because of its use for homework, it was lighter and slimmer, and the games were much simpler and more easily to learn than traditional games.

If the reader can forgive the almost gratuitously nerdy personal anecdote, the contrast between what mobile gaming was to what it has become is startling. Throughout the 1990's and early 2000's, mobile gaming was limited to dedicated hardware produced by game companies such as Nintendo's Gameboy, Sega's GameGear, and Sony's PSP.

The games mimicked their console-based counterparts in terms of time commitment, required player focus, and button placement. The spread of mobile phone use, at least in the United States, began to offer other opportunities for mobile games, including the famous game of *Snake* on the lovingly nicknamed Nokia “Brick”—actually called the Nokia 3310. However, games on mobile phones were far from ubiquitous, and other handheld technology such as Palm Pilots were more of a novelty than a cultural mainstay. The introduction of Apple’s app store, and then competing digital marketplaces from Google and Microsoft, changed the gaming landscape by providing easily accessible, readily downloadable, and, perhaps most importantly, easily playable games for mobile phones. Unlike the portable gaming devices of the past, people of all ages carried their phones everywhere they went, and with those phones also went the variety of games that could be played at a moment’s notice. Currently, almost anybody with a mobile phone has access to, and possibly plays, mobile games, from toddlers playing *Angry Birds* on their parents’ tablet computer to retired professionals who replaced their Sudoku books with the mobile game equivalent. Of the U.S. population alone, it is estimated that over half, 51.3%, play mobile games.¹⁰⁸

The design of mobile games allow players to start and stop games at will throughout their day, playing the games in short intervals, and the mobile nature of these games and devices invite players to interact with games at almost any location. Unlike traditional games that anchor players to a game space such as a living room, mobile games create mobile gaming bodies that inhabit various spaces and times. I call this characteristic corporeal agency, and while mobile games include many limitations to

player agency, the increased freedom of bodies to traverse time and space merits discussion and analysis. Interviews with mobile game players reveal that mobile games invite particular behaviors conducive to a corporeal agency that breaks away from traditional conceptions of gaming time and space. I argue that mobile gaming bodies demonstrate a more fluid relationship with space, time, and physicality than traditional forms of gaming, allowing players to move their bodies through time and space while performing the corporeal task of gaming. After drawing upon what limited literature has been written on the subject and describing several methodological considerations, I begin my analysis by addressing corporeal agency in terms of mobile gaming physicality followed by sections dedicated to analyzing mobile gaming temporality and spatiality. I end the chapter by describing the implications of my analysis including the ways mobile gaming points to digital viscera.

Casual Games and Mobile Players

Mobile games present a conundrum to both popular culture and scholarly researchers alike considering how differently they appear when compared to traditional gaming. Unlike the arcade cabinets of the 1970's and 1980's or the living room consoles of the 1990's or 2000's, mobile gaming demonstrates several characteristics that demarcate them as a unique gaming phenomenon. While portable games have long existed since the advent of Nintendo's Gameboy and continue to exist through today's current handheld gaming devices, mobile games are different than portable games: a portable game device was made for gaming, while a mobile game device is a phone, tablet computer, or some other piece of hardware designed primarily for other purposes

such as communication or productivity. Portable game devices have a control system dedicated for that purpose, but mobile games kludge the utilities of a phone or tablet in order for players to play games. As McCrea argues, portable gaming still functions as a form of traditional gaming, even if it is transportable, while mobile gaming, such as on phones or tablets, exhibit an entirely novel set of characteristics.¹⁰⁹ Mobile gaming tends to take place on devices not designed for that purpose, such as cell phones or tablet computers, and touchscreen technology has combined the utility of the television screen and controller into a single device. Mobile game design also relies less on gaming as a dedicated occasion and tends towards games that allow for greater freedom of when or where to play, such as puzzles or turn-based games.

The ambiguity of mobile gaming, at least in its current manifestation on mobile phones and tablet computers, has inspired scholars to engage in discourse to define the meanings inherent in mobile or casual gaming. Their findings question popular assumptions about mobile gaming's characteristics, such as its recent surge in popularity. Jussi Parikka and Jaakko Suominen approach mobile gaming as a cultural history and trace its roots to practices dated as far back as the nineteenth century.¹¹⁰ They argue that mobile games stem from cultural contexts readily seen throughout the last few centuries, such as increased travel, mechanized play, mobile entertainment—such as newspapers or print novels—and various other social characteristics. Through this lens, mobile gaming is a natural extension of these particular cultural factors and by no means a surprising phenomenon. While mobile games might have emerged naturally, Christian Christensen and Patrick Prax suggest that mobile gaming fundamentally changes how people use

technology by reconfiguring various relationships, both social and technological.

Through a study of smartphone use in relation to the online computer game *World of Warcraft*, Christensen and Prax argue that mobile gaming demonstrates the fragmented nature of modern gaming, what they call an assemblage of play: instead of thinking of gaming as discrete experiences bound in one time and space, such as during a typical play session of a computer game, mobile apps that allow for chatting among player groups or participating in the game's item economy disrupt gaming and takes it to a variety of times and places.¹¹¹

Mobile gaming challenges traditional assumptions about gaming, and these challenges have not gone unnoticed by game scholars. The magic circle, for instance, is a design concept that both producers and commentators use to describe the immersive quality of gaming. Inside of the magic circle, players feel as if they are in a different world. However, as Christopher Moore argues, mobile games resist the metaphor of the magic circle inasmuch as players include mobile gaming as part of their everyday lives.¹¹² Aubrey Anable further explains in her study of time management of casual games that mobile games tend to be ambiguous for both scholars and popular culture precisely because of their role in everyday life. She suggests that the cultural meaning of mobile games resides in the spaces between:

Rather than being blank spaces in our day, casual games are affective systems that mediate relations between players and devices, workers and machines, and images and code (and our feelings about those relations). As such, casual games constitute a contemporary "structure of feeling," in Raymond Williams' term, that

gives shape and expression to emergent ways of being in the world as well as emergent ways of understanding what the world means.¹¹³

In other words, casual games change relationships between people, places, work, machines, and other constructs by filling time and space between them. For example, casual games may be as a fundamental part of the work day as a trip to the watercooler, and their existence in workplaces do not make them a distraction but instead a means of understanding labor.

