Theses and Dissertations

2006

The Role Of The Digital Sports Game In The Sports Media Complex

Andrew Paul Baerg
University of Iowa

Recommended Citation

THE ROLE OF THE DIGITAL SPORTS GAME IN THE SPORTS MEDIA COMPLEX

by

Andrew Paul Baerg

An Abstract

Of a thesis submitted in partial fulfillment
of the requirements for the Doctor of
Philosophy degree in Communication Studies
in the Graduate College of
The University of Iowa

December 2006

Thesis Supervisor: Associate Professor Joy Hayes

This dissertation builds on Wenner's (Wenner, L.A. (1989). Media, Sports and Society: The Research Agenda. In L. A. Wenner (Ed.), *Media, Sports and Society* (pp. 13-48). Newbury Park, CA: SAGE Publications Inc.) claims about how the culture of sport is changed as it is mediated by examining the mediation of sport through four digital sports games produced by Electronic Arts—*Fight Night Round 2*, *Tiger Woods PGA Tour 2004*, *MVP Baseball 2005*, and *John Madden Football 2005*. Following the example of digital game scholars, I employ a multi-level method of textual analysis in engaging the representation and gameplay of these respective titles. The dissertation uses three case studies to tease out the ideological implications of these games as they position their users. The fourth case study examines how the digital sports game audience responds to the ideologies and positioning identified in the textual analysis sections.

In responding to the broader optimism of new media theorists, I argue for a consideration of the specific context of the digital sports game as a way into measuring the validity of their positions. In looking at the mediation of the body in *Fight Night Round 2*, golf and its attendant culture in *Tiger Woods PGA Tour 2004*, the ubiquitous quantification of *MVP Baseball 2005,* and audience responses to *John Madden Football 2005,* I argue that the potential freedom certain strands of new media theory proclaim is constrained by the ideologies resident in the texts examined here and the ways in which these digital sports games position their users. As such, scrutinizing these specific new media contexts reveals we should ultimately be cautious about the degree to which they offer the kinds of progressive freedoms advocated by celebratory new media scholarship.

Abstract Approved: _____

                            Thesis Supervisor

                            _____

                            Title and Department

                            _____

                            Date

THE ROLE OF THE DIGITAL SPORTS GAME IN THE SPORTS MEDIA COMPLEX

by

Andrew Paul Baerg

A thesis submitted in partial fulfillment
of the requirements for the Doctor of
Philosophy degree in Communication Studies
in the Graduate College of
The University of Iowa

December 2006

Thesis Supervisor: Associate Professor Joy Hayes

Graduate College
The University of Iowa
Iowa City, Iowa

CERTIFICATE OF APPROVAL

_____

PH.D. THESIS

_____

This is to certify that the Ph.D. thesis of

Andrew Paul Baerg

has been approved by the Examining Committee
for the thesis requirement for the Doctor of Philosophy
degree in Communication Studies at the December 2006 graduation.

Thesis Committee: _____
                    Joy Hayes, Thesis Supervisor

                _____
                    Mark Andrejevic

                _____
                    Bruce Gronbeck

                _____
                    Thomas Swiss

                _____
                    Michael Lomax

ACKNOWLEDGMENTS

TABLE OF CONTENTS

CHAPTER ONE

INTRODUCTION

A recent blog posting by an instructor teaching a course on digital games and global culture related her difficulty in dealing with a student who had concluded he "was not a hardcore gamer at all" because he hardly played fantasy role-playing, science fiction or first person shooter video games. These digital game genres had been those the instructor had emphasized throughout the course. Instead, this student spent the majority of time he devoted to video games playing sports games. After a fruitless search for academic research on sports games, this instructor wondered why so little work had examined them calling sports games "the forgotten genre." One respondent to the original posting appeared to dismiss sports games for "replicating rules that are already in existence" and for failing "to contribute to the evolution of gameplay." Another suggested "there isn't really anything unique about sports games as a so-called genre. When you create a "sports game", you're basically just licensing—a basic gameplay framework and rules set, celebrity names, faces and stats, ESPN-style overlays and broadcaster commentary." A third affirmed the sentiment of the previous posters and blamed the paucity of research on sports games by placing the genre in the context of academic digital games culture stating, "Comments disparaging sports games and their audience are not difficult to elicit" (Anonymous, 2004).

These comments may certainly be well-founded from the perspective of scholars searching for entirely new games full of fresh rule sets. They also provide a glimpse into the rationale behind the meager amount of academic research on the digital sports game genre. However, given the import of digital sports games for the digital game industry and its consumers, it is surprising that little scholarly work has focused on the genre. In a

recent essay lamenting this lacunae, Leonard (2006) argues that "academic discourses perpetually ignore and resist critical inquiry into virtual athletic fields" (p. 393).

To continue to ignore and resist this inquiry into these games is to turn a blind eye to the fact that monthly sales charts routinely reveal almost a third of all digital games sold come from the sports game genre. As an example, in August 2005, five of the top ten games sold were various incarnations of *Madden Football '06* and *NCAA Football '06*. One month later, sports games would occupy seven of the top ten slots with the inclusion of *Tiger Woods PGA Tour 2006*, *NBA Live 2006*, *NASCAR '06: Total Team Control* and *Mario Superstar Baseball* (Easton, 2005). These sales figures are certainly representative of broader trends within the digital game industry. If game audiences were finding little of interest in the sports game genre, sales of these games would falter and the game manufacturers would dispense with the strategy of an annual new release neatly coinciding with the inception of another real world sports season. If the sports game genre was not important, there would also be little concern over an event like Electronic Arts' recent acquisition of the exclusive license to the National Football League—an acquisition positioning EA as the sole producer of video games affiliated with the premier professional football league in the world. Instead, internet message boards received an avalanche of postings from irate gamers decrying EA's apparent destruction of the competition.

In order to engage the previously ignored, but immensely popular digital sports game, this dissertation analyzes four digital games produced by Electronic Arts Sports (EA Sports), a division of the software entertainment industry giant, Electronic Arts. EA Sports' highly profitable list of typically annual titles includes games devoted to football, soccer, hockey, basketball, golf, boxing, auto racing and baseball. At a glance, one might suggest that EA Sports produces games aiming to represent professional sport. Although it is certainly debatable as to whether or not this is the case, making this categorization

allows me to separate EA Sports from a subsidiary of its own, EA Sports Big. EA Sports Big creates games centered around alternative visions of sport where a representation of professional sport is in no way intended. These titles would include those that are part of the Street series (*NBA Street Vol.1*, *Vol.2* and *Vol.3*, *FIFA Street* and *NFL Street Vol.1* and *Vol.2*), the *Def Jam Vendetta* fighting games and a trio of snowboarding games, the *SSX* series. Although the latter are certainly intriguing in their own right, I plan to focus my dissertation on digital games produced by EA Sports rather than those of its subsidiary EA Sports Big. The textual centre of the project will specifically focus on EA Sports' *Fight Night Round 2* (boxing), *Tiger Woods PGA Tour 2004*, *MVP Baseball 2005*, and *Madden Football 2005*.

The larger question I consider concerns the cultural meaning of the digital sports game text and its role in mediating modern sport within what cultural studies scholar Sut Jhally (1984) nominates "the sports media complex". Thinking about this larger question entails a series of other questions that might be used to provide some potential answers. What kinds of ideologies are these digital sports game texts communicating to users? How do these ideologies position those who play these games? How does this positioning occur? Providing some answers to these questions should enable us to discern the kinds of meanings these texts may be communicating.

My answers to the questions above draw on the framework provided by cultural studies scholarship. In their work on the political economy of digital games, Kline, Dyer-Witheford and De Peuter (2003) argue that the cultural studies literature allows scholars to,

> analyse how media texts give our experience of the world meaning through representations (or images) and patterns of narrative; how they offer readers, viewers or players certain points of identification, or subject-positions, in relation to those narratives; and how they contribute to the construction (and sometimes subversion) of an everyday "common sense," a repertoire of assumptions and premises about how things are in the world at large (p. 43).

These authors are careful to point out the potential drawbacks to the cultural studies approach in suggesting that it fails to account for the political economy of the industry, minimizes or trivializes the nature of political resistance and ignores the idea that audience responses have already been organized by the industry producing the cultural object. However, if we accept Kline, Dyer-Witherford and De Peuter's annunciation of the objectives of cultural studies' analyses, this approach can certainly prove to be a valuable tool with which to engage media texts, including digital games.

The cultural studies mandate above will be addressed primarily through an analysis of three digital sports game texts with an additional accompanying foray into an analysis of audience discourse. Textual analysis assumes that audiences walk away from their immediate experience with the text in such a way that they bring this experience to their understanding of the world. Textual analysis begins from the ground that the beliefs, values, actions and ideologies communicated by the text can be absorbed by its audience (Vande Berg, Wenner and Gronbeck, 1998). In deploying the term 'ideology', I borrow from Gramsci's (1971) notion of ideology as a dynamic force working in and through hegemonic processes to construct the spaces in and positions from which people come to understand their daily lives. Gramsci's notion of hegemony allows us to discuss the work of ideology apart from a specific focus on coercive power structures and moves us away from perceiving ideology in consistently pejorative terms, even as some of its expressions may be harmful to those under its purview. The concept of hegemony enables an examination of how institutions beyond the State exercise forms of control via the consent of those subject to their power. These institutions include the entities of schools and, importantly for my purposes, media (Eagleton, 1994, p. 198-199). In analyzing the digital sports game text, I am most interested in the kinds of things to which consumers consent as they interact with sport in this new medium and engage the ideologies these texts contain.

The text then becomes the center of a project designed to locate and identify these ideas for their broader social and cultural significance. Interviews with these games' producers could allow for an exploration of how sports game designers negotiate the construction of an experience with which their audience has considerable familiarity. Ethnographic audience research could lead to speculation concerning how audiences consume, experience and utilize these games in their day to day existence. However, it is the textual level that proves most interesting to me for this project. Although the former levels of analysis are certainly important and ultimately useful in discerning the cultural meaning of digital sports games, starting with the texts themselves provides an arguably necessary springboard to that research. I am interested in how and what these texts naturalize as they mediate sport.

In examining digital sports game texts, I argue that these games provide users with a new venue through which to understand, acquire and in some cases, interrogate, the cultural meanings communicated through mediated sport. Although digital sports games certainly have their analog predecessors, it is the new medium of the digital game that has garnered the attention of millions of sports fans seeking to fulfill dreams of experiencing sport in novel ways. The texts themselves present visions of respective sports that both break and follow from their real world counterparts. When users sit down to throw the ball in *Madden Football 2005*, they are both performing an activity very different from that of a real world quarterback while simultaneously performing something very similar. Likewise, the texts also present visions of respective *mediated* sports that both break and follow from their real world counterparts. When users play a round of golf in *Tiger Woods PGA Tour 2004*, they are participating in an activity that in many respects does not approximate a mediated experience of golf while simultaneously being immersed in a virtual space much like the mediated golf with which they are familiar.

It is the meaning of this space between the real and the virtual and its ideological implications for sports game users' understandings of the culture of sport that serves as the focal point of this project. Textual analyses of the digital sports games under scrutiny in this dissertation reveal the kinds of ideologies the texts position users to acquire—ideologies attached to sport and the body, sport and race, class and gender and sport and quantification. In drawing on the work of sport sociologists and digital game theorists, I argue that the digital sports games examined here simultaneously transfer and transform ideologies attached to the experience of real world and mediated sport. As part of the transferring and transformative process, we also gain insight into how new media position users as subjects and represent the body in virtual space. With the import of the body for its material counterpart, the cultural site that is sport provides a useful entrée into examining how new media treat the body as it is mediated.

Literature Review

Theoretical Import of the Project, Questions to be

Considered

This dissertation aims to draw upon and contribute to two existing bodies of scholarship: studies on the relationship between sport and mass media and studies interrogating the field of new media with specific attention paid to digital game studies.

Sport-Media Studies

Work on sport and media provides me with a framework for understanding how the relationship between these two aspects of culture has been considered. Until the mid to late 1980s, academic literature covering sport's relationship to media was relatively limited. In his article calling for the appropriation of cultural studies theory and methodology to the study of sport, Jhally (1989) employs the phrase the "sports-media complex" to describe the object of this appropriation. In employing this term, Jhally aims to draw our attention to what he perceives to be the interdependent, nearly inextricable, relationship between sport and the media such that the two become part of an indivisible 'complex.' Jhally argues for the importance of acknowledging modern sport as produced commodity, the mediated nature of the sports event, the mediated sports text's naturalizing function and the import of audience studies in this research. At this point, Jhally encourages sports studies scholars to build upon traditional research areas interpreting sport as "(1) ritual/ideology and (2) compensatory fulfillment" (p. 71) by pursuing a more critical cultural studies perspective which concurrently aims for deeper analysis of the sports-media complex. Jhally's notion of the sports-media complex opens the door to the kind of critical cultural work this dissertation seeks to execute.

During the same year Jhally publishes his article detailing the sports-media complex, Wenner (1989) embarks on what he calls "a maiden voyage for the

communication of sport" (p. 8) with his edited anthology of essays covering areas including the political economy of sport and the media, the mediated sports audience and mediated sport content. In this piece, Wenner notes that only a dozen or so essays have been published on sport and communication which derive from communication and media studies scholars. In calling for research on communication and sport, Wenner posits that "a significant amount of preliminary inquiry into mediated sport might center on how the culture of sport is changed as it is mediated" (p. 18). Wenner goes on to suggest that these changes can then be analyzed for their implications for wider society in hopes of performing a litmus test which may or may not signal the presence of hegemony (see Gramsci, 1971).

Nine years later, Wenner (1998) releases a second anthology of essays examining sports media institutions, texts and audiences. In his introductory essay, he explains why he has chosen to structure the collection around these three categories while critiquing the potential problems inherent in each of these respective approaches. In their contribution to Wenner's volume, Kinkema and Harris (1998) survey existing studies of media representation and sport on television while acknowledging some existing work on print media and film. Their essay extends Wenner's introduction by providing a relatively comprehensive survey of much of the sport media literature concerning production, texts, and audiences. They advocate a move to studying "renditions of sport appearing in emerging electronic interactive technologies such as the World Wide Web and sports-talk radio" (p. 53), but leave their discussion of new media with the identification of the burgeoning importance of the internet.

