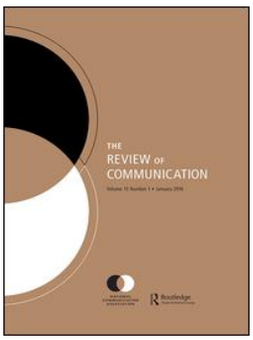

Routledge
Taylor & Francis Group

Review of Communication

ISSN: (Print) 1535-8593 (Online) Journal homepage: http://www.tandfonline.com/loi/rroc20

The corporeal turn: at the intersection of rhetoric, bodies, and video games

Sky LaRell Anderson

To cite this article: Sky LaRell Anderson (2017) The corporeal turn: at the intersection of rhetoric, bodies, and video games, Review of Communication, 17:1, 18-36

To link to this article: http://dx.doi.org/10.1080/15358593.2016.1260762

Published online: 14 Dec 2016.

REVIEW OF COMMUNICATION, 2017
VOL. 17, NO. 1, 18–36
http://dx.doi.org/10.1080/15358593.2016.1260762

The corporeal turn: at the intersection of rhetoric, bodies, and video games

Sky LaRell Anderson

Department of Communication, Denison University, Granville, U.S.A.

ABSTRACT

Through a critical literature review, this article examines the trend in game studies toward studying bodies, both of players and of characters, in communication scholarship. Specifically, 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. The article concludes by forecasting the future of game bodies and game studies with an eye toward Artificial Intelligence (A.I.) gaming, augmented reality, and virtual reality. This article argues that instead of creating a single, unifying theory of gaming bodies, games scholars should identify themes of bodies in games.

ARTICLE HISTORY
Received 24 June 2016
Accepted 26 October 2016

KEYWORDS
Video games; game studies; corporeal turn; rhetoric; materialism

There exists a recent turn in the interdisciplinary field of game studies as it relates to communication and rhetoric that targets gaming bodies. While a recent preconference meeting of the Game Studies Interest Group of the International Communication Association showcased, as its theme, the nature of video game bodies,[1] the disparate nature of the work on gaming and bodies has obfuscated the widespread interest in them. Through a critical literature review, this article describes the trend toward studying gaming bodies, both of players and of characters, in communication scholarship. This article also predicts that a comprehensive theory of gaming bodies is improbable given the interdisciplinary nature of game studies, and instead games researchers, especially in the field of communication studies, should search for, name, and describe common corporeal characteristics found in games. In other words, instead of creating a single, unifying theory of gaming bodies, I argue that scholars should identify prominent themes of bodies in games and use those themes to create a semblance of unified effort towards understanding the phenomena.

While this article does not attempt a comprehensive examination of every book and article related to the subject at hand—such an effort would prove to be a monumental task far beyond the scope of this project—I showcase work that especially relates to the field of communication in order to reveal a trend regarding game studies. First, I discuss how the field of rhetoric has gradually become more familiar with studying

CONTACT Sky LaRell Anderson andersons@denison.edu

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 through the lens of three themes of research, namely space, identity, and engagement.

Ultimately, while the turn to studying bodies in video game scholarship is widespread, it is not as readily acknowledged among games and communication researchers. The purpose of this critical literature review is to bring to light the ever-growing interest in bodies in games research, especially from a communication perspective. While the areas of study may seem disparate, they gather around several prominent themes that I explore in the sections to follow. The goal of this article is to provide evidence that games scholarship, even in the field of communication, has turned from almost exclusively studying what is on the screen to the bodies that inhabit gaming—both on and off the screen. The turn to studying bodies in game studies and communication necessitates a formal acknowledgement of the fact in hopes of formalizing future work around an often studied, but less explicitly stated, object of investigation.

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. One of the first books aimed at constructing a rhetorical theory of video game analysis came in 2004 with Ken McAllister's *Game Work*.[2] McAllister makes the case that games are rhetorically potent artifacts, whether through their mass cultural influence, economic influence, instructional influence, or even what he calls their psychophysiological influence. He proposes the analysis of the computer game complex, a term aimed at describing games, the games industry, and players' behaviors. He calls his suggested method of analysis of the computer game complex a grammar of gameworks, taking inspiration from Kenneth Burke's writings on rhetoric as grammar. McAllister's grammar consists of agents, functions, influences, manifestations, and transformative locales, and a full summary of each would require much more space than this article could allow. However, through a series of case studies, McAllister employs this grammar to create a framework for the future study of games. While certainly not as far-reaching as later theories, McAllister's work presents one of the first, most vital steps towards a rhetorical approach to game studies theory, and he accomplishes this feat by starting with a foundation of rhetorical theory.