Given the transgressive nature of mobile gaming in terms of typical expectations regarding bodies, space, and time, the majority of the work on space deals with hybrid-reality games. Also known as augmented reality games, or ARGs, these games utilize mobile phones' GPS and other capabilities to gamify everyday spaces. Larissa Hjorth describes how mobile gaming ARGs challenge the boundary between what are known as hardcore and casual gamers by utilizing game mechanics that require various levels of involvement that both complement and distract from everyday life.¹¹⁴ ARGs also create hybrid spaces, or new territories informed by mobile technology, through the mobile gaming experience, according to André Lemos study on the subject.¹¹⁵ Adriana de Souza e Silva and Daniel M. Sutko further argue that these ARGs, and the mobile technology that allows for their existence, connect physical spaces, gaming, and technology to the practice of daily living, and their inclusion in ordinary life speaks to how mobile gaming breaks away from traditional conceptions of gaming spaces.¹¹⁶

ARGs are hardly the site of the most popular mobile gaming experiences, but there has yet to be many comprehensive studies about mobile gaming spaces, places,

time, and bodies. However, some scholars have begun to ask what mobile gaming means for bodies. For instance, Ingrid Richardson studied the particular corporeal behaviors of mobile gaming, citing the particular behaviors, gestures, etc. that emerge from playing mobile games,¹¹⁷ and Celia Lam describes how the smaller screens of mobile devices has constructed novel viewing spaces for game spectatorship.¹¹⁸ These studies, and those mentioned above, construct a foundation of what bodies mean for mobile gaming, specifically relating bodies to the spaces, movements, and times they play games. My study expands on the ground covered these scholars in an attempt to describe the actual experiences of mobile game players in relation to when, how, and where, they play.

Methodological Considerations

The purpose of this study was to discover how mobile gaming invites corporeal behaviors different than other, more traditional, gaming forms. Although game design merits inclusion in this analysis, players' behaviors and personal reflections are more salient to the goal of the study because they tell us how the games are actually used. Therefore, the following research question guided the methodological considerations of this project:

1) What are the most prominent corporeal characteristics of mobile gaming according to mobile game players' reported experiences?

I interviewed nine self-identified mobile game players, three female, six male, ranging in age from late-twenties to early sixties. All of the interview subjects are working professionals with some attending institutions of higher education during their spare time. The interviews were in-depth discussions ranging from twenty minutes to an hour, and

though pre-written questions guided the discussion, follow up questions and back-and-forth talking led to the subjects describing experiences that I had not anticipated. The interviews were recorded and transcribed for further analysis. Consistent themes among subjects' replies were grouped together to form response categories, and the following sections expand on those categories through a discussion of the findings.

Corporeal Agency and Mobile Gaming Bodies

Mobile games rely on particular, embodied behaviors on behalf of the players, behaviors that interact with space and time in ways unseen in other game forms. And when the players comply, as they tend to do, mobile games emerge into a realm free of the typical limitations of console or PC gaming. It was not just the games that do this, but it is the astute combination of gaming hardware in the form of a phone or tablet computer, the manner in which the games are designed to invite these behaviors, and finally, and, perhaps most importantly, players' corporeal behaviors. The mobile gaming body demonstrates a variety of characteristics that not only set it apart from other forms of gaming corporeality, it also fundamentally produces and maintains the mobile gaming experience as it is culturally known today. Specifically, the interviews with mobile game players demonstrated three consistent elements of mobile gaming bodies: physicality, spatiality, and temporality.

Mobile Gaming Physicality

Although both the body's place in space and time occupies the primary feature of mobile gaming corporeality, various aspects of mobile gaming invite identifiable physical characteristics, or at least the physical limitations, to the discussion at hand. Before

mobile gaming bodies may traverse space and time, they demonstrate particular ways of physically engaging with the gaming technology, such as how to hold or interact with the device.

The players identified various body positions in which they are able to play mobile games, mentioning specific ways of sitting, standing, or prostrating that they felt was most comfortable for them when playing. The majority of the players described their body positions when playing mobile games as being the results of that day's schedule. One player explained: "Common location would probably be the living room, sitting on the couch. Occasionally, I would play at work at my desk. The most common place would be living room and on the couch, in the common space." Another player discussed playing mobile games sitting in a car, lying in bed, leaning against a wall at work, and slouching over the device when waiting at a doctor's office. Without a specific question regarding the matter, every player mentioned some way in which mobile games allowed them the choice of how to position their bodies when playing games.

Mobile games not only provide liberty when choosing how to position the body to play the games, they allow each player to explore which physical positions best fits their needs. While PC or console games often produce a limited number of body positions—usually sitting—mobile games, and the phones and tablets on which they are played, let players interact with the games in any position as long as players are able to hold the device, control the game, and see the screen. But even with these limitations, players may express a great variety of ways of positioning their bodies for playing games, and this freedom opens other avenues of corporeal choice. If playing a mobile game is

comfortable when lying in bed, then playing mobile games becomes an option when relaxing right before going to sleep. If a player is able to easily control a mobile game when leaning against a wall, a short lull at work becomes an opportunity to play a game. In this way, the freedom of body positions interacts with other elements of gaming agency, such as the ability to choose where and when to play, to open additional avenues of play.

The manner in which players hold their game devices further personalizes the corporeal experience of playing mobile games. Players reported particular ways of holding their devices that best fit their play style and comfort. For instance, one player stated, “Most often, either iPad or phone, it’s holding it with one hand and using one finger on the other hand to click or touch or whatever.” Each player tended towards one specific way of holding their device, although players also described how they would alter how they held devices depending on their circumstances. One player mentioned a preferred method of holding the device followed by a caveat regarding how s/he played games while eating: “One hand, pinky on the bottom, control with my thumb. When I’m eating . . . I use my pinky.” Players also described the varying distances at which they would hold their devices from their faces, such as one player who described how it depended on the game: “If I had to really concentrate on it, I’ll hold it really close to my face, I’d say about here, about 6 inches or so from my face. If it is more of a relaxed game, I’ll have it down here and I’ll just be playing with my index finger with my other hand.” Oftentimes the distance between the device and players’ eyes would be

determined by the location or other circumstances surrounding play, such as setting the device on the table while eating or while at a work desk.

Related to how players hold their mobile devices, methods of input and game control provide a meaningful array of options for players. The design of a typical console controller portrays a single ideal for how players should input commands insofar as certain fingers belong to particular parts of the control and command a limited set of button. The touchscreen design of mobile game devices increases the number of available methods of input, and the players interviewed for this study described how both their personal preferences as well as each game's design dictates the options for control. For instance, players reported that games which require only single taps could be held by one hand and tapped with the thumb, held by two hands and tapped with a thumb, and held in one hand while tapped with a finger from the other. To visually illustrate the point, the game *Hungry Shark Evolution* lets players tap, hold, and drag on nearly any part of the screen, and the location of the first tap becomes the reference point for movement: after tapping, if the player drags the finger to the right, the shark will move right (see fig. 31). Because players may easily control the game regardless of how they hold the device or where they tap on the screen, they may choose what body, hand, and finger positions are the most accommodating to play the game in any particular circumstance. The game's design is not the only factor dictating methods of control, and some players reported controlling the same game differently on different devices depending on the size, shape, and weight of the device.