Rowe (1999) argues for the ubiquity of sport in everyday life suggesting sport has come to inhabit our private, public and institutional spaces. Where Jhally speaks of the "sports-media complex", Rowe turns our attention to the "media sports cultural complex" as he aims to emphasize "the primacy of symbols in contemporary sport and the two-way

relationship between the sports media and the great cultural formation of which it is a part" (p. 4). He defines the media sports cultural complex as "all the *media* and sports organizations, processes, personnel, services, products and *texts* which combine in the creation of the broad, dynamic field of contemporary sports culture" (p. 174, italics in original). In agreement with Jhally, Rowe also suggests that sport and the media have become difficult to separate in the context of commodification and capitalism given mass media's ability to carry and represent sport culture to global audiences and modern sport's need to foster and enable this representation to occur. Sport neatly sits at the nexus of two primary goals of mass media—news and entertainment—making it important for the accruing of capital.

By 2002, Bernstein and Blain believe they can definitively stake out the area of sport and the media as a major research field. In surveying a body of literature that has arisen, with a few exceptions, primarily since 1980, they follow from prior work in reasserting the difficulty of separating discussions of sport from discussions of media. Bernstein and Blain note the increasing amount of scholarship in this field addressing issues of interest to media studies in general, issues which include representation and identity, globalization and political economy.

The largest body of scholarship in this field has developed around questions of power, representation and identity. Studies on representation and identity have tended to focus on media portrayals of women in sport through qualitative textual analyses or content analyses (e.g. Duncan and Messner, 1998, Kane, 1998, Baroffio-Bota and Banet-Weiser, 2006) although more recent work has begun to examine forms of masculinity, with special attention being paid to representations of hegemonic masculinity (e.g. Lucas, 1999). A second body of work devoted to representation and identity considers questions of portrayals of race (e.g. Davis and Harris, 1998, Grainger, Newman and Andrews, 2006, Houck 2006). A third group of scholars examining representation and identity in

sport and the media have worked on how the collective identity of the nation comes to be constructed and/or imagined (e.g. Finn and Giulianotti, 1998, Mason, 2002).

Although this considerable body of work has arisen on power, representation and identity in sports media texts and continues to flourish, the overwhelming majority of scholarship circulating around sport and the media has centered on either television (see Brown and Bryant, 2006, Sullivan, 2006) or print media (e.g. Wanta, 2006, Cummins, 2006). Where work on new media has occurred, this scholarship has tended to focus on new possibilities for and implications of the increased transmission of sports information rather than on power. Boyle and Haynes (2002) concentrate their study on the transmission of sports content through the internet, digital television and cellular phones, but fail to acknowledge the presence of the digital sports game as part of their research.

In spite of the fact that the first commercially popular home video game, *Pong* (1972), appears to be attempting to represent the sport of table tennis and that many of the first video games aimed to represent a variety of sports, sports media sociologists have ignored the digital sports game. With a considerable focus on the representation of sport on television and in print and most recently, the Internet, sport studies scholars have not begun to adequately address the role of the digital sports game in the sports-media complex they describe. Although academics like Kinkema and Harris (1998) acknowledge that a considerable body of work has arisen examining the texts produced by the television and print media industries, their work reveals one of the potential blind spots in sport studies research, the study of digital sports game texts. Where studies of the connections between new media and sport do exist (e.g. Boyle and Haynes, 2002, Real, 2006), they fail to engage with one of the more prominent ways in which people have come to experience sport in the new media context—the digital sports game.

Where there have been a few lonely scholarly contributions considering virtual sport, the emphasis has been placed on training simulators (Clarke, McBride and Reece

2002) or sport and virtual reality (Miah 2002) rather than a dedicated examination of sports video games. Fairweather (2002) comes closest to examining digital sports games in addressing the benefits and costs of what he terms 'virtual sport', but for him 'virtual sport' denotes a category of experiences that do not necessarily include sports games even as some sports games might fall within this paradigm.

It is only in a recent collection of essays claiming to offer what approaches a comprehensive perspective on contemporary scholarship addressing sport and media (Raney and Bryant, 2006) that a focused discussion of sports video games arises. In an essay entitled "An Untapped Field: Exploring the World of Virtual Sports Gaming", David Leonard (2006) introduces readers to the variety of sports games available in outlining the broader categories of team sport, extreme sport, cartoon sport and street sport games (like the aforementioned *Street* series from EA Sports Big). He then notes the three essays cited above from 2002 as the only scholarly contributions even beginning to approach the digital sports game[1]. Leonard argues that "the field of sports game studies represents a barren wasteland of knowledge. As of yet, there has been little work examining the centrality of race or gender, representation of sport, notions of realism or the related competitions" (p. 393). This dissertation begins an exploration of this wasteland in addressing some of these areas.

This project aims to use this existing body of sports studies scholarship to examine texts which have yet to be considered in sports studies. As such, this dissertation applies some of the work done by these scholars in the sports-media field to the new medium of the digital game. This application entails an engagement with the ways in which these games represent the sports they mediate in keeping with Wenner's

---

[1] It is certainly debatable as to whether or not essays by Clarke et. al., Miah and Fairweather truly address digital games. Their concerns appear to be much more relevant for studies on virtual reality and sport. Although virtual reality and the digital game can certainly be related, to conflate the two fails to address some of their key differences separating these two forms of experiencing sport.

(1989) call for studies considering "how the culture of sport is changed as it is mediated" (p. 18) while simultaneously bringing concerns broached by sports studies scholars about power, representation and identity to the fore. A study of the previously untapped site that is the digital sports game should lend further insight into the kinds of questions sports studies scholars have been asking for roughly the last two decades. This dissertation aims to discern whether the digital sports games produced in this historical moment represent a textual and ideological break, continuity or a combination of both break and continuity with the imbrication of sport in previous forms of media as it examines how sport is represented in and through this new medium.

Digital Game Studies

Although the academic landscape of digital game study has become much more developed in the last decade (see the narratology/ludology section below), a large percentage of this prior work has revolved around a few key areas. Psychologists, particularly child development psychologists, have published a considerable number of studies positing links between violent behavior and video game participation[2]. Social

---

[2] The study of video games and violence can be traced back to the mid 1980s (for examples, see Dominick (1984), Graybill, Kirsch and Esselman (1985), Price (1985), Toles (1985)). However, the late 1990s and early 2000s witnessed the burgeoning growth of studies on the subject. Dill and Dill's (1998) review of the empirical literature suggested causal links between violent video participation and aggression. However, the article also observed a considerable lack of empirical data alongside a number of methodological problems which limited the viability of the findings.

Anderson and Bushman's (2001) meta-analysis of the existing psychological literature considering video games and violence argued for a clear connection between exposure to violent video games and increased levels of aggression and antisocial behavior. During the same year, Bensley and Van Eenwyk's (2001) survey of existing work on video games' effects on the real-life aggressivity of their users appeared wary of coming to any hard and fast conclusions on the issue. A call for papers on video games for a recent special issue of the *Journal of Adolescence* revealed developmental psychologists' ongoing concerns about the potentially harmful effects of exposure to violent video games. As part of this special issue, Anderson (2004) updated readers on recent developments in the scholarly landscape. His article contrasted the prior findings of Bensley and Van Eenwyk (2001) and affirmed his own prior work by asserting that the most methodologically sound experiments posited a direct causal correlation between aggressive behavior, aggressive thought and video game participation.

scientists have taken up the question of gender in thinking through representations of women in digital games and more recently, the ways in which girls and women play games and interact with game culture[3]. Largely uncritical journalistic perspectives on video game history have appeared as the revenue generated by the digital game industry has increased. A small body of work has arisen along the vein of political economic analysis with texts on industry criticism.

The overwhelming number of texts from a psychological perspective dominate discussions of the issue. However, some scholars have moved beyond direct queries about content and representation to consider how interfaces work to position digital game users as agents of violence. Penny's (2004) work attempts to examine the space between simulation and pictorial representation as part of a larger concern with the ways in which representation becomes interactive. In drawing upon the U.S. military's enormous investment in simulations and simulation technologies as part of their training program, he asserts that digital games serve as training grounds which have the potential to produce automatic and potentially violent behavior.

[3] For example, Provenzo's (1991) project involves a consideration of gender stereotyping, sexual discrimination and the potential connections between these two areas and violence and aggression in video games. He briefly surveys and then performs a content analysis of ten of the most popular Nintendo games of 1989 to draw conclusions about the sexist and violent nature of the majority of these titles.

Recent scholarship like Cassell and Jenkins' (1998) *From Barbie to Mortal Kombat* moves away from Provenzo's concerns about the representation of women in video games toward a discussion of the gendered nature of video games themselves. Their collection includes essays covering how video games position girls, games designed by and for girls, interviews with female game designers and feminist approaches to game space and the game experience.

Bryce and Rutter (2003) address the ways in which computer games, in spite of their traditionally masculinist orientation, might be providing new opportunities for women to resist and access conventionally private and public leisure space through their exploration of the popularity of gaming for women. Blumberg and Sokol (2004) attend to the ways gender might play a role in children's understanding of digital games. Lucas and Sherry (2004) advocate changes in game design given their findings identifying that women continue to feel excluded as a game audience, are less inspired to play in social situations and have little interest in games involving competition and three-dimensional manipulation.

However, in spite of the more recent move away from scholarship on representation of women in digital games, this scholarship has certainly not faded away. Beasley and Collins Standley's (2002) content analysis of forty-seven randomly selected Nintendo and Playstation games discovers a disproportionate, albeit unsurprising, number of male characters while at the same time notes that the female characters who did appear frequently wore less clothing than their male counterparts. Other works on representation of women in video games such as Mikula's (2003) work on Lara Croft have begun to ask new kinds of questions in this area. Mikula complicates prior work on the representation of women by addressing the ambiguity of the famous video game heroine, Lara Croft, in her essay which argues Croft occupies a position as both object of masculine desire and empowered female subject.

Herz's (1997) *Joystick Nation* was one of the first texts to provide an informal history of the video game. Her stylistically journalistic text works through a combination of biographical experience, historical narrative, interviews with early game designers, analysis of the digital game industry and some critique of gender. Herz traces the origins of the digital game through the rise of the coin-operated arcade machine to the growth of the market for Nintendo and Sony hardware and software.

Kent's (2001) lengthier, but similar, work pieces together digital game history through the eyes of the digital game designers and industry workers he interviews. He traverses much of the same territory Herz covers even to the point of giving the same name to one of his chapters, "Moral Kombat", a chapter devoted to the 1993 controversy ensuing with the release of Sega's blood-spilling fighting game, *Mortal Kombat*. Although Kent's text proves to be an interesting narrative, it lacks the critical edge which might come out of a book performing a deeper analysis of comments elicited from his interviewees. His work serves as an apologia celebrating how far the digital games industry has come since its inception.

The Narrotology/Ludology Debate and the Video Game

Text

The burgeoning scholarly field of digital games studies provides a foundation from which to build arguments about how digital games communicate and what they might be communicating. However, the nature of the digital game text has been the subject of controversy. Recent debate in digital game studies has begun to address some of the issues revolving around digital game textuality but has largely ignored media studies scholarship in its exploration. Instead, digital game studies scholars have found themselves involved in a pitched battle which appears to situate them as either accepting or rejecting an understanding of the digital game text through the perspectives offered by literary studies. In one camp sit those who would describe themselves as narratologists.

The narratologists argue that the experience of the digital game constitutes a novel form of the traditional literary text—an interactive story. In another camp sit those who describe themselves as ludologists. The ludologists assert the uniqueness of the digital game experience apart from previous experiences with other kinds of texts. These two sets of ideas respectively posit a continuity with previous media forms such as books, television shows and movies and a break with previous forms in situating the phenomenon of the digital game as something entirely new.

The narratologically oriented set of scholars perceive a user's engagement with a digital game as an interaction with a story or drama. Buse (1996) appears to be one of the first to consider video games as narratives in calling them "narrative machines, providing for their players stories in which to participate" (p. 165). For Buse, reading requires slower reflection on a text, a reflection that cannot occur in the faster paced activity of what he terms "playing a narrative" (p. 167). Laurel (2001) also works from the narratological perspective in examining the human-computer interchange through the metaphor of the stage/theatre. Janet Murray (1997, 2004) may be narratology's most celebrated theorist in her commitment to understanding digital games under the umbrella of an engagement with story.

Game designer, Chris Crawford (2003), sees a stark division between game and story given the current digital game development situation. He critiques existing games for their failure to adequately synthesize story and game. Crawford would like to see designers performing "interactive storytelling" by inventing games that accord with "basic laws of drama" (p. 264). Mateas (2004) lends Crawford's proposition greater theoretical vigor by arguing for the application of an Aristotelian structural approach to drama to the creation of digital games.

In another camp sit those who would describe themselves as ludologists. Perhaps the most prominent and vociferous ludologist would be Marku Eskelinen. One of

Eskelinen's (2001) first essays on the subject mobilizes traditional narratology to argue against the possibility of interpreting digital games as narratives. In an essay co-authored with Tronstad, Eskelinen (2003) denigrates the idea that games can be perceived as narratives in asserting that a narrative approach implies an audience a game does not necessarily need. He argues that digital games must be perceived to be configurative rather than interpretive experiences offered through traditional narrative forms (see Moulthrop (2004) for an echo of the configurative argument). Eskelinen (2004) also argues that a user's experience of time in a digital game differs markedly from a reader's experience of narrative time and that game characters simply do not behave like narrative characters or actors in a drama.

A second noted ludologist, Gonzalo Frasca (2003), critiques narrative approaches for misinterpreting the function of video games. Frasca argues against narratology's assertion that video games are about representation by stating that games have different mechanics and open up the potential for different rhetorical possibilities than typical representational media because they simulate rather than represent. Where representation typically acknowledges only the output of a medium's signs, simulation acknowledges both input and output of these signs. Frasca (2004) affirms the latter point in differentiating traditional novels from simulations by arguing that novels do not allow for the audience's alteration of a dynamic system whereas simulations provide for this potential.