No summary of rhetorical video game theory would be complete without mentioning the foundational work by Ian Bogost and his concept of procedural rhetoric. 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. What makes both Bogost's and Galloway's approaches similar in their methods for understanding games is that they address the medium's eccentricities.[6] 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.

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*.[7] He suggests much of the previous research on games tends to target specific elements within games, such as their generic classification or narrative content. He instead proposes a broader methodological approached aimed at studying myriad aspects of games. He argues that games researchers should examine the discourse found in and around games, through both textual and paratextual approaches. Paul's term for the discourse in and around games is "wordplay," and his theory acknowledges game studies' need to create theories born from games themselves, instead of adapted from other media.

Several edited volumes approach rhetorical game theory through a unified focus on a theme,[8] but the sometimes varied approaches inherent in such edited books tend only to 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 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, visuality, interaction, engagement, and how those elements combine to form a type of subjectivity.[9] Voorhees's other articles repeat similar claims.[10] 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.[11] 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.

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.[12] 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 20th 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 that complicates and abstracts rhetoric in order to describe it as a "technology of deliberation,"[13] 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,"[14] 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.[15] 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."[16] Each of the remaining chapters is concerned 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 8, initiates a conversation about what roles digital literacy and the Internet might play regarding a materially grounded discussion of bodies.[17] 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's 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 publicly available documents and signs that cover the walls and hallways.[18] The text, it seems, not only projects a material dimension, but also 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 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.[19] 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.[20] 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 publicly show or conceal). For example, Robert Hariman and John Lucaites dissect the bodies on display in the famous Tiananmen Square protest photograph,[21] Richard Morris rhetorically analyzes representations of death of graveyards and monuments,[22] and Phebe Shih Chao tackles the rhetoric of tattoos and body piercings.[23]

Hawhee's second project on bodies arrived in 2009 with the National Communication Association award-winning book *Moving Bodies: Kenneth Burke at the Edges of Language*.[24] 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*. 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 2010s. 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 corporeal 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 rereading significant figures and discovering traces of materialism and bodies,[27] while others 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 shared 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, postmodern 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" among creators, viewers, things, life, and matter itself.[31]

Game studies and bodies

Space: exercises and movements

Released at the end of 2006, the Nintendo Wii game console was the first of its generation to feature a controller that not only acted as a pointing device, but also could 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 were 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.

The sudden popularity of movement-based game controllers launched it to the forefront of gaming scholarship. 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 Craz 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 20 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 *Dance Dance Revolution* installation.

Other scholars have begun to inquire into the nature of sports, exercise, and games, and their methods reveal a positionality concerned with observing players and their bodies in space.[34] For instance, various scholars have begun to investigate the nature of e-sports and game streaming.[35] However, more abstract questions arise regarding the body and space, and these inquiries primarily target spatial control and general body movement. Alison Gazzard's chapter in *CTRL-ALT-PLAY* 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.[36] She hypothesizes that gaming bodies inhabit space not only through mimetic interfaces such as 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*.[37] 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. They suggest that 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.

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*.[38] 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.[39]

As games such as *Dance Dance Revolution* traverse public, private, and digital-public spaces, so do the bodies that participate in the game's high-energy movement. In this

case, 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 this article to identity and bodies, it is worth noting how movement has the unique capability to both discipline bodies and influence identity perceptions. Brad Millington, through a Foucault-esque critique, explains 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.[40] Players ignore such ramifications 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.[41] 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 relationships among bodies, games, and spaces.