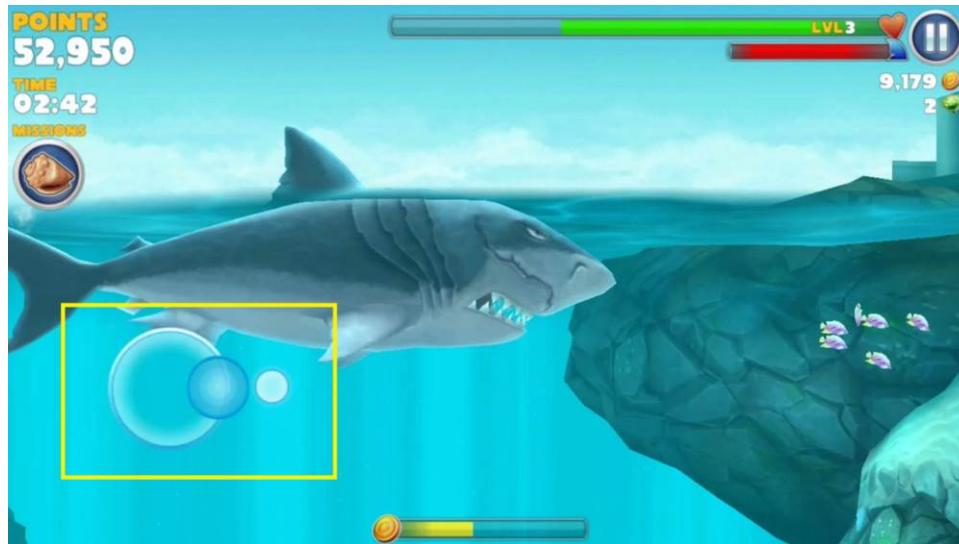


Figure 31: The yellow box highlights where the player touched the screen in order to move the shark.

Variability in methods of holding and controlling mobile gaming devices exemplifies corporeal agency at its most minute, almost to the point of being taken for granted. Video games have a long, yet somewhat consistent, history regarding how hands and arms should interact with game hardware, and from arcade cabinets to living room consoles the hardware has oftentimes dictated how players could hold devices. However, the merging of screen and controller in mobile gaming devices produces instances in which players have a greater liberty when holding devices. The abstract nature of touchscreen phones and tablets gives game producers and players varying options for how to hold and interact with the devices. Some games require two hands to hold the device to manipulate the devices gyroscope while also touching the screen with thumbs. Others simply need single taps of a finger, and it could be by any of the hand's digits. Some games invite certain ways of holding devices through dense visual details requiring close examination. Regardless of the specific game, mobile games demonstrate a tradition of

fitting the variability of modern, mobile life, letting players interact and hold their devices as they see fit in most circumstances.

One noteworthy caveat to corporeal agency in mobile game physicality is that increased freedom to choose body positions and methods of holding/controlling devices is that there appears to be a greater chance of unintended physical discomfort. Although traditional game controllers might undergo extensive ergonomic testing, the truth of the matter is that manufacturers did not design mobile devices as game machines, at least primarily. And the variability allowed when physically interacting with mobile devices presents opportunities for players to choose body and hand positions that may lead to discomfort. Most players described at least one way they have experienced physical discomfort when playing games, all of which relate directly to how they chose to play the games: eye strain from holding the device too close to their eyes for extended periods of time, neck strain from poor posture, and arm, wrist, and finger fatigue from holding the device up. It should go without saying, but unlike other forms of gaming wherein the screen sits on a desk, table, or is mounted on a wall, in mobile gaming the controller and the screen are the same thing. As such, mobile devices require players to constantly negotiate how they are looking at and controlling the device, sometimes favoring one at the expense of the other. These negotiations may invite certain body, arm, hand, and finger positions that may feel painful after playing for an extended period of time.

Mobile Gaming Temporality

Although discomfort may arise during extended play sessions, the majority of the time players interviewed tended to play mobile games at short intervals throughout their

day, a phenomenon that demonstrates temporal agency for gaming bodies. When asked about the length of a typical play session, answers varied, but none were longer than an hour, and only in the most extreme cases would a player play longer than that. The majority reported a typical play session lasting twenty minutes or less. Some described their play sessions as lasting around five minutes. Shorter play sessions were common, however, but they depended on the circumstances. The shortest typical play sessions were two to three minutes, just enough time to play a single turn or complete one challenge.

Players also described play sessions lasting throughout the day but interrupted by various tasks like caring for children or working. The following statement is typical of the experiences described by the players:

I would say usually, most of the time, it'd be shorter increments of time and then a couple times a day. For me, very rarely would I dive into a game and spend two hours playing it. With the exception of this one car racing game I have, I really got into it. I would play it for one or two hours at a time.

Some games interested players for extended periods of time, such as the racing game in this example, but the majority of the time the players reported playing games in short play sessions throughout their day. Another player stated:

Those were anywhere between two and five minutes. The thing about these games is they are played for me usually as time fillers. That's why your question about where you play the most is sort of hard to answer because if I have ten minutes, I would sit down and mess around with it, but if any time during those ten minutes I needed to do something else, like if the doctor walked in or anything, I would

immediately blank out the tablet and stand up or whatever. These games are something to keep my mind a little busy as my body waits.

Interruptions and games as time fillers were common themes that arose throughout most of the interviews, and players utilized these games in short bursts according to their temporal needs throughout the day.

In traditional gaming, such as on game consoles or on a computer, the time requirement for gaming tends to be more taxing. Quitting the game in the middle of play often punishes the player or results in a game over scenario. Mobile games, however, seem to reject typical temporal limitations in favor of catering to players sometimes sporadic schedules. Mobile gaming bodies demonstrate a level of temporal agency uncommon in other forms of gaming, and they are able to start, stop, pause, and restart games at a moment's notice depending on the given circumstances. This agency results in players being able to eschew planning on any given amount of time for a play session; i.e., they need not ask themselves if five minutes is enough time to play a particular mobile game. Instead, any amount of free time in their day may result in playing a mobile game inasmuch as they know they may stop the game at any moment to accommodate interruptions.

The temporal agency inherent in mobile gaming also invites play sessions at times when gaming would have otherwise been impossible or unexpected. In other words, this characteristic lets players choose to make the use of a period of time for one task as well as playing a game. Players reported choosing to play games during lunch breaks, while using the bathroom, or while performing a task at their jobs. In these instances, gaming is

not a distraction while waiting, nor is it something to put away the moment something more pressing comes to players' attention. The short, adjustable play sessions of mobile gaming, and the temporal agency that arises from this characteristic, invites players to make gaming an addition to an activity they are already performing. Players need not choose between one activity and another, in these circumstances, but instead may include mobile gaming as a supplemental activity knowing that the games fit into a variety of temporal limitations. Players can play a single turn of a game while they are chewing their food, and then pause or stop the game to get another bite or sip their drink. Players are able to perform a duty at their job, play for a few moments on their game, and then promptly attend to the next task. Mobile gaming exhibits adaptability in how it allows players to play within various temporal contexts, and this adaptability lends itself to increased agency for players.

One characteristic of mobile gaming that supports adaptability of play session and when to play is turn-based gameplay. A large number of the most popular mobile games require players to take turns when playing against other players, but players reported that time limits dictating when they have to take their turns are functionally non-existent. Several players attempted to describe the time limitations of their turn-based games: "You would get people who would take a few days to take their turn." "I know with Draw Something, it seemed indefinite." "It'll wait for you for; whenever it is your turn, you get, I believe, it's three days to answer a question, if in three days you don't answer the question you lose the game." One player explained their surprise when, upon

opening a game they had not played in over a year, they saw they had several hundred opportunities to finish games s/he had started with other players.