A third prominent ludologist, Espen Aarseth (2001) also aims to defend a space where the experience of playing a digital game departs from traditional notions of interaction with a text asserting that games are played rather than read. Aarseth (2004) argues for the categorical difference between game and text in that games are self-contained by contrast to the intertextual text and provide alternative experiences of pleasure texts cannot allow.

Other ludologists have continued to make these kinds of claims. Juul's (2004) discussion of game time also breaks from an interpretation of the game experience as one associated with the experience of time in novels and movies. Newman's (2002) essay affirms the need to consider digital games as unique media experiences by suggesting that representation is irrelevant to the level of a user's involvement or engagement with a digital game. For Newman, the fuller, rounded character of conventional narrative is only ornamental for the domain of the digital game and ultimately unnecessary for a user's enjoyment of the experience. Game characters are not embraced by players at the level of identification in keeping with the kind of identification offered by interaction with representational media. Rather, characters become tools to be used to accomplish the game's goals. How well game characters function as tools becomes most important for Newman's understanding of the user-character relation.

Ryan (2001) mirrors Newman in suggesting that an excessive focus on narrative tends to flatten the differences between media given that different media provide different resources for expressing narrative. The digital game narrative proves to be instrumental rather than the goal of the game experience. Even as she maintains they cannot be understood as narratives per se, Ryan asserts that digital games provide new openings for narrative production. Similarly, Pearce (2004) argues for the narrative production ability of games, but also posits a break between digital games and film and literature.

Others, such as Montfort (2004), attempt to negotiate the narratological and ludological positions by suggesting that new media cannot be perceived in the oppositional categories of story and game. Instead, new media offer the potential for both story and game to comfortably coexist in, for example, interactive fiction. Jenkins (2004) also affirms this negotiated position by arguing against the narratologists in stating that not all games provide narratives and that the experience of games cannot be limited to the experience of a story. Simultaneously, Jenkins challenges the ludologists for their

acceptance of a limited understanding of narrative and failure to acknowledge that some games feature narrative components. Kucklich's (2003) work also serves as an example of a mediating position between the narratological and ludological perspectives.

If we conclude that digital games are interactive stories, it would seem we must also carry a set of theoretical assumptions into a qualitative assessment of the experience of the text. If we conclude that digital games must stand as entirely new and unique communication media, another set of theoretical assumptions must be brought to bear on the qualitative study of the experience. It is unclear whether the tensions between these two positions have blinded them to other disciplinary perspectives, but a media studies contribution to the discussion appears, with one exception, to remain curiously absent. Wolf's (2001) scholarly text attempts to theorize the video game as a medium through an historical narrative chronicling reasons why the academy has failed to study video games, the various spaces in which video games have been experienced and how video games have come to possess their contemporary form. Wolf's narrative suggests that the video game represents a new medium because it uniquely combines "elements such as interactivity, collaboration and competition between players, and labyrinthine narrative structures, as well as new ways of structuring space, time and narrative" (p. 32). The rest of Wolf's text aims to explain, albeit with limited success, the aesthetic continuities and breaks between the digital game and film and television via discussions of these medium's respective representations of space, time and levels of abstraction.

An alternative media studies perspective on the textuality of the digital game might begin by referencing Barthes' discussion of semiotics, Hall's work on encoding and decoding and Bolter and Grusin's taxonomy of new forms of mediation.

Barthes' (1972) work on semiotics and myth posits the presence of a signifier, a signified and their connection in the sign. Whereas the semiologist, Saussure, had considered these ideas specifically with reference to language, Barthes argues for and

demonstrates the application of Saussure's work to other kinds of communication such as photographs, film and sport. Barthes' text aims to establish how signs can be interpreted both in their first-level denotative signifying function and in their second-level connotative signifying function. The famous example from the text describes how a picture on the cover of a Parisian magazine of an African colonial subject saluting a French flag denotes the individual's patriotism, while at the same time connoting the power of the French empire. Barthes asserts that the mythology he describes can be found at this second level or connotative level of signification. The critic's project then becomes the unmasking or 'demystification' of the denotative in order to critique the connotative.

Cultural studies theorists following Hall (2001) argue that a mass communicated text comes to be understood in the processes of encoding and decoding. In his famous essay, Hall critiques the traditional understanding of mass communication in terms of its linear sequence of senders, messages and receivers by positing a different model emphasizing the circulation of symbols through their production, their translation, their distribution in discourse and their consumption by audiences. Hall's work alerts us to the notion that the meanings encoded by producers do not necessarily correlate with the meanings decoded by audiences. Although it may be possible for audiences to interpret a text from the dominant perspective of its producers, they may choose to interpret a text in an entirely different way than the producers intended by interpreting it through a negotiated or oppositional perspective.

It is this kind of freedom allowing audiences to engage a media text that appears to inform certain strands of new media theory. The postmodernist cyberculture approach (Lister, Dovey et.al 2003) celebrates the possibilities new media offers for new kinds of subjectivity. As part of her argument on the subject, Turkle (1995) suggests that the communication occurring through the interaction of participants in the virtual spaces of

computer-mediated Multi User Dungeons/Domains (MUDS) allows for a fluid and dynamic constitution and reconstitution of identity. Her interview data led Turkle to assert that the kinds of communicative possibilities (chat rooms, video games, etc.) offered by new media make the application of postmodern and poststructural theory to contemporary life possible. She describes the internet's influence on subjectivity in its provision for the possibilities of constructing "a self by cycling through many selves" (p. 178) going so far as to claim that the internet serves as a "significant social laboratory" (p. 180) for experimentation in a multiplicity of subject positions. She applauds these new possibilities for the ways they encourage diversity and flexibility.

Poster (2001) follows from Turkle in contrasting subject positions adopted by those working with media technologies under the conditions of modernity with subject positions adopted by those working with media technologies under the conditions of postmodernity. Poster argues that the interactivity offered by new media in postmodernity allows for the constituting of "subjects as unstable, multiple and diffuse" (p. 618) in a move away from the autonomous and rational subject constituted by broadcast media in modernity. In a clear allusion to McLuhan, Poster comments on the diffusing ability of new media stating, "From the club that extends and replaces the arm to virtual reality in cyberspace, technology has evolved to mime and to multiply, to multiplex and to improve upon the real" (p. 624).

Filiciak (2003) appears to be operating from this perspective by agreeing with those who perceive new media as a site for the construction of malleable identity. In his work on identity and massively multiplayer online role-playing games (MMORPG), Filiciak argues that digital media allow for the manipulation and multiplication of selves and identities ad infinitum. His optimistic reading of MMORPGs suggests that these cultural products facilitate a fluid postmodern self and the ability to express the self beyond the restrictive bounds of subjectivities articulated to the physical body.

This notion of audience freedom would seem to be especially important for considering how digital sports games might offer an opening for the construction of new forms of identity in a sporting culture traditionally understood by sports studies scholars to be particularly conservative in nature. Although the positions advocated above are and have certainly been subject to critique, thinking through how digital sports games do or do not allow for the kinds of identities proposed by scholars like Poster and Turkle could provide a window into how they function in the sports-media complex in this historical moment and perhaps how they might serve as a site where dominant ideology might be resisted. This kind of discussion also raises the question of how sporting bodies become mediated in new media and the degree to which the texts of the digital sports game mediate the freedom to escape the constraints of the material body in the experience of sport in the digital realm.

A third perspective on textuality might be offered by new media theorists. Bolter and Grusin (1999) argue that what is new about new media is the way new media integrate with older media and the way older media respond to this integration. From their perspective, new media come to rely on three historically grounded practices. Bolter and Grusin nominate these sometimes contradictory practices as the logics of immediacy, hypermediacy and remediation. They assert that the logic of immediacy aims to efface an audience's/user's awareness of a medium in order to both generate an immersive experience and render the act of representation transparent and automatic. The logic of hypermediacy works to make several representational moves simultaneously such that a replication of our sense experience becomes possible. Bolter and Grusin posit this logic as the experience of our windowed world. The logic of remediation builds on McLuhan's (1968) notion of the content of one medium serving as another medium. Remediation becomes "the representation of one medium in another" (p. 45). Various forms of remediation and degrees of remediation frequent new media forms.

Barthes, Hall, and Bolter and Grusin can be used to orient us to a consideration of the nature of the digital game as text. While Barthes is able to apply Saussure's ideas about semiotics and language to the texts produced by communication media like cameras, it seems possible to make a similar move in applying his ideas on signs to forms of new media texts like digital games. Discerning the ways in which the denotative signs connote meanings within these texts can demystify them such that we can gain a better sense of the ideological work the texts perform as users interact with them. If we accept Hall's argument about the potential for dominant, negotiated and oppositional readings of media texts, we can ask and test what kinds of readings might be possible for audiences as they interpret the digital game text. These readings should provide us with evidence as to the liberatory potential some strands of new media theory suggest about these texts. We might also utilize Hall's work in order to discern how encoders frame the experience of the text in order to position users within a given ideological frame. Bolter and Grusin's dialectical perspective on the interaction between old and new media proves useful for this project in that many digital sports games appear to be explicitly acknowledging a connection to the representation of sport in older media forms. Their foregrounding of the distinctive characteristics of new media provide a theoretical backdrop for thinking through the implications these respective logics have for the user's experience of a digital game text.

Digital Games and Ideology

The question of how ideology is communicated through the playing of digital games is both difficult and complex. A few digital games scholars have deployed ideological analysis as their analytical tool of choice. Friedman (1995, 1999) has analyzed the computer games, *Simcity* (1989) and *Civilization* (1991), for the way in which they conceptualize urban planning and the history of cultural development respectively. Kennedy (2002) has attempted to complicate the feminist reception of Lara

Croft in *Tomb Raider* (1996). Berger (2002) has undertaken an analysis of *Myst* (1996), *Riven* (1997), and *Half-Life* (1998) and Caldwell (2000) has studied *Settlers 3 (*1998) from an ideological perspective. However, fewer scholars have attempted to explicate how ideology is communicated through the digital game.

As a starting point into this discussion, it is instructive to consider the video game as a cultural product arising in a specific social context. Berger (2002) usefully suggests that video games reflect the societies from which they spring and that the values they communicate are mediated through the lived social experience of their collective group of designers (p. 7). Gee (2003) argues that video games provide cultural models that might reinforce a given perspective on the world or potentially challenge existing assumptions (p. 139-40). Friedman (1999) suggests that digital games have the power to reshape our perceptions of the world in a more effective manner than traditional media because these games are "a new medium, still in flux."

In working from these kinds of assumptions about the power of video games to influence the perspectives their players have of the world, many popular and scholarly articles have focused on representations of gender and violence in video games and their potential impact on those who play them (see Squire (2002) for a sound survey of this literature). However, little work discussing the ideology of digital games has been done apart from the implementation of these two analytical frameworks.

Caldwell has provided arguably the most thorough explanation of an ideological approach to digital game criticism might function. In his explanation of how this process works, Caldwell (2000) argues that the careful examination of digital games using a cultural studies interpretive frame must consider "the quite complex ways games not only articulate certain ideologies but they also complicate them." He operates from a ludological perspective by considering how ideology might be communicated through gameplay apart from a primary focus on issues of narrative and narrativity. Caldwell

attempts to explain the player-game interaction by arguing that gameplay consists of what he terms, two impulses of play. The first impulse of digital gameplay contains the aesthetic beauty of the game world and the narrative background to the game's story. As part of this first impulse of play, the user playing a role-playing game might pay attention to the vivid colors deriving from the game's graphical design of a fantasy environment or wonder at the swelling orchestral score accompanying another triumph in battle. This first impulse of play may also move the user to attend to the rationale for a given action. The conventional platform game genre trope of 'saving the princess' as the compelling motivation for play would appear to fall into this category. In many respects, this first impulse of play appears related to the appreciation of conventional art forms and the accompanying motivations attached to activity like listening to an entire Mozart symphony or reading through a Victorian novel.

Caldwell's second impulse of play consists of the point at which "the visual trappings of the game and the motivating story line have slipped into the background, leaving only the sense of seamless integration of the player into the game's cybernetic feedback loop." This second impulse of play shifts us out of the realm of the aesthetic into the phenomenological. Aesthetic concerns dissipate as the second impulse of play positions the player as one manipulating the game's controls without conscious attention to what the game looks like or to the motivation driving play. It also seems akin to that nebulous notion often deployed by game designers and audiences alike—'immersion.' Irrespective of how we might define this term, the concentration required to maintain a consistent rhythm of braking and acceleration around the streets of a virtual Monaco in a Formula One racing game moves the user to momentarily forget about how crisp or poor the graphics might be or how many points they may obtain if they finish in second place. The user's only concern is maintaining as fast a pace as possible in their virtual racecar. It is a testimony to the notion of this second impulse of play that the same things are said

about the immersive quality of racing games in the context of today's increasingly photorealistic graphics as were said about the blocky polygonal cars offered to racing gamers in the early 1990s.   With this second impulse of play, the user may be so engrossed in the game that they may suggest they are 'in the zone' or 'immersed' in the constant input and output the gaming experience offers.

These two impulses come together when the player internalizes "the lessons of the game—the particular ideological and discursive assumptions about how economic and political systems successfully operate—and to apply these lessons to the correct playing of the game." Caldwell argues that this moment renders any kind of self-reflexivity about the game's interpretation of culture as interference with the pleasure that might be derived from its engagement. To halt one's empire of trains during a session of *Railroad Tycoon* and self-reflexively consider how the game perpetuates colonialist and capitalist ideologies could theoretically undermine the fun a user might experience as they lay mile upon mile of train tracks while accumulating massive amounts of virtual wealth in the nineteenth century American West. To allow one's mind to drift to a consideration about patriarchy in *Donkey Kong* could lead to Mario's imminent demise under a barrage of flaming barrels. One could certainly imagine a case in which self-reflexivity might actually enhance the pleasure a player might derive from a digital game, however, it would seem that these situations would be few and far between for many gamers. Caldwell's model of impulses suggests a way in which the ideological content of a digital game might be internalized by the player. To make the game function 'properly' and to effectively work within its system is to submit to its ideologically informed assumptions about the world.