Identity: gender and race

Who are gamers? Marketing agencies and game production companies 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.[42] 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 portraying these identities in games. Portrayal is but one lens through which scholars have described the means by which the corporeality of identity manifests itself onto the apparatus of gaming culture, specifically through gender and race, and it continues to be a hotly contested site of scholarly discourse.[43]

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 reskinning, or changing how characters look, is not only a form of play but also a means of being productive.[44] Based on her interviews with 16 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 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.[45] 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 foregrounds 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,[46] 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.[47] He describes Fiona's sexualized portrayal as not being unlike the female protagonists of 1980s 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 than 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.[48] They describe instances when women and men choose to play characters of different genders, and how that gender performance interacts with the players' identities. They found that male players tended not to 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.[49] 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, such as *Dance Dance Revolution*, and many male subjects in the study reported feeling as if sports games such as 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.[50] Similarly, Jennifer Jenson and Suzanne de Castell targeted gender expectations about gaming in their multiyear study of girls and boys who play video games.[51] 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 and girls actually playing games, highlights gender as a salient aspect of the gaming body.

Race is a far less popular a topic in media and game journals when compared with the voluminous work done on gender and games. However, the journal *Games and Culture* has a consistent track record of publishing articles that address topics of race and gaming identity, in particular regarding 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.[52] 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*.[53] 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 their problematic portrayals seem to continue in modern games. 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 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.[54] The game takes place in Africa, and not only does it pit the player against hordes of black zombies, but it also 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.[55] 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.

Engagement: immersion and interactivity

Game spaces form a tenuous, dialectical relationship with the act of forgetting about the body and spaces through immersion and interactivity.[56] The means by 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,[57] engagement is a question of the entire body, including player perception and involvement. Several psychological studies have linked levels of immersion to the type of controller used in games,[58] especially with motion-controlled games, but 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 by helping them focus on the game's world and space more than on their hands or fingers in the real world.[59] 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 tackles 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.[60] Therefore, not only does the game invite immersion, but the player also 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 in to the online, multiplayer military shooter *America's Army* and typed the names of fallen military service persons.[61] 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. 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 pseudorealistic military simulation. When real bodies were involved, the immersive space of the game protest 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 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, specifically through the lens of casual, mobile gaming.[62] 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.[63] 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.[64] 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 such as Facebook, influence how players interact with games and each other,[65] 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 have 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.[66] 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. It may be healthy to remember that the gaming body has always been present in video games through the simple characteristic of fun.

Future of game bodies

Through this critical survey of literature, I contend that video games and game studies theory have demonstrated an interest in bodies, and while the work on bodies appears on the surface to be disparate, these studies showcase the themes of space, identities, and engagement. Such a turn in game studies, especially through the lens of communication scholarship, is unsurprising given the foundation laid by rhetorical studies and materialism. This article aims not only to identify a trend in game studies literature, but also to promote and forecast a continued interest in the embodied nature of gaming research. To conclude, I now turn to broader trends and the future of game bodies.

The various approaches studying bodies in game studies proves that they constitute a relevant concern, but game bodies merit study, analysis, and continued theoretical contributions in order to understand their central role in video gaming. 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, the work described in this article suggests that other forms of game bodies present legitimate avenues of investigation. Representations of bodies, of players—such as on the game streaming website Twitch.tv—and of digital characters, constitute a large portion of the corporeal presence in games, and their digital construction should not disqualify them from investigation. For instance, while I discussed character representation in regards to gender and race, these studies target only a small sample of what constitutes game character bodies. Gaming paratexts such as cover art or cutscenes and an increased focused on two-dimensionally designed characters—instead of the three-dimensional, computer-generated models seen in many modern games—merit further investigation. Scholars have written on these topics in the past,[67] and additional 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 nonexistent currently, are games solely playable by computer Artificial Intelligence (A.I.), but the current trend in A.I. research is the programing of A.I. to learn by itself. For example, Google's DeepMind A.I. has been able to learn to play, and ultimately complete, over 49 Atari games.[68] It is here that a new materialism may better illuminate the contextualized nature of gaming. 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.[69] 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, AI 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 overemphasize the role of what occurs on the screen and underemphasize the relationships among players, games, viewers, and all the material contexts surrounding games. What Gries calls the "dynamic dance of intra-actions" among objects, things, visuality, and people is lost when game "content" is the only object of study.[70] 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. The work presented in this article 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 include not only 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 nonhuman 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 (V.R.) and augmented reality (A.R.). V.R., 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. V.R. has seen a resurgence in popularity with

various start-up companies, as well as dominant technology corporations, joining the race to create a user-friendly V.R. 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.