If short play sessions demonstrates mobile gaming bodies' temporal agency in the short term, turn-based games suggest that temporal agency extends into the long term. Players not only may choose when and how long they play throughout their day, they may choose which day of the week, month, or year they wish to continue playing a game. And this phenomenon occurs with as little fanfare as a player who casually hit the home button on their phone to close a game at the end of a lunch break only to open the game again several days later to continue the game as if nothing happened. The freedom to start, continue, and end a play session at a moment's notice suggests that mobile gaming bodies are more free than their console counterparts to dictate how time interacts with their gaming lifestyle, whether they play for a couple of hours after work, or they play for a few minutes while riding the train to the bank. They can quickly take their turn while waiting in a grocery store check-out line, and they can wait several days—or longer—to take their next turn when it becomes available. Some games take advantage of this temporal agency by building waiting mechanics into the games' designs, meaning that players are sometimes required to wait a particular amount of time before they are allowed to continue playing. Players may pay money to quicken the process, or they choose simply to wait, as every player interviewed for this study reported doing, because the sporadic, and sometimes long, periods of time were a normal part of their playing behaviors.

One final temporal characteristic that deserves inclusion, if only because it was consistently mentioned among the majority of the interview participants, was the freedom players felt over how long a game should be played before deleting it from their device. Traditional console or PC games tend to require significant time commitments on a variety of levels: time to save money to purchase a new game or wait for it to be on sale, time to download or install the game which may take several hours or longer, time to learn the game, and the time to complete any significant amount of the game's content. Mobile game players reported what could be best described as a somewhat whimsical attitude towards downloading, playing, and deleting games. Players claimed to have heard about a game in a casual conversation, downloaded it in a matter of seconds during the conversation, and played the game as soon as they were free to do so. Once downloaded, it often took little time to learn how to play the game, giving players freedom over how and when to play the game. Once the game did not interest the players any longer, with little to no regard for the amount of the game completed, they reported promptly deleting the game and moving on to other games. Many of the common time requirements found in other game forms do not limit mobile game bodies, and players often demonstrate control over when, during what, and how long they play.

Mobile Gaming Spatiality

Players' mobile gaming devices also serve a primary function as cell phones or tablet computers, and players tend to have the devices on their person or within close proximity throughout the day. The cell phone or tablet is in a purse, pocket, or bag while at home, work, or traveling throughout the day. Spatial agency puts the "mobile" in

mobile devices, and the characteristic offers opportunities for gaming experiences at any convenient location, including places not typically considered gaming spaces.

Players reported playing mobile games at various locations, but several behavioral patterns emerged from the responses. For instance, players consistently chose to play mobile games at their places of employment. Several players explained how they would play games at work as a way to fill gaps of time between their obligations. One player stated: “When I’m in the car wash at work I just can’t help it. You get a quick three minutes or so, so you’re like, whatever, why not? When I’m on break at work. . . . A lot of work related stuff.” Another player expressed how gaming occupied time during both intended and unintended moments at work: “[I would play] five to ten minutes if I had a break in work, or in between reading emails. Mostly breaks in work, if I had a client that didn’t show up.” Other players used games to relax during their planned breaks, such as lunch breaks. One player changed her/his work schedule to better accommodate her/his gaming preferences: “I had it on my iPad and I had it on my iPod and I would take my iPod to work. I would take an early lunch, play during my lunch hour.” With personal devices near players while at work, gaming appeared to become a natural part of the work day.

The spaces people inhabit often dictate, on several levels, who they are, what they do, and how they do it. This fact is especially true in an employment situation, one where businesses pay people to behave in particular ways. Gaming at work lets players resist some of the boundaries on their behavior by infiltrating their work space with mobile games. A space traditionally reserved for mental focus, such as a desk area in an office,

transforms into a gaming space the moment a player places their device on the desk surface and opens a game. Even spaces meant for more physically demanding labor, such as at a car wash in the case of one of the interviewed players, may become gaming spaces. While at work, players subject their bodies to the rules of their employment, but they also resist those rules and insert their gaming identities into those places. A spare moment or boring task turns the workplace into an opportunity to play a game, and therefore players' bodies become more than sites of labor. Incidentally, when asked about any negative repercussions for playing games at work, not a single player reported having any superiors or fellow co-workers speak to them regarding their gaming habits.

In a similar vein, players described their gaming behaviors during transit, such as when they were passengers in trains, airplanes, and cars. Sitting in transit is by no means an activity that requires the full attention of passengers, and a casual glance around a city bus, for example, would reveal various forms of media consumption such as reading or listening to music. However, these other media have had a history of being forms of mobile communication: reading a book or listening to portable audio is hardly novel. Games, on the other hand, have only recently entered public culture as a mobile phenomenon, and gaming bodies now appear in almost any form of transportation, private or otherwise. If understood as a consequence of technological advancement, mobile devices may operate for long periods of time without needing to reconnect to a power supply, and this, now common, feature of personal tech lets gaming bodies travel great distances during typical play sessions. When interviewed, players talked about playing during transit as a forgone conclusion, as if it was the most obvious place to play

games. Their responses demonstrate a cultural transformation in which gaming bodies on the move are typical, even expected, in any location where people are traveling.

Although grounded gaming spaces still exist, mobile gaming bodies that traverse space, such as while in transit, suggests that bodies contextualize the spaces they inhabit. For instance, when several passengers playing mobile games occupy a city train, the train signifies the added purpose of “a place to play games.” Gaming bodies legitimize modes of transportation for gameplay simply through their presence. Of course, mobile gaming during transit is not necessarily a new phenomenon—video game companies have been producing mobile game hardware for years—but only now does the ubiquitous nature of gaming during transit seem to translate into consecrating these moving spaces as being appropriate for games.

Places of residence are another common location for mobile gaming, according to the interviewed players, but unlike traditional gaming which also takes place in homes, mobile games allow players to inhabit the entire residential space as gaming bodies. Players reported playing in every conceivable place in their homes: in living rooms, on couches, at desks, at kitchen tables, in the bedroom, and even in the bathroom. Although game consoles and computers tend to reside in living rooms or bedrooms, locked into place given their technological limitations, mobile game bodies and their devices roam from room to room depending on their preferences at the moment. Much like gaming at work, other activities may dictate where and how players participate in mobile games while at home. One player explained how the places s/he played at home depended on the morning and evening routine:

With my evening routine, usually after the kids go to bed, I'll work on school. I'm sitting at my kind of makeshift desk right now. So I'll play here, not very often will I play in bed. Sometimes in the morning, if we're having a little bit of a lazy morning, [I'll play in bed], because I usually work the later shift so I usually don't go in until late morning, 11 o'clock or noon, usually. If we have a lazy morning, I might play a little bit in bed, but normally, [my daughter] and I will watch cartoons or something on the iPad. Probably mostly when I'm at home, I'll play either at my desk or on the couch.