So the objective for the digital game critic in working from Caldwell's two impulses of play is to stop and attend to the first impulse of play while maintaining an attitude of self-reflexivity in the midst of the cybernetic feedback loop of the second

impulse of play. In making these reflexive moves, the critic can gain a heightened awareness of the way these texts mediate specific ideologies. It is precisely this kind of move I plan to make in analyzing the digital sports games in the next four chapters of this dissertation.

<p style="text-align:center">Methodology</p>

This dissertation employs qualitative textual analysis to critique digital sports games and then draws some theoretical conclusions deriving from this criticism. It would seem that the few qualitative textual analyses of digital games that have been produced assume a methodology in keeping with prior kinds of textual analysis of books, films and television shows. Although evidence of the methodology used to yield conclusions appears in these pieces, many of these kinds of approaches fail to precisely explain the nature of the reading act itself.

Salen and Zimmerman (2005) provide an entrée into thinking about how one might understand the reading process used to interpret digital games. In teasing out Huizinga's (1955) notion of 'meaningful play', they argue that meaningful play involves two dimensions. First, meaningful play entails "the way game actions result in game outcomes to create meaning" (p. 60). Second, meaningful play necessitates the game's clear identification when and how actions and outcomes are important in the game's broader framework. Without game actions yielding game outcomes and without an ability to see how these actions and outcomes are relevant, users cannot find meaning in play and discern the import of their activity. Salen and Zimmerman posit meaningful play occurring at the formal level of a player's single move in a given game, at the social level as multiple participants converse within the game as they play and on a broader cultural level as a game's features, actions and/or results become a metonymy for the political, social or philosophical domain. For example, meaningful play in chess might be considered in terms of the series of movements of individual pieces within the strict

confines of a formal mathematical system, as a social relation between two people in an experiential system or as a metonymy for battle in a cultural system.   In working from Charles S. Peirce's (1958) conceptualization of the sign, they trace how signs can come to have meaning within a game's sign system at these formal, social and cultural levels.

Salen and Zimmerman's explanation of meaningful play in tandem with the interconnection between their three systems of meaning in games provides a ground for this project's approach to the text of the digital sports game. As I analyze *Fight Night Round 2*, *Tiger Woods PGA Tour 2004* and *MVP Baseball 2005*, I consider the operation of signs within these texts and then move to engage the range of ways these digital sports game texts present formal, social and cultural systems. I then analyze the ideological significance of these functioning systems. The chapter addressing audience responses to *Madden Football 2005* considers how users respond to the systems of meaning the game offers.

In order to come to terms with these systems and their inherent ideologies, I perform a textual analysis of the respective digital sports game in question. For the purposes of this dissertation, a textual analysis of the game texts entails considerable familiarity with the game's options, representations and playing possibilities. Frasca (2003) argues that digital games reveal their ideological perspectives through the rules, that is, the playing possibilities established by the game world. A thorough understanding of the user's parameters of action and the signs used in its modes of representation in these digital games comes to be a way to think about the ideological implications of the text itself. Two examples of this kind of reading strategy occur in Consalvo (2003) and Carr (2003).

Consalvo's (2003) analysis of sexuality in *Final Fantasy IX* and *The Sims* provides the closest model of the kind of methodology and work I perform in this dissertation. Her essay explores representations of sexuality and heteronormativity in the

gameplay of the aforementioned two digital games. Consalvo defines the study of representation in digital games as not only including the way in which video game characters are represented, but also "the narratives and history offered, visuals, and situations found (including character dialogue, subplots, appearance, etc.)" (p. 173). She argues that the level of representation constitutes the 'surface' level of a digital game. However, Consalvo argues that digital games are much more than representational media in the sense of being readable texts. Because they move beyond the readable texts of representation into what she terms "the performative level of gameplay" (ibid.), digital games must also be studied at the more complex level of experience. Given that users actively move game characters around in virtual worlds and perform actions in these worlds, Consalvo suggests that users occupy subject positions through their acting avatars. She asserts that analyzing both the representational and experiential levels provides useful insight into the study of, in her case, the expression of sexuality in digital games. Her ensuing essay applies a qualitative textual analysis of *Final Fantasy IX* and *The Sims* to the exploration of how these texts position viewers both within and outside the parameters of heteronormativity.

Although I am not explicitly interested in representations of sexuality in sports games per se, it is Consalvo's concern for how subjects are positioned in these game texts which proves intriguing for my purposes. Although she fails to adequately theorize the move, her multi-level approach to the digital game text appears to provide a useful way to negotiate the narratology-ludology impasse.

Carr's (2003) qualitative textual analysis of *Silent Hill* and *Planescape Torment* provides a second model for the kind of work I perform with this dissertation. Her essay explores how the navigational options these games, operating in different genres, offer with regard to the user's experience of space as it relates to the effectiveness of their

respective affects. Her analysis also employs Deleuze and Guattari's notion of the rhizome and Freud's notion of the double as a theoretical ground for her propositions.

As with my discussion of Consalvo, it is not necessarily the specific content of Carr's essay that proves particularly useful for my purposes. However, it is the qualitative methodology she employs that I borrow. She demonstrates a clear understanding of and experience with these games and relates this experience to other theories that help explain the experience. Making these theoretical applications provides a better rationale and justification for digital game criticism.

Given these two models of digital game criticism and the theoretical framework erected by Salen and Zimmerman, each of the following chapters aims to interrogate the digital sports game and its role in mediating real world sport correlatives by employing a similar methodology.

Chapter two addresses the question of the representation of the body in EA's boxing game, *Fight Night Round 2*. The chapter establishes the import of the body for the sport of boxing before considering the way the body is mediated in EA's representation of the sport. In particular, careful attention is paid to the interface as one of the key mediating mechanisms framing the user's experience with the text. I argue that *Fight Night Round 2* attempts to inscribe the body into new media through its avatar creation system and interface even as these features actually perpetuate distance between the material and virtual body. The implications of this interface are discussed in the context of theory addressing the body and new media.

Chapter three centers around *Tiger Woods PGA Tour 2004* (*TW 2004*). *TW 2004* proves interesting for the ways in which it remediates the game of golf. It also provides a different kind of experience given that golf is an individual as opposed to a team sport. The individual nature of the game appears to have a significant impact on the kinds of things that can be done with its digital counterpart. *Tiger Woods PGA Tour 2004*

provides users an opportunity to participate in the sport of golf in a new medium and to subsequently challenge the raced, gendered and classed hegemony associated with golf even as its features close down this potentially progressive space to perpetuate traditional power structures surrounding the game. This dialectic is neatly mirrored by the popular mediation of Tiger Woods himself.

Chapter four takes up the ubiquitous nature of quantification in sports video games through the lens of *MVP Baseball 2005*. The chapter traces the ways in which numbers are deployed in digital sports games as communication media and mechanisms of power. As part of my discussion, I argue that *MVP Baseball '05* immerses users in a world of numbers, a world that theoretically positions users as calculable selves interacting with calculable others. The chapter concludes by engaging some of the results of the digital sports game's excessive preoccupation with numbers.

Chapter five departs from the close textual focus on the games themselves in the previous three chapters in shifting towards an investigation of how digital sports game audiences understand their activity. By examining internet message boards, I trace how the audience of *Madden Football 2005* interpreted their experience with the game through the notion of realism. In ascertaining this audience's obsession with visual and quantitative realism, I locate these two understandings of realism within their historically scientized and gendered frames. I argue that this study of the audience of *Madden Football 2005* reveals users following lockstep with the way in which quantitative discourses position them.

The concluding chapter brings the previous four chapters together to address the broader significance of the dissertation in terms of how these games speak to issues concerning the mediation of the body in new media. I also propose potential avenues of future research that could further fill the gap cited above in this domain of sports-media scholarship.

CHAPTER TWO

FIGHT NIGHT ROUND 2, CORPOREALITY, INTERFACES AND

DIGITAL BOXING

In spite of the loud voices of many of the sport's critics, boxing continues to be popular in contemporary culture. Boxing has enjoyed the attention of artists and filmmakers for the better part of a century and the sport has recently come to prominence again with the success of films like *Million Dollar Baby* (2005) and *Cinderella Man* (2005) and television shows like *The Contender* (2005-2006). EA's *Fight Night Round 2* (hereafter *FNR2*) joined in this resurgent interest in the sport in February 2005 as one of the most popular games in EA's stable.

Given the centrality of the body for sport, beginning the textual analysis of this dissertation with an examination of EA's rendering of boxing seems appropriate. A digitally mediated representation of boxing proves to be an excellent site for considering the ways in which bodies are mediated in digital technologies. Given the sport's excessive emphasis on precise weight limits and the need to protect oneself, boxing betrays an utter dependence on the manipulation and preservation of the body. Although all sport arguably involves the import of the body, few sports require such a complete management of the body and complete incapacitation of an opponent's body for victory. The nature of boxing necessitates the extensive and exhaustive preparation of the body both to render the opposition unconscious and to prevent oneself from being rendered unconscious. Given the paramount importance of the body for the sport of boxing, it is instructive to consider how *FNR2* treats the body in its mediation of the sport. What are the consequences of this digital translation for a sport so deeply imbricated in the

material? How is the culture of boxing changed and challenged as it is mediated by this digital game?

This chapter explores the mediation of the highly corporeal nature of boxing to critically engage how *FNR2* attempts to inscribe the boxing body into the new medium of the digital game. I begin by briefly representing selected scholarly perspectives on the freedom offered the body through new media. In the ensuing section, I speak to how boxers and writers speak to their perception of the body in the sport. I then analyze how *FNR2* attempts to deal with the free immateriality of bodies in new media by inscribing the boxing body into the digital realm through its avatar creation system and innovative control set. I argue that the design decisions behind these two features fail to successfully communicate the centrality of the body in boxing to the game's users. The chapter concludes by addressing how this failure speaks to broader questions about the significance of this mediation for boxing as *FNR2* positions its users in relation to the sport.

<div align="center">The Body and New Media</div>

Seemingly inspired by the work of science fiction authors like William Gibson, many scholars working in the 1990s argue for the increasing irrelevancy of the physical body as digital media transform consciousness and subjectivity. Carnegie-Mellon roboticist, Hans Moravec, provides a vivid illustration of how technophilic activity aims to dissociate neurological processes from the body. Moravec (1988) argues that the machines we create will perpetuate the evolution of human culture, albeit a culture that has left human flesh behind. Without any sense of irony Moravec opines that the machines will happily continue this process such that "our DNA will find itself out of a job, having lost the evolutionary race to a new kind of competition" (p. 2). He would have us distance ourselves from an identity associated with the physical body to what he terms "*pattern-identity*….the essence of a person, say myself, as the *pattern* and the

process going on in my head and body, not the machinery supporting that process" (p. 117, italics in original). For Moravec, adopting 'pattern-identity' in place of 'body-identity' enables the effective splitting of mind from body. His argument likening the body to machinery places flesh and technology on the same ontological level in that the latter seamlessly replaces the former.

In a later work, Moravec (1999) labels robotic machines humanity's "mind children" (p. 13) suggesting they are "ourselves, in more potent form" such that robots provide the best chance for humanity to survive impending evolutionary change. He foretells the day when "some individuals could survive total physical destruction to find themselves alive as pure computer simulations in virtual worlds" (p. 192). In a move that appears to push Baudrillard's (1988) notion of the simulacra to an extreme, Moravec appears to welcome the day when humans become nothing but unsullied simulations living in digital ecosystems.

Haraway (2003) also appears optimistic in embracing new technologies along a different vein. Where Moravec situates the physical body on the same level as the machine, Haraway appears to position the two as they collapse into one another. She sees new opportunities for pleasure in what she locates as the permeable boundary between organism and technology occupied by that which is "simultaneously animal and machine" (p. 516). Haraway describes this cyborg as free to function outside existing binary structures like the public-private, the natural-cultural or the individual-social. Haraway advocates a move away from a body-centric organic politics to a cyborg politics that opens up potentially novel means of political engagement and contestation. For example, new technologies might become the instruments through which women refashion their bodies and their social relations. Given the high technology culture in which we live and our tight connection to these technologies, Haraway argues that "machines can be prosthetic devices, intimate components, friendly selves" (p. 533).

This kind of unfettered techno-utopianism finds its fictional expression in portions of the work of cyberpunk novelist, William Gibson. Tomas (1989) chronicles one of the key threads in Gibson's work, the technophilic body. The technophilic body derives from aesthetic changes made to the body's surface (e.g. cosmetic surgery, transplants) and functional changes made to the body's interior (e.g. biochip implants, improvements to the senses). For Tomas, the consequences of Gibson's technophilic transformations of the body reconstruct social identities and, as if to express Moravec's dream, enable the potential for the human mind to be "effectively dislocated from organic bodies gripped by a deteriorating natural ecosystem to be relocated and rewritten through a wide variety of hardware-based software personality constructs" (p. 117). Gibson's cyberspace serves as that which "absorbs the object of technologification so that cyborg systems are dematerialized and 'cybernetically' reconstituted within the context of this cyberpsychic space" (p. 121). The 'meat' of bodies effectively disappears as minds travel across the data ranges of cyberspace.

In her work on the body, technology and new media, Stone (2001) chronicles what she perceives to be the destabilization and then rupture of the relation between the body and the subject. As internet users occupy virtual reality, Stone argues that the process of getting past the computer screen "involves a state change from the physical, biological space of the embodied viewer to the symbolic, metaphorical "consensual hallucination" of cyberspace; a space that is a locus of intense desire for refigured embodiment" (p. 193). However, Stone cautiously reminds us that life is still lived in the physical and that no reconstituted body dwelling in cyberspace can alter the death of a cyberpunk with an incurable disease.