A.R., 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 V.R. technology. A.R. 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 A.R. 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 V.R., the purpose of A.R. is not to block out a user's senses but to add to what a user already experiences. One commercial application of A.R. is Playmation *Marvel's Avengers* series of toys wherein players interact with their environment, use wearable technology, and also interact digitally with computerized game equipment and apps.

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 contexts 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.

Ultimately, the corporeal turn consists of an inclusion of the lived experiences and spaces of people who play games while also maintaining a focus on game texts and what appears on game screens. Gaming offers a novel paradigm of study in which interactivity invites the locus of study into the behaviors and interactions of players and characters. The impetus to study game bodies stems from the inherent participation required by games, more so than any other electronic medium, and the trend in gaming scholarship points towards the material lives of creators, players, and even viewers in the case of those who watch online game streaming content. The corporeal turn in game studies has already occurred, but it is scholars' obligation to recognize it.

Notes

1. Game Studies Interest Group, "Gaming Bodies," (preconference, International Communication Association Conference, San Juan, PR, May 21, 2015).
2. Ken S. McAllister, *Game Work: Language, Power, and Computer Game Culture* (Tuscaloosa: University of Alabama Press, 2004).
3. Ian Bogost, *Unit Operations: An Approach to Videogame Criticism* (Cambridge, MA: MIT Press, 2006); *Persuasive Games: The Expressive Power of Videogames* (Cambridge, MA: MIT Press, 2007).
4. Bogost, *Persuasive Games*, 28.

5. Alexander R. Galloway, *Gaming*: *Essays on Algorithmic Culture* (Minneapolis: University of Minnesota Press, 2006). Page 37 offers a clear diagram of his definitions and is worth examination.
6. Also known as ludic scholarship. See Sky LaRell Anderson, "Start, Select, Continue: The Ludic Anxiety in Video Game Scholarship," *Review of Communication* 13, no. 4 (2013): 290–301.
7. Christopher A. Paul, *Wordplay and the Discourse of Video Games*: *Analyzing Words, Design, and Play* (London: Routledge, 2012).
8. See Matthew Wysocki, ed., *CTRL-ALT-PLAY*: *Essays on Control in Video Games* (Jefferson, NC: McFarland, 2012); Nick Dyer-Witheford and Greig de Peuter, *Games of Empire*: *Global Capitalism and Video Games* (Minneapolis: University of Minnesota Press, 2009); Ian Bogost, Simon Ferrari, and Bobby Schweizer, *Newgames*: *Journalism at Play* (Cambridge, MA: MIT Press, 2010).