Other players offered similar explanations for where they play in their homes, choosing to play games where other activities took them. The locations in the home also tended to be the result of habit, such as one player describing playing a game on the couch for twenty minutes on her/his tablet as a way to unwind from a long day at work (a day at work that also included moments of playing mobile games, incidentally).

Homes present a trickier space to analyze regarding game bodies simply for the fact that traditional gaming forms already have inhabited homes for roughly twenty years. However, the difference between traditional gaming and mobile gaming in the home resides in the consistently changing locations of gameplay. For example, a player may play on the couch while their partner watches television, take their device with them while they use the bathroom, and then play for a few minutes in bed before retiring for the night. In this instance, the gaming body inhabited three different locations in the home, thus expanding the game space from the living room to the entire residence. According to players' interview responses, the entire home is appropriate for playing

games, and therefore mobile game bodies may occupy any given location in the home instead of limiting gameplay to the more traditional space of the living room.

Throughout players' days, many moments present opportunities to play games, and the locations may vary drastically. One player's response was typical for those interviewed regarding the seemingly random variety of spaces mobile gaming bodies may inhabit:

I used to play games a lot when I was in the bathroom. But, I found that I wasted a lot of time in the bathroom, so I stopped doing that. If I'm waiting at the doctor's office or waiting for an appointment or something . . . Like a couple weeks ago I went to go get my oil changed for my car and they had some show on their TV that I wasn't interested in so I pulled out my phone and started playing some games. So yeah, I guess if opportunity is there and there's nothing else I would be doing, I probably pull out a game.

Mobile game bodies demonstrate a level of adaptability when choosing where to play that is impossible with other forms of gaming. Any place wherein a player has their device presents an opportunity to play a game. In this way, mobile gaming bodies pop into and out of existence throughout the day, in various places, depending on the circumstances of the particular context.

Implications

Agency is a loaded term with a history of contentious definitions, but if examined as a series of behaviors, or potential for behaviors, then mobile gaming agency revolves around bodies in time and space. The specific ways players described engaging with

mobile games demonstrate that gaming corporeality extends beyond arbitrary or traditional boundaries. If console gaming players tend to exhibit a commitment to time, from thirty minutes to thirty hours, then a temporal boundary surrounds those gaming bodies inasmuch as players restrict their expectations for how and when they disrupt that engagement. However, mobile game players expand those expectations so that time commitment becomes an afterthought to the gaming process. Similar phenomena occur spatially when mobile game players inhabit a great number of places and body positions when gaming, including home, work, and during transit. Mobile game bodies do not chain themselves to one space, time, or position, and players' behaviors and expectations regarding their physical experience of gaming include the freedom to start, stop, and move as they see fit.

These findings provide a new paradigm through which to understand the relationship between bodies and games. Instead of a media effects perspective in which the games perform the majority of the rhetorical labor in shaping how players' bodies behave during gameplay, this new paradigm suggests that players' bodies shape the gaming experience. Players' bodies dictate how, when, and where the game is consumed. For instance, mobile games tend not to require prolonged gameplay sessions which allow players the freedom to play a variety of contexts. Mobile games do not limit where and when they can be played. Instead, players may determine when and where any particular mobile game would be useful or appropriate. This agency insists that the best analyses of mobile games take player choices seriously inasmuch as much of the meaning players derive from mobile games depends on how they choose to consume them. Throughout

the interviews, players freely divulged what their games meant to their lives, or their interpretations of how mobile games contribute to the actual practices of daily living. Whether to relax, to distract, to entertain, or even to socialize, players' choices for how, when, and where to play foregrounded the ways in which players' bodies contextualized the nature of the gaming experience.

Inherent in this paradigm is the implication that the times and places in which players choose to corporeally engage with mobile games dictates the nature of any particular time and place. Spare moments become gaming times. The work office becomes a game space. And throughout these events players' bodies become gaming bodies which traverse temporal and spatial boundaries. These findings engage with current work on the rhetorics of space and place inasmuch as it subverts the power of the space in favor of players' behaviors. For instance, Steven Conway offers an excellent assessment of sports video games and culture, including a discussion of how players position themselves in living rooms when playing *Pro Evolution Soccer 2008*.¹¹⁹ His approach works well with console games inasmuch as they seem to structure the gaming experience: the sports game introduces a sports culture in the living room, and players' behaviors in that space follow the expectations of that space. However, mobile games appear to transgress the assumptions of this approach inasmuch as the places and times so often change. Players may start a game at home, continue to play it at work, play another game while waiting in line at a grocery store, and then play for a few minutes in bed before going to sleep. In these instances, players' behaviors structure the space instead of the space structuring the gameplay. Players who play mobile games while waiting for a

mechanic to repair their cars make their space a space for gaming. Of course, this behavior does not necessarily determine that everybody acknowledge that space is one meant for gaming, but instead the space is a personal one. The player's space is the gaming space. However, observing others play games in any given space might suggest to some people that gaming is appropriate.

Corporeal gaming agency includes some lesser discussed implications, including how the variability of gaming positions lets those with some physical disabilities play games as naturally as they would participate in any other activity. By way of a personal anecdote, after undergoing surgery on my elbow after a bicycle accident, I could not play PC or console games given the physical restrictions on my arm and hand. However, I could fully operate my touchscreen phone inasmuch as I could hold and position the phone in a great variety of ways, allowing me to pass the many hours of immobility by playing mobile games. Others with more permanent physical limitations might find the physical agency of mobile gaming exceeds that of other, more traditional, forms of gaming. Many smart phones include a number of accessibility options that would put console and PC gaming to shame.¹²⁰ Touchscreen technology allows players to play games with their toes, elbows, knuckles, various fingers, or even parts of the face. Corporeal agency does not only imply a greater number of options for all players, it also provides gaming experiences to a wider variety of players who otherwise would not have been able to participate.

Lastly, the three I's of digital viscera form a fundamental part of the mobile gaming experience. In terms of interactivity, casual, mobile games invite their interactive

presence in various times and spaces, making time/space interactive elements of the game. Choosing when and where to play is just as much a part of the game's interactivity as the on-screen content of the game itself. For intuition, choosing where/when to play becomes a matter of intuition. A spare moment turns into a "trained" moment of turning on the game for a few minutes. Certain spaces become habitualized into the space where mobile gaming takes place, such as when a player comes home from work, collapses on the couch, and plays their favorite game for a few minutes. Lunch breaks, times before bed, or visiting the bathroom all create moments of habitualized and intuitive, gaming. And for immersion, casual mobile games make the magic circle completely permeable, and the way they navigate time and space, and allow players to hop in or out at a moment's notice, makes immersion an element of corporeal agency instead of a compelling force that captures bodies.

Mobile touch technology has expanded what gaming means for bodies in terms of when, where, and how it occurs, but only when contrasted with other forms of gaming does the recent popularity of mobile games makes sense as one part of a widespread phenomenon of gaming corporeality, which is neither new or a passing fad. The following chapter describes what the four elements of gaming corporeality discussed thus far mean when taken together, and I conclude this project by proposing a term that defines what all forms of gaming bodies have in common.