Digital games have yet to place their users completely in virtual environments in keeping with the kind of future vision offered by scholars like Moravec, Haraway, Gibson and Stone, however, the move to free the body from its place in space and time

appears inherent in these games' respective designs. This chapter aims to assess EA's attempts to deal with this freedom through the mediation of a sport explicitly tied to the physical body in the material world. How does the mediated boxing of *FNR2* speak to new media's apparent freeing of the mind from the body and what are the consequences of this mediation for a user's understanding of the sport of boxing—a sport where the protection of the body is both the stakes and at stake?

<div align="center">The Import of the Body in Boxing</div>

Perhaps no scholar has done a better job of explaining the material world of the boxer than French sociologist Loic Wacquant. Wacquant's (2004) participant ethnography of boxers at a gym in an urban Chicago ghetto over a three year period yielded a series of insightful articles designed to understand the boxer's, from Bourdieu, habitus. Wacquant's work demystifies the public, media-centric perceptions of boxing as either a sport excessively focused on violence and bloodlust or one through which an impoverished urban youth can become a famous, glorified and wealthy champion. Wacquant explores the world of the everyday boxer to interrogate why boxing's participants continue their practices and how the sport functions in their respective lives. He aims to examine boxing as "a practice that is… intensely corporeal, a culture that is thoroughly kinesthetic, a universe in which the most essential is transmitted, acquired and deployed beneath language and consciousness…" (p. xi). Certainly the majority of sports, broadly defined, explicitly revolve around the movement of the body, however, Wacquant's work demonstrates the preeminence given to the body in boxing. Wacquant (1995a) argues the boxer's body is "the template and epicenter of their life, at once the site, the instrument and the object of their daily work, the medium and outcome of their occupational exertion" (p. 66).

This argument certainly applies to the way in which boxing is represented in other media. In 2005, Mark Burnett, eminent reality television producer, launched a boxing

competition show entitled *The Contender*, the premise of which involved a group of fighters participating in a single elimination tournament over a four month period. The boxers represented on the program consistently worked on their bodies to prepare themselves for their next opponent. We see them carefully attending to their diets and exercising in specially constructed insulation suits designed to enable them to quickly sweat away excess pounds to meet the required weight limits. We also witness the fighters studiously examining their faces in the mirror for any visible damage they may have received immediately following each match. These oft repeated scenes clearly demonstrate the vital role of the boxer's body in succeeding at their craft.

Popular writers such as Norman Mailer have also spoken to the importance of the body for boxing. Mailer's (1975) chronicling of the celebrated 1974 Mohammed Ali-George Foreman 'Rumble in the Jungle' describes Ali's ability to deal with any potential pain he might experience in the ensuing heavyweight title fight in these terms,

> he [Ali] could assimilate punches faster than other fighters, could literally transmit the shock through more parts of his body, or direct it to the best path, as if ideally he were working toward the ability to receive that five punch combination (or six or seven!) yet be so ready to ship the impact out to each arm, each organ and each leg, that the punishment might be digested, and the mind remain clear (p. 5).

Mailer suggests that the whole body is invoked in the reception of a punch to one of its areas and that the most talented fighters can dissipate this force away from the place where the blow has been received. Later in the book, Mailer elaborates on what is required of a fighter receiving a punch. "Standing on one's feet, it is painful to absorb a heavy body punch even when blocked with one's arms. The torso, the legs and the spine take the shock" (p. 191). Fighters must be in tune with their bodies in order to equip themselves to withstand this kind of punishment.

The fighter's close examination and awareness of their body also accords with Wacquant's semiotic interpretation of the boxer's body as "a system of signs, a symbolic

quilt that he must learn to decipher in order better to enhance and protect it, but also to attack it" (p. 68). Given this kind of hermeneutic project required of its practitioners, Wacquant perceives boxing to be unique for the way it necessitates the proper interpretation of the body as simultaneously that which attacks opponents and that which is attacked by the self. Famed boxing trainer and corner man for former heavyweight champion Larry Holmes, Eddie Futch, witnessed Holmes lose a fight by making an imprecise interpretation of his body and coming into a title defense two pounds too light. After addressing Holmes' subsequent title bout defeat, Futch related the consequences of this hermeneutic mishap in saying, "When your weight is too fine, you see the things you want to do, but you can't do them. You see punches coming that you can't get out of the way of. Just like you can't do things when you're too heavy" (Anderson 1991, p. 252). Futch cites this misinterpretation of the body as the key reason for Holmes' subsequent loss that night.

This hermeneutic project begins in the confines of the boxing gym well in advance of a fight. In preparing for a bout, Wacquant explains how the self attacks the body through rigorous, disciplined training designed to sensitize and reorient

> the entire corporeal field of the fighter, bringing to prominence
> certain organs and abilities and making others recede, transforming
> not only the physique of the boxer but also his 'body-sense,' the
> consciousness he has of his organism and, through this changed
> body, of the world about him (p. 73).

This reorientation occurs through a series of repetitive, sometimes monotonous, training sessions which imprint optimum stances and movements as well as emotional-intellectual patterns on the body. The latter becomes especially important given the boxer's need to conceal emotions and pain from visible expression. To betray this physical and psychological anguish is to lend an opponent a strategic advantage and invite further damage to the body. Mailer provides a concrete illustration of this idea in relating how Mohammed Ali deceived Foreman into believing a lie about his condition

by faking this physical and psychological anguish. Under the attack of a relentless barrage of Foreman punches, Ali "used his eyes. They looked like stars, and he feinted Foreman out with his eyes, flashing white eyeballs of panic he did not feel which pulled Foreman through into the trick of lurching after him on a wrong move…" (p. 196). Ali's physical ruse seduced his opponent into using all of his energy only to have Ali suddenly retaliate with an ultimately victorious flurry that would send Foreman to the canvas.

The aforementioned sources clearly demonstrate the centrality of the body for the boxer and provide a frame through which to understand how *FNR2* mediates the key to the sport. A boxer's 'body sense' becomes crucial to their success in training and in the fights themselves. The rest of this chapter explores how this digital game attempts to reinscribe the boxer's 'entire corporeal field', thereby potentially providing users with a greater appreciation for the 'body sense' so necessary to successful skill development in the sport.

Avatar Creation: Corporeality and Informational Pattern

FNR2's Avatars and the Boxing Body

One of the key sites in which EA attempts to reinscribe the boxing body into *FNR2's* digital space comes at the beginning of the game's 'career' mode. Upon selecting the career mode option, the game takes users to the avatar construction screen. Although it is possible to use champions past and present in the game's exhibition and practice mode, *FNR2* does not allow users to begin the career mode without the creation of an avatar. Oddly enough, *FNR2*'s character creation system is less detailed than the one used in *Tiger Woods PGA Tour 2004*[4] given boxing's excessive focus on the body.

---

[4] See the following chapter for an extended discussion of *Tiger Woods PGA Tour 2004* and its Game Face feature.

The avatar construction tool provides users the opportunity to create both the body and the face of the character with which they will fight over the course of their career.

In allowing users to mold a virtual body, the avatar generation tool enables them to begin the game with a semblance of the fighting body they desire. Users are initially given the option of increasing or decreasing the amount of muscle and fat on the upper parts of the body. Users can create an incredibly thin, absurdly overweight, or excessively muscular character. The options certainly set some limits in preventing users from creating any boxing body (for example, only male characters are allowed),[5] however, they provide considerable latitude in terms of how the body is constructed.

After the boxer's body has been created, the game takes the user to a subsequent menu to equip and prepare the boxer and his body for the next fight. Part of this preparation involves a training session. Whereas real world fighters spend months and weeks getting ready for an impending match, EA short-circuits this grueling, disciplined process with a quick, painless mini-game sequence. Before training begins, users have the option of deciding what kind of skill set improvements they would like to see their avatar make. Users can choose to engage in: (1) combination training to improve speed, agility, heart and stamina; (2) heavy bag training to better power, speed, chin, heart, stamina, cuts; and (3) weight training to build up power, body, heart, stamina.

Following the training session, the results of the training appear both quantitatively and qualitatively in the next screen. At the quantitative level, the user character's skills are evaluated for their numerical level of improvement. A user's fighter might come away from training with a +3 in power so that their punches generate more

---

[5] This limitation reflects the generally gendered nature of the sport as a specifically masculine activity. The first officially sanctioned amateur women's fight only occurred in Sydney, Nova Scotia in 1991 and a women's division of the celebrated amateur tournament, the Golden Gloves, was only inaugurated in 1995 (Anasi 2002). However, increasing numbers of women have begun to box over the course of the last decade.

force, +3 in stamina so that this force can be exerted in the latter rounds of the impending bout, +1 in chin and +1 in body so that an opponent's punches to the face and mid-section respectively may be more easily and effectively absorbed. Qualitatively, the user sees the direct results of the training session inscribed upon the fighter's body. If the user has successfully improved the power of the fighter, the character will appear more muscular. If the user has successfully improved the stamina of the fighter, the character will appear leaner and more streamlined. This inscription is most visible in the initial stages of the fighter's physical transformation and becomes less and less identifiable over time as the number of training sessions increases. The increasingly imperceptible changes to the virtual body aim to simulate the increasingly invisible effects of the material world's training returns. These training sessions effectively transform the physical image of the boxer in the hopes of generating increased virtual bodily capital that should theoretically lead to better user performance in the virtual ring.

The last stop in *FNR2's* body construction set can be found in the game's shop. As James and Carkeek (1997)[6] argue about how consumerism ascribes the signs of appropriate identity in what they deem late capitalism, so too does consumption of virtual commodities in *FNR2* function to provide the finishing touches on what constitutes the user's appropriate boxing identity. Part of this identity derives from an internalization of the body as a site of performance. In borrowing from Goffman, Wacquant (1995) suggests that the boxing body serves as a site for "impression management" in considering how fighters adorn themselves. In preparing to enter the ring, real world fighters will typically either clothe themselves in as intimidating a manner as possible by

---

[6] James and Carkeek (1997) suggest that the culture of late capitalism renders the body increasingly problematic to the self. They posit that the body "remains important to the constitution of identity, but more as the constructed image through which the self is presented to others than as a locus of the simultaneous connection and separation from others" (p. 117). Citing the examples of the fitness industry, plastic surgery and the diet craze, James and Carkeek define the contemporary body as that which can be simultaneously created, fragmented and dissociated from the self through processes of commodification. From their perspective, "The body becomes an industry, with mass consumerism ascribing the signs of appropriate identity" (James and Carkeek, p. 117).

wearing something like a long hooded robe which conceals the entire body or, as Woodward (2004) argues, parody this intimidation with gaudy, tasseled garments that appear to mock the pretenses of physical toughness. *FNR2's* diversity of commodity choices certainly appear to open up either possibility as they function to position the user, and vicariously, the user's avatar with the appropriate signs of boxing identity.

The consumption of the game's virtual commodities not only enables users to practice impression management, but also elevates the user's fighting ability. Although the virtual boxer's physical body can be improved through the game's training sessions, the purchase of a variety of products in the shop also functions to improve a user's boxing skills. Merely training extensively at the game's gym will not make one a virtual world champion. Users can practice the mechanics of moving the control sticks for as many hours as they choose and yet still falter in the ring without the additional magical skill upgrades afforded by the shop's commodities. Users may purchase items such as licensed trunks that will reduce their susceptibility to serious cuts, a variety of different shoes that will improve their agility in the ring, gloves that will increase the speed or power of punches, and mouth guards and foul protectors that provide additional protection from opponent's punches.

In many respects, this consumption of commodities to achieve a more desirable corporeal representation mirrors the practices of some existing online clothing stores who present their customers with virtual visions of the post-purchase self. Jordan (2003) describes how some clothing retailer websites feature virtual hypermodels shoppers select in order to approximate how the store's wares might fit their own material bodies. Jordan argues that these hypermodels "seek to persuade shoppers alternatively to identify with the model as a reflection of their own bodily form and to desire the same hypermodel as a better body to which they can gain access through consumption" (p. 249). Certainly, unlike these hypermodels, user avatars in *FNR2* may not necessarily reflect their real

world likenesses. However, like the online consumers who identify with these models as idealized images of their own bodies, the avatar creation system would seem to position users for the deployment of similar identification processes with their avatars in *FNR2*. Whether the identification process works because the avatar serves as a reasonable facsimile of the user does not seem as important as the fact that the avatar serves as the user's primary point of reference in the game. The identification process would seem to have more to do with the avatar's instrumental than representational function in this respect. If users consider a better body to be one that functions more successfully in the ring, then the purchase of the game's commodities becomes the means to that end. In being adorned with commodities and buffeted by training, the flabby, flaccid virtual bodies with which users begin the game become bodies transformed into muscle-bound fighting machines.

FNR2's Avatars and the Boxer's Face

Users not only design their virtual bodies with the avatar construction tool, but also employ it to generate their fighter's face. In the same way the game enables the alteration of the avatar's bodily dimensions, a series of similar options allow users to modify several aspects of the fighter's facial features. Among the litany of features to modify include the shape, angle and height of the nose, the protrusion of the brow, the cleft of the chin, and the amount of space between the eyes. This system offers considerable flexibility and a relatively large degree of precision in terms of how users create the most distinguishing aspect of their character and that which most clearly differentiates them from other fighters.

One suspects that the excessive focus on creating the face can be tied to design decisions made for the rest of the game. The face in *FNR2* serves as a core element in two of the game's key animation sequences, the knockdown/knockout animation and the corner animation which occurs between rounds. During gameplay periods when a user or

a user's opponent faces the danger of experiencing a knockdown or knockout, the game shifts into a series of slow motion animations highlighting the damage either being exacted or suffered. The game's camera pans to a tight close-up shot of the wounded boxer's face to register the movement of cheeks, lips, blood and sweat as a barrage of punches connect. The avatar creation system's focus on the face becomes important in these sequences as the face itself becomes the central point of visual emphasis delineating when a fighter is in trouble.