9. Gerald A. Voorhees, "I Play Therefore I Am: *Sid Meier's Civilization*, Turn-Based Strategy Games and the *Cogito*," *Games and Culture* 4, no. 3 (2009): 254–75.
10. See Gerald Voorhees, "The Character Difference: Procedurality, Rhetoric, and Roleplaying Games," *Game Studies* 9, no. 2 (2009): http://gamestudies.org/0902/articles/voorhees (accessed May 25, 2014); "Discursive Games and Gamic Discourses," *communication +1* 1, Article 3 (2012): 1–21, http://scholarworks.umass.edu/cpo/vol1/iss1/3 (accessed June 16, 2014).
11. Anderson, "Start, Select, Continue."
12. Michael Calvin McGee, "A Materialist's Conception of Rhetoric," in *Explorations of Rhetoric*: *Studies in Honor of Douglas Ehninger*, ed. Ray E. McKerrow (Glenview, IL: Scott Foresman, 1982), 23–48.
13. Ronald Walter Greene, "Another Materialist Rhetoric," *Critical Studies in Mass Communication* 15, no. 1 (1998): 21.
14. Ibid., 27.
15. Jack Selzer and Sharon Crowley, eds., *Rhetorical Bodies* (Madison: University of Wisconsin Press, 1999).
16. Jack Selzer, "Habeas Corpus," in *Rhetorical Bodies*, ed. Jack Selzer and Sharon Crowley (Madison: University of Wisconsin Press, 1999), 8.
17. Lester Faigley, "Material Literacy and Visual Design," in *Rhetorical Bodies*, ed. Jack Selzer and Sharon Crowley (Madison: University of Wisconsin Press, 1999), 171–201.
18. Christina Haas, "Materializing Public and Private: The Spatialization of Conceptual Categories in Discourses of Abortion," in *Rhetorical Bodies*, ed. Jack Selzer and Sharon Crowley (Madison: University of Wisconsin Press, 1999), 218–38.
19. Martin Nystrand and John Duffy, *Towards a Rhetoric of Everyday Life: New Directions in Research on Writing, Text, and Discourse* (Madison: University of Wisconsin Press, 2003).
20. Debra Hawhee, *Bodily Arts: Retoric and Athletics in Ancient Greece* (Austin: University of Texas Press, 2004), 13.
21. Robert Hariman and John Lucaites, "Liberal Representation and Global Order: The Iconic Photograph from Tiananmen Square," in *Rhetorics of Display*, ed. Lawrence J. Prelli (Columbia: University of South Carolina Press, 2006), 121–38.
22. Richard Morris, "Death on Display," in *Rhetorics of Display*, ed. Lawrence J. Prelli (Columbia: University of South Carolina Press, 2006), 204–26.
23. Phebe Shih Chao, "Tattoo and Piercing: Reflections on Mortification," in *Rhetorics of Display*, ed. Lawrence J. Prelli (Columbia: University of South Carolina Press, 2006), 327–43.
24. Diana Coole and Samantha Frost, eds., *New Materialisms: Ontology, Agency, and Politics* (Durham, NC: Duke University Press, 2010).
25. Jeremy Packer and Stephen B. Crofts Wiley, eds., *Communication Matters: Materialist Approaches to Media, Mobility and Networks* (London: Routledge, 2012).
26. Kelly E. Happe, *The Material Gene: Gender, Race, and Heredity after the Human Genome Project* (New York: New York University Press, 2013).