CONCLUSION

The *Grand Theft Auto* video game series is no stranger to public outrage and controversy surrounding its depiction of violence, drugs, and sex crimes. Its most recent iteration, *Grand Theft Auto V*, pushed the boundaries further than the series ever had before, yet there was only a small outcry regarding its content. Both its primary audience and the medium itself had grown up a bit, and therefore most people were not surprised at the game's violent or sexual content. However, one scene in the game did attract the attention of popular commentators and news outlets, that of a torture scene that the player was required to play in order to progress with the story (see fig. 32).



Figure 32: Screenshot of the tooth-pulling section of the torture scene in *Grand Theft Auto V*.

The game is filled with both satire and not-so-subtle political commentary, and the moments that follow the torture scene include a dialogue critiquing the United States'

“advanced interrogation tactics” in the war on terror. But the scene caused enough—perhaps intended—controversy to place the game back at the center of the decades-long public debate about the relationship between video games and physical violence.

Controversies about video games are not limited to what is on the screen, and gaming culture has had its share of shameful moments. On June 15, 2012, the Kickstarter crowdfunding campaign concluded for the YouTube series “Tropes vs. Women in Video Games” after receiving \$158,922 from almost seven thousand donors. The series, to be produced by Anita Sarkeesian, aimed to critically dissect common sexist tropes in popular video games, ranging from the “damsel in distress” trope to women as sexually objectified ancillary characters. Sarkeesian intended the series to consist of only five episodes, and she set the Kickstarter campaign goal at \$6,000. Backlash from angry members of the gaming community led to widespread media coverage of the Kickstarter campaign, and, after achieving the initial goal, donations continued to pour in. Attackers sent Sarkeesian death and rape threats, popular internet video game forums filled with angry vitriol about Sarkeesian and the proposed video series, and, within a few weeks, a misogynist and criminal segment of video game culture appeared to have confirmed everything that was wrong with video games. Their threats were unsuccessful, however, and Sarkeesian has posted nine of the promised twelve episodes on her YouTube channel FeministFrequency.

August, 2014 saw the rise of what would come to be known as the GamerGate controversy, a somewhat natural extension from the harassment that spawned online towards Sarkeesian. An ex-boyfriend of Zoë Quinn, a game developer, wrote a lengthy

blog post attacking and disparaging her, and game forums online jumped at the opportunity to accuse her of having a sexual relationship with a game journalist in order to gain favorable reviews for a game she recently published. In what seemed like a culture war, articles, Twitter posts, blogs, and forums all ignited, with some arguing against the apparent sexism in the gaming community and with others arguing against progressivism in game journalism. Throughout the controversy, online harassment towards journalists and female members of the gaming community, including towards Quinn and Sarkeesian, only fueled what was dubbed GamerGate onward. Everybody who had some stake in video games appeared to have something to say about the controversy, but in the months that followed nothing was resolved. Once again, a vocal subset of gaming culture seemed to have proved itself to be a misogynist, sexist, homophobic, violent, and criminal group.

It would be a mistake to confuse the groups that cause these controversies with the entire population that play games. The vast majority of people, at least in the United States, play video games in one form or another: the Entertainment Software Association estimates that 155 million U.S. Americans play video games, 42% play video games three or more hours per week, four out of five households own a device used to play video games, and 51% of households own a dedicated game console.¹²¹ Whether they are online social games, casual mobile games, console games, PC games, or motion-controlled games, video games are here to stay in cultures across the globe. People in long-term medical care facilities play sports games with motion controllers, children play handheld devices, working professionals play on tablets and phones, and avid hobbyists

purchase expensive computer equipment to play at home. With the prevalence of gaming, it would be logical to assume that such concentrated, heated, and misogynist attacks would be a single oddity, a fluke in an otherwise healthy and balanced cultural medium. However, instances of abuse and harassment continue in gaming culture, in one form or another, and so the question arises: what is it about video games that inspire such hateful acts?

One possible explanation is the novelty of the medium itself. Lee Grieveson, in his book *Policing Cinema*, describes how the early days of film saw a broad cultural anxiety about its function in society.¹²² The histories of comic books and television are also fraught with public outcries, anxieties, and parental fears about content. It appears that whenever a medium is growing in popularity, but has yet to cross the peculiar threshold of public acceptance, controversies surrounding its form and content abound. But video games have existed in public culture, in one form or another for the better part of four decades, and given their popularity in almost every demographic of society, there must be something else at stake that inspires the ugly side of gaming to continue, in one form or another.

Beyond video games' emerging place in everyday life and society as a whole, my project suggests that the reactions and controversies seen throughout video gaming's history orbit around bodies. The trait shared among these instances of public controversy is the same characteristic investigated throughout this project. Bodies, whether digital or physical, whether present or simply represented, provide a primal foundation in almost every part of gaming culture, such as journalism, advocacy, critique, aesthetics, design,

community, etc. Beyond corporeal participation, which every media form necessitates, there exists primal, embodied elements to gaming that bubble up regardless of the site of investigation. But what distinguishes video games from other media in this regard, apart from the fact that games are still relatively new in most cultures when compared to, say, novels or films, stems directly from their corporeal foundation: games are visceral.

Digital Viscera

I term the relationship between bodies and games as digital viscera, or the physical, visceral experiences of games and how they create corporeal involvement. Throughout this project, I examine various manifestations of this relationship. Online game streaming merges identities, representations, and physical participation into a website aimed at showcasing human involvement. Game characters' bodies draw upon a series of aesthetic choices to make them seem weighted and present to players whose physical bodies function quite differently than those on the screen. Mobile, casual games foreground players' ability to traverse space and time in order to allow for more corporeal agency in gaming than ever seen previously. And motion-controlled games make games of players' bodies, literally making a game of living everyday life. These manifestations of the relationship between bodies and games demonstrate how "digital" uses "visceral" to make "corporeal," and there exist three parts to digital viscera that support bodies' involvement with digital games: games as physically interactive, games as physically intuitive, and games as physically immersive.

Chris Crawford defines interactivity as a three-part process using the metaphor of a conversation: listening (input), thinking (processing), and speaking (output).¹²³

Furthermore, he describes interactivity as existing on a continuum so that an experience may be more or less interactive. Using this definition, video games are highly interactive, but Crawford's approach demonstrates the continued focus on the digital aspects of the experience. The physical, embodied aspect of interactivity is a hallmark of video gaming of all types, and participating in a video game is a physically interactive experience. It would be easy, using Crawford's model, to describe video games' interactivity as falling into the three categories through digital means: listening is the program accepting digital inputs, thinking is the program computing equations and following the logic of the code, and speaking is the program sending information out of the computational sphere.

However, it is readily apparent that such a model awkwardly avoids the inherent physicality to games' interactivity. Restructured to include players' bodies, the model reorganizes into something more heuristically pleasing: listening is the player physically inputting commands into hardware that translates the commands into digital signals, thinking is the program using those signals to make decisions based on its code, and speaking is the program translating its output into signals that hardware can project back to the player.