The face is also important in another one of *FNR2's* elements, the corner animation and gameplay sequence operative between rounds. Upon each round's conclusion, both fighters retire to their respective corners. At that point, users see their avatar's face in extreme close-up. This perspective enables users to identify those areas of the face needing greatest attention and provides the important information needed to succeed in what amounts to a medical mini-game. Swelling and bruising to the cheeks and around the eyes necessitates the application of a frozen metal device called the N-Swell across the affected areas. Users move the N-Swell across the battered cheeks and brows to alleviate damage from their opponent. Users also employ virtual cotton swabs to cuts to eliminate as much of the bleeding as possible for the same purpose. Successfully dealing with the fighter's cuts and bruises provides the user with a greater ability to take a punch in the ensuing round.

This between rounds mini-game would appear to heighten the user's emotional connection with their avatar. Seeing one's avatar, the avatar that has been so painstakingly created, visibly suffering from the punishment being applied by an opponent could potentially increase the user's desire to be healed or to return to the fight with an even stronger desire to overcome the challenge set before them. However, without the focus on the face in the initial avatar creation system, this potential for this player-avatar identification would seem much less likely.

Implications of the Avatar Construction System

Although the avatar construction system enables users to create a body and a face with which they identify in the playing of the game, this identification process lies in tension with the fact that this feature and the subsequent playing of and with the avatar leaves the user and their virtual body at the level of observation rather than participation. Neitzel (2005) notes this distinction in arguing for a differentiation between those aspects of digital gameplay which position the player as observer from those which position the player as agent. She suggests that these positions come together in the process of engaging a digital game. In outlining the position of the player as observer, Neitzel states that this observational position "has the effect of regulating the player's level of involvement in, or distance to, the game" (p. 231).

It appears the construction of the boxing body in *FNR2* functions primarily through this observational position and generates distance between user and avatar by situating the body as object to be acted upon and observed rather than subject with which to be identified. Although the construction of the body as object to be acted upon might be equated with Wacquant's argument about the boxer's interpretation of the body as that which is to be attacked, the game's positioning of the player at the level of observation in these game sequences works against a subjective identification with the fighting avatar. The animations highlighting the blood and sweat flying from the fighters' faces during the knockdown segments position the player as an external onlooker to the action rather than the one who sees their own blood being spilled in keeping with a first person perspective. The corner sequences in which users tend to their avatar's cuts and bruises remove them from a strong subjective identification with their fighter by positioning them external to the character the game asks them to identify with. As such, users become distanced from the harsh and painful difficulty of the real world sport's toll on the body.

The game's positioning of users in the observational perspective also distances them from the boxing body in that what users see between rounds appears more akin to mediated boxing within the televisual frame. When the round ends and the virtual fighters head to their respective corners, users see an image of their fighter very close to what they might see on television. Although the angle of vision in *FNR2* is slightly different from the television angle, it seems the intention of the representation of one's fighter in the game remediates the intention of a fight's television production in giving the user the greatest possible insight into the condition of the boxer within the frame. However, the effect of this design choice positions the user to perceive their avatar as they would perceive a boxer seen on television. As such, rather than generating increased subjective identification with the avatar as agent, *FNR2's* chosen between rounds camera angle places the avatar on the same objective ontological level as the distant televised fighter. Consequently, users are left at the level of observation and the boxing body at the level of immaterial "informational pattern" (Hayles, p. 167, 1993a). In the process, the real world corporeality of the sport is arguably undermined.

<u>The Boxing Body and *FNR2*'s Control Set, Corporeality</u>

<u>and 'Kinesthetic Iconicity'</u>

It seems plausible to suggest that positioning the player as observer in the avatar construction, knockdown/knockout and corner game sequences distances the user from the corporeality of boxing. But what happens when we move from considering game sequences positioning the user as observer to considering those positioning the user as agent? Even though users play *FNR2* through a televisual camera angle and frame, how do we consider the user's entrance into the frame as they control what they see? What if the game's control set tries to reinscribe the body into the experience in a unique way?

One of the most important aspects of *FNR2's* positioning of the user as agent concerns the game's interface. EA Sports deemed *FNR2's* control set unique and

innovate enough to market it as a key feature of the game. The company nominated the in-ring fighting interface the "Total Punch Control System." Popular game reviews lauded this design choice in calling the controls "a deep and involving boxing mechanic that allows you to be creative in your approach to the fistic arts" (Ekberg 2005, 'Fight Night Round 2'). Other reviews praised the system for providing "unmatched control" (Woo 2005, 'Fight Night Round 2') and the feature "where Fight Night Round 2 scores a KO" (The Midnighter, 2005, 'Fight Night Round 2').

Before proceeding, it would be useful to explain how the Total Punch Control System allows users to play *FNR2*. Users move the left control stick (or thumb stick) to position their fighter around the ring and to dodge an opponent's punches such that this control stick becomes an extension of the user's legs. Users move the right thumb stick to throw and block punches such that this control stick becomes the extension of the user's hands. It is this right thumb stick that functions as the locus of the "Total Punch Control System." This system aims to link a user's movement with the right thumb stick to the precise trajectory of a punch thrown by their fighter onscreen. Upward left and right diagonal movements enable the user to throw quick left and right jabs. Straight left and right movements that then continue by maneuvering the thumb stick towards the top of the controller allow for the execution of left and right hooks. More time consuming, but more powerful left and right upper cuts may be thrown by moving the stick downward diagonally and then shifting it in a continuous circular direction towards the top of the controller. The most powerful, but most risky, 'haymaker' punches can be performed through an extreme downward diagonal movement of the right thumb stick that is then continued in an arc to the top of the stick's range of motion. The control system enables users to virtually perform the range of punches their corporeal counterparts throw in the material sport.

With the Total Punch Control System, *FNR2* attempts to generate the illusion of a physical materiality so paramount to the sport of boxing. Whereas prior boxing and fighting games relied on a combination of button presses to execute attacking movements, *FNR2*'s 'Total Punch Control' system mimics the trajectory a fist travels through the air in the execution of a boxer's punch. To apply Peirce's (1894)semiotic terms, this control system moves away from an interface characterized by symbolic signs agreed upon by convention (e.g. pressing the 'A' button on the controller to throw a right hook) to one characterized by iconic signs in which the movement of the control stick in space resembles the movement of the material fist through space. In reflecting on my own interaction with the game, I realized I was consistently accepting the illusion offered by the control set in believing that the harder I pushed the right thumb stick through the arc, the more powerful and effective my hooks and upper cuts would be against my opponent. In fact the simple motion of the stick generates the requisite force needed to throw a powerful punch irrespective of how hard the stick is pushed.[7]

In transforming the game's interface from an engagement with symbolic signs into an engagement with iconic signs, *FNR2* allows users to gain a greater sense of the physical materiality of boxing than was possible before. Although *FNR2* cannot make any claims to perfectly replicate the fighter's craft, what might be termed the 'kinesthetic iconicity' of the control system theoretically mediates the sport of boxing more realistically than prior mediations of boxing and mediations of other sports whose control systems remain more strictly tied to symbolic signs. Throwing a punch with the right thumb stick in *FNR2* seems to be a much different physical activity than pressing a

---

[7] This feature has actually been incorporated to a greater degree in *Fight Night Round 3* (2006) with the 'stun punch.' The stun punch requires the user to whip the thumbstick through its arc of motion and then to follow through with the punch by pushing the stick past the straight up position as one would in *Fight Night Round 2*. The stun punch becomes the riskiest punch to throw in that it requires the most time to execute, but also has the potential to exact the greatest amount of damage on an opponent.

button to throw a pass as a quarterback in *Madden Football* or a trigger to begin the pitching motion in *MVP Baseball*.

The control set also opens up the possibility for users to enact and appreciate what Wacquant (1992) describes as the consistent activity of the most successful boxers. Wacquant avers that the best fighters are

> defined by the fact that the body of the fighter computes and decides for him, instantaneously, without the mediation and the costly delay that it would cause, of abstract thinking, prior representation, and strategic computation. The body is the immediate, spontaneous strategist of the game…" (p. 248, italics in original).

In the same way, *FNR2's* intuitive control system enables this kind of explicit bodily immediacy to occur. Users no longer need to meticulously master a series of button presses in combination with one another a la the boxing games of the past. In its iconic simplicity, the 'Total Punch Control System' enables action that need not require abstract thinking or strategic computation.

Without the need for excess abstract thinking or strategic computation, *FNR2* arguably provides users with what might be termed a more proprioceptive interface than that afforded by previous boxing games. Hayles (1993) establishes the import of proprioception in her discussion of bodies and virtual reality in arguing that "…proprioception creates a link between the body's extension and habitually used objects. An expert tennis player experiences the racket as an extension of her arm; an experienced typist feels the keys as part of his fingers" (p. 167). For *FNR2,* the right thumb stick becomes the extension of the user's arms in iconically linking its movement to the movement of the virtual fighter's fists. Given this kind of more explicitly proprioceptive interface, it would seem that users could more easily incorporate the control scheme of the game and perhaps positioned to come to a greater appreciation of the skills needed to perform these movements in the physical world.

This iconic interface certainly appears to both make the game easier to learn and potentially lends insight into how these athletes practice their craft. However, Hayles also argues that virtual reality simulations alter and modify the body's proprioceptive capacity. She suggests that one can reach for an object in virtual reality and not receive any material resistance upon grasping the object. As a result of this empty material feedback, the body is further dematerialized. When the body experiences this kind of dematerialization, then any proprioceptive activity within the experience reinforces the idea that the user is operating as "an informational pattern interacting with the informational patterns on screen" (p. 169). This argument certainly applies to *FNR2*. Although users hear the sound of their punches connecting with their opponent, the controller yields no material resistance upon the meeting of glove with virtual flesh. Even though the movement of the thumb stick through the punching arc mimics the movement of a punch thrown in real life, the thumb stick does not come to a stop when said punch hits its target. If we accept Hayles' argument, then irrespective of how intuitive *FNR2's* interface might be and to what degree it enables users to appreciate the realities of the sport being mediated, without the material resistance, users cannot help but be positioned to experience the game at the level of informational pattern.

The interface also has consequences for the way it positions users to understand the sport of boxing. Interestingly, *FNR2* represents attacking and not defending movements through the kinesthetic iconicity of its control set. Users do not defend themselves with the same kinds of movements they use to attack. Instead of continuing with the innovative control system in designing defensive movements, EA returns the user to the symbolic realm to defend the virtual self. Instead of moving the right thumb stick as an extension of the fighter's arms and blocking punches, *FNR2* requires the pressing and holding of one of the controller's shoulder buttons to raise a gloved wall of protection or to attempt to duck and weave.

This design choice becomes significant if we agree with Rehak's (2003) argument about how digital game interfaces function ideologically as they render themselves natural and transparent. *FNR2's* 'Total Punch Control System' renders attacking offensive fighting natural and transparent while readily ignoring the defense and protection of the body. It appears impossible to succeed in the game by imitating a successful defensive fighter like Pernell Whitaker as EA's patented control set clearly privileges the pleasure of punching as opposed to that of a wily defense. EA has yet to invent and patent the 'Total Punch Avoidance System' or the 'Total Punch Protection System'. The control set certainly offers users defensive fighting options in enabling them to duck punches, to lean back and to step out of an opponent's way, however, these controls remain in the realm of the symbolic rather than the iconic. The end result of this design yields intuitive attack and counter-intuitive defense. This kind of representation suggests a game decision privileging offense over defense and aggressive attacking over skillful defense. Granted that the controller does vibrate when a user is hit with a punch in providing some tactile feedback about one's lack of defensive skill, but this minimal feedback pales in comparison to the clear favoring of an offensive control mechanism intended to imitate the throwing of real world punches.

Invariably, EA's design decision led this user to observe the post fight punch statistics routinely revealing my fighter connecting on a high number and percentage of punches, but suffering from being hit with an equal, if not, higher percentage of punches from my opponent. Even though my avatar may not have consistently been hit with a high number of punches (i.e. I could always move my avatar around to try to avoid being hit), the connecting percentage of my opponent frequently outpaced my own. I could throw punches with the best opponents, but simply could not keep my avatar from being pounded whenever I was in an opponent's punching range. Only the least skilled opponents would have difficulty connecting with my virtual fighter. My only hope of

succeeding in a fight would be to hope I could connect with a greater number of punches than my opponent given that my opponent would always connect with a higher percentage of blows. This consistent outcome would appear to come from the game's ability to make throwing punches iconically intuitive and dodging punches symbolically counter-intuitive. Attack is simply easier to execute than defense given the control set with the end result being the naturalization of offensive fighting.

The naturalization of offensive fighting also encourages the exacting of damage to both fighters, thereby increasing the amount of bloodletting in every fight. In the material world of boxing, fighters tend to be informally classified as to how prone they might be to cuts and swelling. By contrast, in *FNR2* every fighter appears equally and extremely susceptible to the visible effects of opponents' punches to the face. Almost without fail, three rounds of boxing will leave a fighter in *FNR2* with cuts needing attention and swelling that must be quelled. EA's 'Total Punch Control' glorifies the visible effects of damage resulting from offensive fighting. Mohammed Ali could never have claimed to be 'pretty' if forced to fight in *FNR2's* boxing world as he simply would not escape *any* opponent unscathed.

This privileging of offensive fighting further distances the user from the boxing body. In emphasizing attack over defense in the virtual ring, *FNR2* positions users at a distance from the boxing body outside of the ring. The game's control set positions users by injecting more of the physical body into attack than into defense thereby distancing them from the pounding real world fighters experience in being hit with innumerable punches over the course of a fight. Mailer's aforementioned comments regarding Ali's defensive prowess reinforce the notion that in the material world of boxing, the registration of an offensive attack on the boxer's own body is much less tangible than the feel of an opponent's punch to the solar plexus or the liver. To deemphasize the skill

needed to take a punch in favor of throwing one theoretically alters a user's understanding of the sport.

As stated earlier, *FNR2's* placement of the user in the observational position distances them from the sport's toll on the body, but the game's placement of the user as agent functions similarly. Given the privileging of attack over defense fostered by the Total Punch Control System and the fact that the action occurs within the physical frame of an older medium, users engage the fighting body at a distance. What they experience is not a realistic rendering of boxing, but an interpretation of the sport influenced by other media forms. Although it may be a slight exaggeration to make this claim, one could plausibly argue that the graphically violent *Rocky* series of movies sees its blood-filled digital analog in *FNR2*. As such, users may not be interacting with a mediation of the sport itself, but rather with a televised or filmic remediation (Bolter and Grusin, 1999) of boxing. The digital game generates distance between user and the sport in its representation of televised boxing rather than with boxing itself.