27. See Chris Lundberg, *Lacan in Public*: *Psychoanalysis and the Science of Rhetoric* (Tuscaloosa: University of Alabama Press, 2012).
28. See Matthew S. May, *Soapbox Rebellion*: *The Hobo Orator Union and the Free Speech Fights of the Industrial Workers of the World, 1909–1916* (Tuscaloosa: University of Alabama Press, 2013); Kathi Weeks, *The Problem with Work*: *Feminism, Marxism, Antiwork Politics, and Postwork Imaginaries* (Durham, NC: Duke University Press, 2011).
29. Elizabeth Grosz, "Refiguring Bodies," in *Volatile Bodies: Toward a Corporeal Feminism* (Bloomington: Indiana University Press, 1994), 1–26. See pages 21–24 for prescriptions for avoiding the mind/body dualism.
30. Donna Haraway, "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century," in *Simians, Cyborgs and Women*: *The Reinvention of Nature* (London: Routledge, 1991), 149–81.
31. Laurie E. Gries, *Still Life with Rhetoric*: *A New Materialist Approach for Visual Rhetorics* (Logan: Utah State University Press, 2015).
32. Ben Kuchera, "Nintendo the Big Winner, PS3 Dead Last for the First Half of 2007," *ArsTechnica*, July 24, 2007, http://arstechnica.com/gaming/2007/07/first-half-of-console-sales-for-2007-nintendo-the-big-winner-ps3-dead-last.
33. Bogost, *Persuasive Games*, 293–316. For additional work on space and sites of play, see Samuel Tobin, "Hanging in the Video Arcade," *Journal of Games Criticism* 3 (2016): http://gamescriticism.org/articles/tobin-3-a (accessed September 8, 2016).
34. See Steven Conway, "'It's in the Game' and above the Game: An Analysis of the Users of Sports Videogames," *Convergence: The International Journal of Research into New Media Technologies* 16, no. 3 (2010): 334–54; Hayeon Song, Wei Peng, and Kwan Min Lee, "Promoting Exercise Self-Efficacy with an Exergame," *Journal of Health Communication* 16 (2011): 148–62.
35. See Garry Crawford and Victoria K. Gosling, "More than a Game: Sports-Themed Video Games and Player Narratives," *Sociology of Sport Journal* 26, no. 1 (2009): 50–66; Brett Hutchins, "Signs of Meta-Change in Second Modernity: The Growth of E-Sport and the World Cyber Games," *New Media & Society* 10, no. 6 (2008): 851–69; T. L. Taylor, *Raising the Stakes: E-Sports and the Professionalization of Computer Gaming* (Cambridge, MA: MIT Press, 2012); Gifford Cheung and Jeff Huang, "Starcraft from the Stands: Understanding the Game Spectator" CHI '11 Proceedings of the 2011 Annual Conference on Human Factors in Computing Systems, ACM, 2011: 763–72; Victoria K. Gosling and Garry Crawford, "Game Scenes: Theorizing Digital Game Audiences," *Games and Culture* 6, no. 2 (2011): 135–54; René Glas, "Vicarious Play: Engaging the Viewer in Let's Play Videos," *Empedocles: European Journal for the Philosophy of Communication* 5, no. 1 (2015): 81–86; Nicholas David Bowman, Rene Weber, Ron Tamborini, and John Sherry, "Facilitating Game Play: How Others Affect Performance at and Enjoyment of Video Games," *Media Psychology* 16, no. 1 (2013): 39–64; William Hamilton, Oliver Garretson, and Andruid Kerne, "Streaming on Twitch: Fostering Participatory Communities of Play within Live Mixed Media," CHI 2014, April 26–May 1, 2014, Toronto, Ontario, Canada; Mehdi Kaytoue, Arlei Silva, Loïc Cerf, Wagner Meira Jr., and Chedy Raïssi, "Watch Me Playing, I Am a Professional: A First Study on Video Game Live Streaming," in Proceedings of the 21st International Conference Companion on World Wide Web, ACM (2012): 1181–88; Jussi Parikka and Jaakko Suominen, "Victorian Snakes? Towards a Cultural History of Mobile Games and the Experience of Movement," *Game Studies* 6, no. 1 (2006): http://gamestudies.org/0601/articles/parikka_suominen (accessed October 28, 2015).
36. Alison Gazzard, "Standing in the Way of Control: Relationships between Gestural Interfaces and Game Spaces," in *CTRL-ALT-PLAY*: *Essays on Control in Video Games*, ed. Matthew Wysocki (Jefferson, NC: McFarland, 2012), 121–32.
37. Seth Giddings and Helen W. Kennedy, "'Incremental Speed Increases Excitement': Bodies, Space, Movement, and Televisual Change," *Television & New Media* 11, no. 3 (2010): 163–79.
38. Irene Chien, "This Is Not a Dance," *Film Quarterly* 59, no. 3 (2006): 22–34.