Even with a reinterpretation of a program's interactivity to include the player's physical involvement, the model must also take into account the participation of the player through the same metaphor. The player listens by accepting the game's feedback through various senses—primarily audiovisual, but also haptic feedback in many instances—thinking about how to respond, and speaking by inputting commands into the game's hardware. Every side of video gaming's interactivity revolves around the physical

involvement of players' bodies. Again, using Crawford's model, interactivity exists on a continuum, and while other media such as films, video, literature are interactive to a degree, what distinguishes video games from other media is the degree to which games require physical interactivity. This interactivity includes the mental burden placed on players to think through complex virtual situations, puzzles, and other game mechanics. Games oftentimes require attention and participation, so much so that many games cannot be played without considerable practice and skill. Or, as the stand-up comedian Dara Ó Briain explains in his TV special "Craic Dealer":

Video games do a thing that no other industry does. You cannot be bad at watching a movie. You cannot be bad at listening to an album. But you can be bad at playing a video game. And the video game will punish you and deny you access to the rest of the video game. No other art form does this.¹²⁴

Of course, a case could be made for media literacy of all forms, and all media, especially literature, require high levels of education in order to participate fully, but in terms of corporeal involvement that includes physical interactivity at a rapid pace, no other media form compares to video games.

The remaining two aspects of digital viscera, intuition and immersion, stem from interactivity in some form or another, and while they share many of the same characteristics, they remain sufficiently distinct to merit their own descriptions. While mentioned previously, I wish to emphasize that I do not distinguish between mental involvement and physical involvement. The mind is as much a part of the body as the hands, and every part of the body works cohesively to function as a whole. By rejecting

the bifurcation, intuition remains a firmly corporeal experience—many athletes, musicians, and yes, avid video game players, even call it muscle memory. The back-and-forth interactivity of video games is not fully conscious experience inasmuch as the physical involvement of the player, in both mind and appendage, often takes place without perfect forethought. Even the strictest puzzle games such as *Candy Crush*, when played by somebody who is familiar with the game, evolve into a system of intuitive actions by the eyes, brain, and fingers. Time and other limitations, even if only to encourage fluid gameplay, transform the experience into one existing in the realm of intuition, and intuition requires physical focus as the player's attention is turned fully towards the game. The nature of video game inputs, always abstract and never literal or actual, further cements the video gaming experience as one existing in intuition. Hands and fingers must push brightly-colored buttons than have no literal relation to the action performed in the game, but players' hands and fingers maneuver these buttons as if the controller was an extension of their own bodies.

The last quality of digital viscera is immersion, a word often used to describe gaming experiences even though it lacks a clear definition. Some writers describe immersion as existing within a “magic circle” that acts as “a shield of sorts, protecting the fantasy world from the outside world.”¹²⁵ Immersion is the sense of being engulfed in a virtual experience, and while all media forms, especially those which portray fiction, demonstrate this quality to some extent, video games have demonstrated an ability to immerse players in ways other media forms cannot. Each of the other elements of digital viscera, interactivity and intuition, contribute to this phenomenon wherein players

separate their experiences in the virtual worlds of games from that of the more physically-grounded world of everyday life. Not every game utilizes immersion to the same extent, but many games demonstrate a consistent potential for this characteristic. Immersion in a virtual world does not make gaming less physically involved inasmuch as immersion is a physical phenomenon. Immersion attracts the attention of players' bodies to the extent that it almost completely captures their energy and focus. It is not the forgetting of the body; it is the engulfing of the body, at least on a psychic level, that dictates how the body will feel and behave while immersed in the game world.

As mentioned previously, the characteristics of digital viscera are not foreign to other media, but games tend to distinguish themselves as utilizing digital viscera more prominently and consistently than, say, books or television. For instance, a film may immerse a viewer, but it certainly would not require the same level of interactivity and intuition as video games. It is the cohesive whole of all three characteristics that distinguish video games as digital, visceral experiences grounded in the bodies of players, even though they often overlap in terms of how they function. For instance, a game's level of interactivity depends on how it allows players' intuitions to feed into the experience, and the deepest levels of immersion necessitate both interactivity and intuition.

Each investigation in this project centers on a different site of video game culture, yet each manifests the three I's of digital viscera. Interactivity, intuition, and immersion all play a role in making each site of study a corporeal experience. While the concluding

section of each study describes how the three I's relate to the each chapter's subject matter, I restate those relationships here for the sake of convenience:

1) Third-person bodies and corporeal aesthetics:

Interactivity: Players interact with, and manipulate, the digital bodies on the game screen.

Intuition: The games' aesthetics function to make controlling the third-person bodies as intuitive of an experience as possible.

Immersion: The aesthetics of third-person bodies help make players feel as if they are the body they are controlling in the virtual world.

2) Twitch.tv and corporeal awareness:

Interactivity: The entire site is one of interacting between people, on a digital platform, regarding games. Perhaps those streamers and viewers are so familiarized with the gaming convention of interactivity that, as it extends into the website experience, it feels like it fits the theme of gaming.

Intuition: The players on Twitch include some of the most skilled in the world, including professional, competitive players. Their intuitive control of the games, often at a speed difficult to reproduce by casual players, is one of the most attractive features for viewers.

Immersion: The website plays with the idea of immersion inasmuch as the games being played tend to be quite immersive, but the website highlights the permeability of the magic circle, especially as streamers and viewers pop into and out of the game's fictional world to comment and react to it.

3) *Wii Fit U* and corporeal gamification:

Interactivity: Exercise games take interactivity to a different level wherein the entire body, or the player's everyday lifestyle, is gamified through the interactions.

Intuition: These games capitalize on the intuition of living life, taking "muscle memory" more literally. The exercises performed become intuitive through familiarity, and thus the games and exercises themselves are a matter of intuition.

Immersion: Since the game, players' bodies, and everyday life work together, players immerse themselves in the game within the context of life and real exercise. This happens by inviting players to think about, and think through, the actions they are taking as a part of the game.

4) Mobile gaming bodies and corporeal agency:

Interactivity: Casual, mobile games invite their interactive presence in various times and spaces, making time/space interactive elements of the game. Choosing when and where to play is just as much a part of the game's interactivity as the on-screen content of the game itself.

Intuition: Choosing where/when to play becomes a matter of intuition. A spare moment turns into a "trained" moment of turning on the game for a few minutes. Certain spaces become habitualized into the space where mobile gaming takes place, such as when a player comes home from work, collapses on the couch, and plays their favorite game for a few minutes. Lunch breaks, times before bed, or visiting the bathroom all create moments of habitualized and intuitive, gaming.

Immersion: Casual mobile games make the magic circle completely permeable, and the way they navigate time and space, and allow players to hop in or out at a moment's notice, makes immersion an element of corporeal agency instead of a compelling force that captures bodies.