Conclusion

Even as it frees bodies from the material dangers of real world boxing, *FNR2* leaves the boxing body at the level of informational pattern through its avatar construction system and its kinesthetically iconic interface. The avatar construction system represents the body as externally observable and pliable object rather than the internalized and identified with subject. The construction of the face and body that could generate an empathetic connection between user and their virtual fighter comes undone with the ways in which the creation system operates to create distance between the two. Additionally, the critically lauded 'Total Punch Control System' intended to close the distance between user and the boxing body still falls short of constructing the seamless identification between user and avatar. Certainly users fail to register the physical effects of their opponents' jabs on their own bodies and even fail to experience the corporeality

of a successfully executed left hook. As such the identification they might otherwise

experience in relating to real world boxers through the Total Punch Control System fails

to remediate the sport in a way that adequately communicates its highly corporeal nature.

The control set also naturalizes offensive fighting by making attacking more intuitive

than defending.

In many respects, the representation of the body in *FNR2* is analogous to Hayles'

(2001) citation of the multimedia medical database, Trauma Base. Trauma Base provides

medical school students with the opportunity to interact with still and moving images and

sounds collected from Vietnam War casualty records. This virtual reality program

enables prospective doctors to viscerally experience and engage the data they are offered

as a means to generate empathy towards real world patients and teach skills needed in

performing procedures. Hayles critiques this program for the way it offers these students

"the benefits of physicality without being bound by its limitations" (p. 311) and goes on

to argue,

> The privileged position that virtual reality bestows upon the
> subject marks a difference between him or her and others who
> cannot enter the space, specifically those wounded or killed in the
> war. Their simulacra enter the virtual space only to testify to their
> inability to reconstitute themselves as virtual subjects removed
> from the perils of physicality. The very sensory stimulation that
> Henderson [a physician associated with Trauma Base] sees as
> constituting an empathic bond between victim and user reinstitutes
> difference in another register (p. 311, my addition).

Although comparing the experience of boxing in *FNR2* to engaging patients in

Trauma Base certainly reveals differences between the two, each program's attempt to

generate identification reveals some similarity between these pieces of software. Like the

prospective physicians engaging data from the Vietnam War in treating digitally

constituted patients, users of *FNR2* are still positioned to experience an identification gap

between themselves and their onscreen representation because the avatar construction

system and control set do not allow for this identification to occur. This identification

gap ultimately generates a representation of boxing that fails to adequately communicate the centrality of the body for the sport.

CHAPTER THREE

"TIGER TRAP": *TIGER WOODS PGA TOUR 2004* AND THE

IDEOLOGY OF VIRTUAL GOLF

The previous chapter addressed the positioning of users and mediation of sporting bodies in new media by examining the ideological implications of the avatar creation system and control set of *Fight Night Round 2*. The body's paramount importance to the sport of boxing may be unparalleled; however, the body is certainly vital to other sports as well. That having been said, the nature of this body and the way it is understood certainly differs from sport to sport. Subsequently, expressions of the body's translation and the positioning of users in new media may differ as well. This chapter shifts our attention to the understanding of this new media body in the sport of golf as I analyze *Tiger Woods PGA Tour 2004* (hereafter *TW 2004*). With this analysis, I demonstrate how the game, challenges and changes the culture of golf as the sport is mediated.

Few sports have been as restrictive in determining which bodies to allow as participants than the sport of golf. Golf and its associated culture have historically been an elite white male preserve. Even as many golf clubs around the country have taken steps to open up the game to a broader array of participants, a racial, socioeconomic hegemony continues to perpetuate itself in the sport. Maas and Hasbrook's (2001) study of recent advertisements in mainstream golf magazines revealed that the target audience for golf equipment and apparel was still the able-bodied, young to middle-aged, white male suggesting that golf culture has changed little over the last century. Maas and Hasbrook argued that the representations found in these advertisements perpetuated notions of hegemonic masculinity by failing to feature the elderly, the disabled or

women. Royster (1998) speaks to the difference between the surface reality of golf and the substance lying behind it in stating,

> The reality may be that golf is played on public courses, taken for college credit, and enjoyed by a variety of men and women all around the world. But it is no revelation that the sport's mystique is maintained by its association with the Exclusive Country Club, the rare but not obliterated site of racial segregation and carefully policed class boundaries.

But what happens when new media provide the potential for previously marginalized bodies to virtually occupy a space previously inaccessible to them—a space like golf? As the aforementioned new media scholars suggest, new media have been lauded for their potential to open up previously inaccessible domains of experience to those not part of the raced, classed and gendered hegemon. The sport of golf would appear to be no exception. Interacting with the new media representation of golf that is EA's *TW 2004* leads the player into an engagement with a mediation of the sport that potentially enables a move away from historically legitimated forms of culture surrounding the sport, but simultaneously closes down these potentially progressive possibilities. Much like Woods' challenge of traditional golf culture, the game series has also challenged traditional golf culture with its representation of the sport. In this chapter, I argue that *TW 2004* carries progressive potential in its gameplay by positioning its players to virtually challenge the traditional racial and class barriers to the sport, however, this potential sits in tension with other facets of the game that replicate traditional forms of cultural and economic hegemony surrounding real world golf. *TW 2004* allows for the bodies of the traditionally marginalized to virtually occupy previously inaccessible material spaces, but frames this experience within the confines sexist, racist and capitalist discourses. As such, EA Sports' representation of golf in *TW 2004* mediates the sport and positions its users in ways that both challenge and reproduce its traditions.

Front Nine—The Ambiguous Position of Tiger Woods

1997 witnessed Tiger Woods' entrance into professional golf. Woods dominated his competition and quickly became the premier golfer in the world. However, his fame extended far beyond the fairways and greens on which he played. Alongside athletes like Michael Jordan, Wayne Gretzky and David Beckham, Tiger Woods became one of the most prominent celebrities in the world. Woods was perceived to be something of an economic savior for the fading game of golf and quickly helped achieve that position by establishing himself as a key pitchman for interested golf sponsors like Accenture, Nike and Buick. However, Woods also came to be represented as someone who would step outside the oft-traversed athletic endorser path. Woods would be deemed as the one who would transcend the firmly entrenched segregation and class boundaries historically linked to the game of golf.

Woods also used his celebrity to endorse a series of golf video games manufactured by the sports division of Electronic Arts. This line of games came to be known as *Tiger Woods PGA Tour*. Woods has been the only athlete to be featured on the cover of every annual incarnation of his sport's digital equivalent and is the only athlete endorser of the EA Sports product line to have a game named after him.[8] Where the basketball, football, hockey, baseball and soccer games published by EA Sports have featured a different star on their game's covers every single year, the various renditions of EA's golf game have consistently framed Woods on the cover. Although John Madden lends his name to EA Sports' football title, he has not graced the front of its box for several years. Since Woods' entrance into the world of professional golf in 1997, Woods has been the namesake of EA Sports' golf game and featured prominently on the

---

[8] John Madden was once a popular football coach, but the end of his coaching days preceded the application of his name to the now famous digital football game by several years.

cover. No athlete in any other sport can lay claim to this 'achievement.' EA Sports' decision to feature Woods may certainly be influenced by his nearly unprecedented success on the golf course and by the fact that golf is a sport emphasizing the play of the individual. However, as plausible as these suggestions might be, EA Sports' decision implies that there may be something more to stressing Woods at the expense of other golfers than merely his real world success and the individual nature of the game. Through 2004 and 2005, EA certainly mentioned nothing about removing Woods from the cover after Woods experienced something of a slump in struggling to maintain his typically high level of play.

Since his first tournament, Tiger Woods has been lauded for his prodigious talent. However, these plaudits have extended beyond his talent to a discussion of his role as a pioneer in race relations. Many sports studies scholars have taken up the question of race and mediated sport[9]. Grainger, Newman and Andrews (2006) note that "athletes, and athletes of color in particular, are increasingly important actors in the construction and reproduction of racial or ethnic identity" (p. 447). Given this assertion, it seems Woods' position and the ways in which he is represented with respect to his racial identity become important to understanding his role in the construction of racial identities. The fact that Woods' father is "half black, a quarter Chinese, and a quarter Indian" and that "his mom is half Thai, a quarter Chinese, and a quarter white" (Nordlinger 2002, p. 38) made Woods conscious of racial issues from an early age. In an interview with Oprah Winfrey, Woods recalled how, as a child, he coined the term 'Cablinasian'—a mixture of Caucasian, African-American (black), American native, Thai and Chinese racial identities—in order to describe his racial identity (Royster 1998). Woods later stated that, "It is kind of neat to be able to be raised in two cultures and understand them

---

[9] See Grainger, Newman and Andrews (2006) and Davis and Harris (1998) for a survey of this literature.

both and fit in" (Ratnesar 2000). Woods' parents brazenly celebrated his racial heritage early in his career. In an interview with *Sports Illustrated,* Tiger's father Earl proclaimed that his son would be greater than Nelson Mandela and Gandhi because, "he is qualified through his ethnicity to accomplish miracles. He's the bridge between East and West" (quoted in Houck, 2006, p. 473). Woods' mother, Tida, shared her husband's perspective in declaring, "Tiger has Thai, African, Chinese, American Indian and European blood. He can hold everyone together. He is the Universal Child" (Houck, p. 473).

Woods seemed content to foreground his race in relation to the sport of golf from the moment he became a professional in 1996. Nike's 'Hello world' ad campaign coinciding with Woods' first professional tournament featured Woods openly declaring, "There are still courses in the US I am not allowed to play because of the color of my skin. I have heard I am not ready for you. Are you ready for me?" (quoted in Houck, p. 475). Activists praised Woods by implicitly contrasting him to the sanitized, squeaky clean, but politically neutered Michael Jordan. In Woods, the sports world had "a preternaturally talented Black athlete willing take on institutional racism in his very first ad campaign" (Houck, p. 475). After Woods' massive twelve stroke victory in the 1997 Masters Tournament, he paid open tribute to black golfers who had preceded him and made his participation in the event possible with their efforts just over two decades before.

Even as Woods and his parents celebrated his racial identity and openly challenged the institutionalized racism of golf in some contexts, glimpses of what was to come began to appear in others. Woods attempted to sidestep the issue of race at least one time early in his career by issuing a press release stating,

> The critical and fundamental point is that ethnic background and/or composition should NOT make a difference. It does NOT make a difference to me. The bottom line is that I am an American and proud of it! That is who I am and what I am. Now, with your cooperation [meaning the media's], I hope I can just be a golfer and a human being (Nordlinger, 2002, p. 39).

Other scholars have noted that at least some segments of the media have followed Woods' dictum in hopes that race would not be a central issue in comments made about him. Billings' (2003) content analysis of television commentary about Woods confirms his status as one who has not been particularly marked within well-circumscribed racial categories. Billings found that during coverage of PGA Tour events television announcers described Woods using terms conventionally employed to describe both white and non-white athletes thereby implying that Woods has not been represented as a racially inflected figure.

Some commentators interpreted Woods' declaration of race as progressive in its balance. An article from *The Economist* (2001) spoke of Woods' everyman attitude towards his race by asserting that he acknowledges his mixed race heritage, but does not claim any special rights as a result or bask in the glory of overcoming racial barriers. Instead, Woods "sees himself as just another Californian hybrid" (p. 36). The article went on to claim that Woods' position on racial issues situated him "on the other side of whatever obstacle there was" (p. 36). Ratnesar (2000) labeled Woods' stance as a "muted, progressive view of race relations". Hugh B. Price, president of the National Urban League, and Kweisi Mfume, president of the NAACP, praised Woods for both refusing to deny his African-American heritage and embracing all aspects of his racial heritage (Black America 1997). Dr. James Comer, professor of child psychiatry at Yale, wondered why people could ever have a problem with Woods' position on race (Black America 1997). Nordlinger (2002) applauded Woods for his apparent non-position on the issue.

By continuing to perpetuate this perception of his race, Woods has attempted to distance himself from racial controversy and sidestep potential political pitfalls. In 2000, the NAACP asked Woods to boycott a PGA tournament in South Carolina as a way to make a political statement about the confederate flag, however Woods seemingly

indifferently stated, "I'm a golfer. That's their deal, not mine" (Nordlinger, 2002, p. 39). Woods has also distanced himself from speaking out on gender issues. In 2003, a women's group mounted a campaign against the exclusively male Augusta National Golf Club—host of the prestigious Masters tournament—to allow women to be admitted as members. Woods responded to questions about the issue by stating, "They're [Augusta National] entitled to set up their own rules the way they want them. It would be nice to see everyone have an equal chance to participate, but there's nothing you can do about it. It's their prerogative" (Nordlinger, p. 39).

Woods has taken criticism for refusing to take a radical stand on these controversies; however his purposeful distancing of himself from inflammatory issues[10], his difference from the conventionally successful, older, rich, white golfer and his multiracial makeup has made him an ideal advertiser's spokesman. Woods' father has understood this all too well in commenting on Tiger's mixed race pedigree, "For marketing purposes, [he] goes off the charts" (Leland and Beals 1997, p. 58). Robert Triefus, a spokesman for Calvin Klein, also spoke about Woods' marketability by suggesting that Woods "represents the most exciting facet of this [mixed race] matrix" (Leland and Beals 1997, p. 59). Royster (1998) argues "Woods' racial fluidity has lent itself to the marketing of his image as an icon of race "neutrality"". Nike's 1997 advertising campaign latched onto this notion of Woods' 'neutrality' by featuring a variety of people representing different races, genders and ages being able to confidently say, "I'm Tiger Woods." In their work on the cultural construction of Tiger Woods, Polumbaum and Wieting (1999) note that the 'I'm Tiger Woods' Nike campaign

---

[10] Houck (2006) asserts that this calculated distance from controversy has been perpetuated by Woods' friendship with Nike's other most famous pitch man, Michael Jordan. Jordan has served as Woods' big brother by Tiger's own acknowledgment. Houck also cites Woods' failure to explicitly foreground his African-American identity and instead nominate himself 'Cablinasian' in his interview with Oprah Winfrey as a step back from his potential role as a progressive force in American culture.