39. Ibid., 23.
40. Brad Millington, "Wii Has Never Been Modern: 'Active' Video Games and the 'Conduct of Conduct,'" *New Media & Society* 11, no. 4 (2009): 621–40.
41. Derek A. Burrill, "Wii Will Become Silhouettes," *Television & New Media* 11, no. 3 (2010): 220–30.
42. Adrienne Shaw, "Do You Identify as a Gamer? Gender, Race, Sexuality, and Gamer Identity," *New Media & Society* 14, no. 1 (2011): 28–44.
43. As with much of media studies scholarship, the issue of ability is much more rarely studied when compared with issues of race, gender, and sexuality. For an example of game analysis focused on the issue of ability, see Diane Carr, "Ability, Disability and Dead Space," *Game Studies* 14, no. 2 (2014): http://gamestudies.org/1402/articles/carr (accessed September 8, 2016).
44. Hanna Wirman, "Playing by Doing and Players' Localization of *The Sims 2*," *Television & New Media* 15, no. 1 (2013): 58–67.
45. Alison Harvey and Stephanie Fisher, "Making a Name in Games: Immaterial Labour, Indie Game Design, and Gendered Social Network Markets," *Information, Communication & Society* 16, no. 3 (2013): 362–80.
46. For more on the relationship between players and avatars, see Jamie Banks and Nicholas David Bowman, "Emotion, Anthropomorphism, Realism, Control: Validation of a Merged Metric for Player–Avatar Interaction (PAX)," *Computers in Human Behavior* 54 (2016): 215–23; Jamie Banks and Nicholas David Bowman, "From Toy and Tool to Partner and Person: Phenomenal Convergence/Divergence among Game Avatar Metaphors," *Selected Papers in Internet Research* 5 (2015); Jamie Banks and Nicholas David Bowman, "Avatars Are (Sometimes) People Too: Linguistic Indicators of Parasocial and Social Ties in Player–Avatar Relationships," *New Media and Society* (2014): online only, doi: 0.1177/1461444814554898
47. Ewan Kirkland, "Experiences of Embodiment and Subjectivity in *Haunting Ground*," in *Frontiers of Cyberspace*, ed. Daniel Riha (New York: Rodopi, 2012), 125–47.
48. Rosa Mikeal Martey, Jennifer Stromer-Galley, Jamie Banks, Jingsi Wu, and Mia Conslavo, "The Strategic Female: Gender-Switching and Player Behavior in Online Games," *Information, Communication & Society* 17, no. 3 (2014): 286–300. For instances when games scholars push against more typical deconstructions of gender and sexuality in games, see also Helen W. Kennedy, "Lara Croft, Feminist Icon or Cyberbimbo? On the Limits of Textual Analysis," *Game Studies* 2, no. 2 (2002): http://www.gamestudies.org/0202/kennedy (accessed September 8, 2016); Laine Nooney, "A Pedestal, A Table, A Love Letter: Archaeologies of Gender in Videogame History," *Game Studies* 13, no. 2 (2013): http://gamestudies.org/1302/articles/nooney (accessed September 8, 2016).
49. Helen Thornham, "'It's A Boy Thing': Gaming, Gender, and Geeks," *Feminist Media Studies* 8, no. 2 (2008): 127–42.
50. Carolyn Cunningham, "Girl Game Designers," *New Media & Society* 13, no. 8 (2011): 1374–88.
51. Jennifer Jenson and Suzanne de Castell, "Girls@Play: An Ethnographic Study of Gender and Digital Gameplay," *Feminist Media Studies* 11, no. 2 (2011): 167–79.
52. Betsy James DiSalvo, "Digital Games and Young Black Men," *Games and Culture* 3, no. 2 (2008): 131–41.
53. Ben DeVane and Kurt D. Squire, "The Meaning of Race and Violence in *Grand Theft Auto*," *Games and Culture* 3, nos. 3–4 (2008): 264–85.
54. André Brock, "'When Keeping It Real Goes Wrong': *Resident Evil 5*, Racial Representation, and Gamers," *Games and Culture* 5, no. 6 (2011): 429–52.
55. Nathaniel Poor, "Digital Elves as a Racial Other in Video Games: Acknowledgment and Avoidance," *Games and Culture* 7, no. 5 (2012): 375–96.
56. The topic of immersion and gaming's power to overcome the body's senses usually appeared in discourses on gaming addiction. For a deconstruction of previous studies on gaming addiction, see Rob Cover, "Gaming (Ad)diction: Discourse, Identity, Time and Play in the