Each foundational category of corporeal gaming demonstrates a reliance on the three I's of digital viscera to enact corporeality within the gaming experience. Not every site of gaming culture, when examined, will reveal the same levels of corporeal involvement, and, for the sake of this project, I chose to study those areas of gaming that most readily signify corporeality to some degree. However, interactivity, intuition, and immersion, the building blocks of corporeal gaming, may structure any number of gaming phenomena. They do more than explain corporeal gaming, they explain, in part, the allure of gaming itself, and their nature also just so happens to rely on corporeal engagement. In other words, not every part of video game culture will showcase corporeal gaming through its four key manifestations studied in this project, namely awareness, aesthetics, agency, and gamification. However, almost any gaming experience will rely on digital viscera, as it lies at the heart of gaming.

The Future of Game Bodies

This project formalizes the study of game bodies as a topic of investigation. The many interdisciplinary approaches to game studies have touched on bodies as a relevant concern, but I suggest that game bodies merit study, analysis, and continued theoretical contributions in order to understand their central role in video gaming. The following

implications of this project's findings should prove useful to game scholars as games and game studies continue to grow in prominence.

First, bodies arise in gaming in less than intuitive ways, and while players' bodies may seem like the most logical, and perhaps the only, place to start, this project suggests that other forms of game bodies present legitimate avenues of investigation.

Representations of bodies, of players such as on Twitch.tv and of digital characters, constitute a large portion of the corporeal presence in games, and their digital construction should not disqualify them for investigation. For instance, while this project includes a study of video game characters, it targets only a small sample of what constitutes game character bodies, that being third-person action video games primarily designed to be played on game consoles. The aesthetics of these character bodies does not necessarily describe the role of character portrayals or representations, paratexts such as cover art or cutscenes, or two-dimensionally designed character sprites instead of the three-dimensional models studied in this project. Scholars have written on these topics in the past,¹²⁶ and further study of game characters will continue to reveal what character bodies mean on individual and societal levels. In order to discover the nature of video game bodies, researchers must break the artificial barrier between players' bodies, representations of players/viewers, and game character bodies inasmuch as all three types of gaming corporeality intersect, overlap, and influence each other.

Second, scholarly discourse about gaming must remain grounded in a physical materialism inasmuch as there is no purely digital experience. I do not wish to exclude new materialisms, but I am primarily concerned with guiding future writing on games in

order to draw attention to the human, spatially-grounded elements of gaming. All gaming takes place in, through, and around bodies, and there is no such thing as a game that ignores bodies entirely. The only exception, while non-existent currently, are games solely playable by computer A.I., but the current trend in A.I. research is the programming of an A.I. to learn by itself. For example, Google's DeepMind A.I. has been able to learn to play, and ultimately complete, over forty-nine Atari games.¹²⁷ It is here that a new materialism may better illuminate the contextualized nature of gaming. Laurie Gries argues that things or objects exhibit agency through their influence and interactions with people and other objects, and that there exists a vitality to things, especially within the context of rhetorical influence, that already moves throughout people's everyday lives.¹²⁸ This vitality comes in the form of memes to powerful political posters, but regardless of the form, matter makes things happen. With this new materialist perspective, A.I. or computer-oriented games—instead of people-oriented games—is a natural extension of what games are capable of accomplishing beyond the influence of human bodies. However, the trend in video game studies is to over-emphasize the role of what occurs on the screen and under-emphasize the relationship between players, games, viewers, and all the material contexts surrounding games. What Gries calls the “dynamic dance of intra-actions” between objects, things, visibility, and people is lost when game “content” is the only object of study.¹²⁹ What occurs on the game screen or in the game computer means little to a humanistic project without including the role of humans in these processes, and future games research should lean, when appropriate, towards acknowledging gaming as a contextualized experience.

Third, there is no single gaming “body,” or a body that typifies gaming. This project demonstrates that any attempt to unify the abundantly diverse classifications of video game bodies into a single conceptual entity would be futile at best and dishonest at worst. Video game bodies not only include any player from any variety of cultural, racial, sexual, or geographical backgrounds, but also game characters, digital representations of bodies online, and any number of other corporeal phenomena in gaming that has yet to be studied. Once again, I defer to a new materialist perspective to diversify and complicate the nature of gaming bodies and to draw attention to the necessary role of non-human gaming bodies, such as digital representations of humans online or as characters.

The future of video game bodies includes a variety of gaming experiences that have yet to become a mainstay in gaming culture, but two trends in gaming relate to the topic at hand: virtual reality (VR) and augmented reality (AR). VR, as it is known today, usually consists of users wearing a headset that obscures their vision and places individual screens in front of each other their eyes. As they move their head or body, the hardware tracks their movements and changes what appears on the screen in order to create the illusion of three-dimensional, interactive, space. VR has seen a resurgence in popularity with various start-up companies, as well as dominant technology corporations, throwing their hats into the race to create a user-friendly VR experience. The Oculus Rift, the HTC Vive, the Playstation VR, Google Cardboard, and others are attempting to integrate motion-controls, head and motion-tracking, headgear, 3D visual technology, and gaming into an entertaining and marketable enterprise. However, many challenges

still exist for these relatively young technologies, including limited screen resolution, motion-lag, heavy or uncomfortable hardware, and lack of consumer interest.

Augmented reality, on the other hand, has yet to see the same level of commercial interest, but it seems to be able to solve many of the problems inherent in VR technology. AR means the addition of various sights or sounds to the already existent spatial and aural experience of users. For example, a user may look at their smartphone as it uses its camera functionality to show a live feed of the user's room. The user may move the phone around their room and see what the phone's camera is picking up. An AR app would add game characters or other digital elements to the phone's screen while also seamlessly integrating those elements into the spatial environment of the room. Unlike VR, the purpose of AR is not to block out a user's senses, but instead adds to what users already experience. One commercial application of AR is Playmation Marvel's Avengers series of toys wherein players interact with their environment, use wearable tech, and also interact digitally with computerized game equipment and apps.

Ultimately, the future of gaming bodies will never be limited to motion-tracking software or VR technology inasmuch as all gaming, as we currently know it, occurs within the embodied context of people's lives. Gestures and button-presses do not exhaust bodies' intersections with games, and everything from health to daily habits informs our collective experience with gaming. The game screen and the computer accomplish much of the work in games, but without the singular presence of at least one player, the game does not even begin. Game bodies will always be mutually constitutive beings given the interactive nature of gaming: games require bodies and bodies create,

play, and watch games. Video games matter, not only as means of entertainment but also, for many people, as fundamental part of daily living, and their influence is not limited to colorful pixels on a screen. Bodies are as much a part of video games as the programing code that guides their rules.

ENDNOTES

1. Game Studies Interest Group Pre-Conference, "Gaming Bodies," International Communication Association Conference, San Juan, PR, 2015.
2. I describe and discuss said literature more extensively in the chapter to follow.
3. Ian Bogost, *Persuasive Games: The Expressive Power of Videogames* (Cambridge, MA: MIT Press, 2007).
4. *Ibid.*, 28.
5. Alexander R. Galloway, *Gaming: Essays on Algorithmic Culture* (Minneapolis, MN: University of Minnesota Press, 2006). Page 37 offers a clear diagram of his definitions and is worth examination.
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