Production of the Gamer Addiction Myth," *Game Studies* 6, no. 1 (2006): http://gamestudies.org/0601/articles/cover (accessed September 8, 2016).

57. Elizabeth Grosz, *Volatile Bodies*. The chapter concerning the futility of arbitrary dualisms, chapter one, is particularly helpful when diagnosing the history of philosophy and popular culture's obsession with dividing the mind and the body; see pages 3–24.
58. See Kevin D. Williams, "The Effects of Video Game Controls on Hostility, Identification, and Presence," *Mass Communication and Society* 16, no. 1 (2013): 26–48; Rory McGloin, Kristie Farrar, and Marina Krcmar, "Video Games, Immersion, and Cognitive Aggression: Does the Controller Matter?" *Media Psychology* 16, no. 1 (2013): 65–87; and Eugénie Shinkle, "Video Games, Emotion and the Six Senses," *Media, Culture & Society* 30, no. 6 (2008): 907–15.
59. See Marco Prasch, Nadia Bianchi-Berthouze, Betsy van Dijk, and Anton Nijholt, "Movement-based Sports Video Games: Investigating Motivation and Gaming Experience," *Entertainment Computing* 1, no. 2 (2009): 49–61; Seung-A Annie Jin, "Avatars Mirroring the Actual Self versus Projecting the Ideal Self: The Effects of Self-Priming on Interactivity and Immersion in an Exergame, Wii Fit," *CyberPsychology & Behavior* 12, no. 6 (2009): 761–65.
60. Dan Leopard, "Mobilizing Affect: The Politics of Performative Realism in Military New Media," in *Joystick Soldiers*: *The Politics of Play in Military Video Games*, ed. Nina B. Huntemann, Matthew Thomas Payne, and Ian Bogost (London: Routledge, 2010), 131–45. For additional work on violence, the military, and immersion, see Mark L. Sample, "Virtual Torture: Videogames and the War on Terror," *Game Studies* 8, no. 2 (2008): http://gamestudies.org/0802/articles/sample (accessed September 8, 2016).
61. Dean Chan, "Dead-in-Iraq: The Spatial Politics of Digital Game Art Activism and the In-Game Protest," in *Joystick Soldiers*: *The Politics of Play in Military Video Games*, ed. Nina B. Huntemann, Matthew Thomas Payne, and Ian Bogost (London: Routledge, 2010), 272–86.
62. Christian McCrea, "We Play in Public: The Nature and Context of Portable Gaming Systems," *Convergence* 17, no. 4 (2011): 389–403; Christopher Moore, "The Magic Circle and the Mobility of Play," *Convergence* 17, no. 4 (2011): 373–87; Adriana de Souza e Silva and Daniel M. Sutko, "Playing Life and Living Play: How Hybrid Reality Games Reframe Space, Play, and the Ordinary," *Critical Studies in Media Communication* 25, no. 5 (2008): 447–65; Aubrey Anable, "Casual Games, Time Management, and the Work of Affect," *Ada: Gender, New Media, and Technology* 6, no. 2 (2013): http://adanewmedia.org/2013/06/issue2-anable (accessed October 28, 2015); Larissa Hjorth, "Mobile@game Cultures: The Place of Urban Mobile Gaming," *Convergence* 17, no. 4 (2011): 357–71; André Lemos, "Pervasive Computer Games and Processes of Spatialization: Informational Territories and Mobile Technologies," *Canadian Journal of Communication* 36, no. 2 (2011): 277–94; Ingrid Richardson, "The Hybrid Ontology of Mobile Gaming," *Convergence* 17, no. 4 (2011): 419–30; Celia Lam, "Portable Media Affected Spectatorship," *Convergence* 17, no. 4 (2011): 431–43.
63. Jesper Juul, *A Casual Revolution: Reinventing Video Games and Their Players* (Cambridge, MA: MIT Press, 2010).
64. Ibid., chapter 5, 103–19.
65. Ibid., chapter 6, 121–28.
66. Paul Skalski, Ron Tamborini, Ashleigh Shelton, Michael Buncher, and Pete Lindmark, "Mapping the Road to Fun: Natural Video Game Controllers, Presence, and Game Enjoyment," *New Media & Society* 13, no. 2 (2011): 224–42. For more on emergent methods of game control, see also David Parisi, "Shocking Grasps: An Archeaology of Electrotactile Game Mechanics," *Game Studies* 13, no. 2 (2013): http://gamestudies.org/1302/articles/parisi (accessed September 8, 2016).
67. Many examples of researchers studying character bodies can be found in this project's literature review, but one exceptionally relevant example is Dmitri Williams, Nicole Martins, Mia Conslavo, and James D. Ivory, "The Virtual Census: Representations of Gender, Race and Age in Video Games," *New Media and Society* 11, no. 5 (2009): 815–34.

68. Elizabeth Lopatto, "Google's AI Can Learn to Play Video Games," *The Verge*, February 25, 2015. http://www.theverge.com/2015/2/25/8108399/google-ai-deepmind-video-games (accessed September 13, 2016).
69. Gries, *Still Life with Rhetoric*, 57–81.
70. Ibid., 73.

Acknowledgements

The author would like to thank John Logie and Ronald Greene for their invaluable feedback. A version of this essay was part of the author's Ph.D. dissertation, "Gaming Bodies: Video Game Corporeality in Characters, Players, and Representations" (2016).