"suggests an idealized, universal humanism in which each individual is both special and equivalent, and anyone—black, white, old, young—could be a Tiger Woods" (p. 96). As further evidence of the ways in which Woods' race has been understood, in 2000, a "multiracial" category was proposed for the impending census—a proposal that would be nominated as the "Tiger Woods census bill."

It certainly seems plausible to suggest that EA Sports (and the select few other companies who can afford him) has recognized Woods' symbolic cache in this regard. Given his multiracial makeup, the company knows that they can effectively market a game in which he features prominently to a broader, more diverse audience. One would suspect that the promotion of a white golfer for their game would not generate the same number of sales and ensuing profits EA seeks. EA Sports' use of Woods' multiracial character arguably serves the interests of the marketing department and EA's bottom line while making the videogame more attractive to a wider spectrum of consumers.

The ambiguous social position of Tiger Woods mirrors the ways in which the digital mediation of the game bearing his name mediates the sport of golf. The rest of this chapter details how *TW 2004's* feature set functions as a simultaneously progressive space in positioning users to butt up against the ideologies associated with traditional golf culture while simultaneously buttressing these existing ideologies against critique.

<u>Eagle—Potentially Progressive Spaces in *TW 2004*</u>

One of the potential spaces in which players might experience a shift away from the traditional culture of golf involves the game's soundtrack. EA Sports has been particularly resourceful and innovative in purchasing the rights to select songs from noted artists for their games. In the past, they have acquired the rights to music from popular artists such as Moby, Robbie Williams, Naughty by Nature, George Clinton and Collective Soul. These songs are then played in the introductory or menu sequences as a

theoretically entertaining addendum that generates energy about the game before the player begins to play or spices up the tasks of setting up the game's options.

TW 2004 is no different in this regard. Upon putting the cd in the game console for the first time, one hears a soundtrack featuring a mixture of hip-hop and mainstream rock with musical contributions from groups like Automatic Black, Rooney, Zane, DMX and Roscoe. This collection of artists would be a conventional, standard addition to some of the other games in the EA Sports line of products. *Fight Night Round 2's* rap heavy soundtrack compliments the gritty, urban ambiance the game aims to create. However, *TW 2004's* inclusion of this kind of music in a golf game appears to be somewhat curious as the selections seem unfit for the general tenor of golf culture. Although it would certainly be facetious to suggest there is such a thing as 'golf music,' the audience for *TW 2004's* soundtrack would not necessarily coincide with the vision of Maas and Hasbrook's (2001) paradigm golfer. Urban hip-hop and twenty-something mainstream rock appear to stand at odds against a staid, conservative country club culture and the quiet, natural pastoralism associated with the golf course. EA Sports' decision to implement what might be called a populist soundtrack into *TW 2004* suggests that the game offers its players an opportunity to imagine a golf culture existing outside of traditional golf conventions.

One might also suggest that the wide variety of opponents who appear in the game might also generate the potential for *TW 2004* to operate as a progressive space. Although one can play the game alone by working through practice rounds, the real competition in the game comes from the game's set of virtual opponents. Users may compete against these opponents in either the exhibition or "World Tour" mode and defeating them serves as one of the key motivations for play. World Tour mode is designed to take the user from amateur hack to polished professional as they play the game and improve their virtual skills around the globe on the game's set of international

courses. *TW 2004* features several real world professional golfers from many different countries around the world. These opponents range from Fijian, Vijay Singh to American, Natalie Gulbis to South African, Retief Goosen. Golfers from other countries represented in the game include Sweden, Scotland and England. Perhaps more impressive and potentially progressive than the virtual counterparts of actual golf professionals are the fictional opponents the player encounters on the game's World Tour. As game players compete on this tour, they encounter opponents from a diversity of ethnic, racial and class backgrounds. The set of opponents include men and women, Asians, Asian-Americans, African-Americans, Mexican-Americans, Italian-Americans and Europeans. Each of these opponents possesses distinct abilities and actions that differentiate them from one another. Based on the collective set of opponents found in *TW 2004,* the user is left with the impression that golf is not a game dominated by elite, wealthy, white American males, but instead can be played by a wide variety of people all over the world, irrespective of their ethnic, racial or class backgrounds.

Perhaps the most potentially progressive feature in *TW 2004* involves EA's self-proclaimed revolutionary Game Face feature. Upon beginning the World Tour mode, users are ushered to the Game Face creation screen. This screen provides users the freedom to create an avatar that can then be initially used throughout their World Tour and then subsequently in any game mode. Users see this avatar in every gameplay situation as they line up their shots and play through the variety of courses on offer. *TW 2004* borrows ideas from the role-playing genre in allowing the player to customize their on-screen visual representation. Simplified versions of this system have been in place in previous renditions of EA Sports' boxing, basketball, football and hockey titles. However, *TW 2004* represents itself as innovative in the degree of freedom it offers players in constructing their virtual persona. Where past customization of virtual characters allowed for minor alterations of variables such as skin tone, body mass and

height, the Game Face feature explodes this set of variables available to players. In doing so, the game positions users with the potential to explode traditional restrictions placed upon non-white, non-male, non-wealthy people who would normally be prohibited from greater participation in the game of golf.

Without resorting to a great degree of hyperbole, the myriad options available for customization of the player's virtual golfer is staggering. At the level of global options for all characters, EA Sports seems to have offered the possibility of any skin color imaginable by allowing dark tan, ruddy, light brown, brown, dark, pale, fair, light tan and tan skin tones. These global options also extend to hair color that might be tinged light blonde, blonde, dark blonde, light brown, brown, dark brown, black, strawberry blonde, auburn, natural red, pepper, gray or white. Further choices can be made about a character's teeth as being regular, gapped, pointed, crowned, gold crowned, platinum crowned, busted, straightened with braces, missing or discolored. Global options can also be applied to the length, width and height of various aspects of the face like the chin, jaw, cheekbones, eyes, eyebrows and ears. A final set of global options allows players to determine their character's body mass by varying upper body, upper arm and forearm, mid section, upper and lower leg and foot sizes.

Apart from the global options common to all customized visual representations of a player's character, the Game Face feature also allows for sex specific variables. Certain characteristics involving the face, hair style and facial hair can only be applied to either a male or female character. The male facial characteristics allow the player to have a baseline face that is young, freckled, teen, acne, handsome, dimple, chiseled, tattoo and stud, rugged, facial tattoo, middle aged, weathered, mature, full or average. The female facial characteristics allow the player to choose a baseline face from a foundation characterized as light makeup, young, freckles, young makeup, teen, teen gloss, makeup 1, makeup 2, makeup 3, makeup 4, makeup 5, beauty 1, beauty 2, beauty 3, beauty 4,

alternative, dark makeup, eyebrow ring, full, middle aged, aged with makeup, mature or mature with makeup. Oddly enough, female characters are given more flexibility with a greater variety of choices at the level of the face. Female characters may be represented by twenty-three possible foundational faces while male characters may be represented by only fifteen possible foundational faces.

Sex specific variables also apply to male and female hairstyles. Male hairstyles can be chosen from shaved, left, right or center parts, widows peak, wavy, short, crew cut, flat top, flat top fade, Caesar, spiked bangs, messy, retro, mop top, surfer, afro, corn rows, dreadlocks, comb-over, receding, balding, mullet, tsunami, ponytail, loose ponytail and Mohawk styles. Female hairstyles can be chosen from cropped, straight, pageboy, flip, bouillard, left and right parted, short, bob, afro, dreadlocks, bun, loose bun, bun with bangs, puffs, loose puffs, puffs with bangs, French twist, loose twist, twist with bangs, ponytail, loose ponytail, ponytail with bangs, braided ponytail, loose braid, braided with bangs, corn rows, Mohawk and shaved styles. As with the number of facial foundations, female characters also have more options at the level of hairstyle as the thirty possible female hairstyles outnumber the twenty-seven styles offered to male characters. Male characters may also feature a variety of different kinds of sideburns and facial hair while female characters' eyelashes can be altered at will.

The idea of Game Face would seem to open up the game of golf to different demographics and audiences. In keeping with the arguments offered by Curlew (2005), a feature like Game Face also allows for the fulfillment of "the representation and identification interests of traditionally "othered" audiences." Virtually anyone can conceivably represent themselves in the game or choose a representation of a self they desire to be visually represented. Game Face allows for a wide variety of expressions of a virtual self.

Game Face also positions users with the freedom to virtually inhabit spaces their age, race, gender and income level would otherwise never allow them to enter. If the elderly African-American man or pre-teen Asian-American would like to play this game with virtual representations of themselves on the screen, they can certainly do so. Game Face also opens up a space for legitimating the athletic ability of the elderly and women. Given that the player's choices concerning their visual representation on-screen do not influence their actual proficiency at the game, the virtual young, muscular white male begins gameplay with the same skill level as the virtual obese, elderly, Puerto Rican woman. Specific skin tones, hair styles or body masses garner the player neither an advantage nor a disadvantage when it comes time to manipulating an on-screen persona. This skill level can be developed to the exact same degree irrespective of the kind of representation the player chooses. The setting up of a character in the Game Face section does not change the abilities or skills of that character upon heading out onto *TW 2004's* courses.

Given the ways in which it legitimates the athletic ability of the marginalized, Game Face also theoretically reinforces the notion of the American democratic dream. Because *TW 2004* enables golfers with a diversity of backgrounds to succeed on its virtual fairways, it seems the game positions users to believe that the sport is accessible to them irrespective of skin color, body type or age. Users can theoretically take on nearly any body they desire without considering the consequences that would follow from trying to experience real world golf with said body. Women may still not be allowed to play on some of the courses represented by *TW 2004,* but the game affords users that possibility. In this respect, the new medium of the digital game allows for an escape from the constraints of the material body as the virtual body freely moves into previously inaccessible zones of experience. This kind of potential accords with new media theorists who argue for the freedom offered by new media.

Triple Bogey—How *TW 2004* Reduces its Progressive

Potential

In spite of the potentially freeing and progressive nature of *TW 2004's*
soundtrack, diversity of opponents and the Game Face feature, the game closes down
these spaces with other aspects of its gameplay. The Game Face feature might be
interpreted to be window dressing that does little in representing diversity. The variety of
opponents that might be perceived as a strength of *TW 2004* could instead be interpreted
as perpetuating gender and racial stereotypes and in doing so, further entrenching ideas of
a white, male power base behind golf. The class-based nature of golf is reinforced by the
thoroughly economic nature of the game's skill development path.

Creating a character in Game Face results in consequences that could be read as
reducing the progressive potential of the feature. Upon selecting the Game Face feature,
the user is immediately sent to the default character set up screen. Users are confronted
with a baseline face that neatly fits with Maas and Hasbrook's paradigm citizen golfer.
The face users see is white, young and healthy as if to signal that this look is the standard
for the majority of those who play the sport. Any alteration made to the sex or race of
this face signals a departure from the naturalized norm.

Game Face also reduces its progressive potential via its representation of a
character's golfing prowess. Because every character created by Game Face comes away
from the process with the same skill level irrespective of representation, the potential for
boundary crossing seems to be minimal as all players may have the same abilities
irrespective of how they have constructed themselves. Creation of a character in Game
Face does not lead to the individuation of one golfer from another. Game Face simply
places a slick, shiny veneer over the figure of the same golfer. Regardless of how these
characters look, they all must play golf the same way with little freedom to represent the

diversity the Game Face feature claims to offer. Game Face ostensibly positions users with a reduction of diversity to appearance.

Game Face closes down this progressive potential at the level of options available to male and female characters. Although one could interpret the greater number of baseline faces and hairstyles available to female characters as indicative of an attempt to make further breaks in golf's traditional gender barrier, the fact that female characters are offered a wider range of baseline faces and hairstyles might also suggest that women are more preoccupied with their appearance and therefore require a greater number of options to satisfy them. One might argue that the Game Face feature potentially stereotypes women as excessively vain.

The Game Face feature might also be interpreted from the perspective of the company behind it. Curlew (2005) critically interprets the apparently more progressive approach one might perceive in something like Game Face by drawing on the work of Naomi Klein and Stuart Hall. From Klein and Hall, Curlew suggests that the kind of appeal to diversity we see in a game like *The Sims* (another EA product) might be little more than the corporate exploitation of difference designed to take advantage of the profit-making possibilities available in markets that have been traditionally ignored. Deploying Curlew's perspective, a company like EA may feign concern for the traditionally marginalized and un(der)represented by including a feature like Game Face when in reality, this concern is driven by the company's ultimate desire for increased capital.

The critique of difference in *TW 2004* can also be extended to include the wide variety of potential opponents for one to face in competition. The game's World Tour mode serves as the primary segment in which the player faces these opponents. Although players do compete against virtual representations of real world PGA professionals and one LPGA professional as they progress through the World Tour, the majority of the

competitors are fictional. These characters span a wide variety of racial and class categories. Each of the characters is represented with a short introductory video that provides some intriguing back-story designed to give the character depth and dimension. Introductory video sequences do more than inform the player about the game they're about to play, but "also work to discursively position the player within the narrative, providing them with information about the subject positions they are permitted to assume" (Finn, 2000). As users view them, the character introduction sequences in *TW 2004* situate the user in a specific subject position by trafficking in racial, gender and class-based stereotypes while at the same time conveniently eliding the narrow demographic of traditional golf participants.

Of the twelve fictional opponents the player faces on the World Tour, seven are men and five are women. The male contingent is represented by a seventy-eight year old white retiree, a twenty-seven year old Samoan warrior, a twenty-eight year old athletic African-American, a twenty year old Japanese-American intellectual, a forty-one year old Italian-American mob member, a thirty-eight year old Scot and a thirty-one year old Japanese sumo wrestler. Each of these characters' respective introductory videos provides the player with information that stereotypes the racial and ethnic groups from which they derive.

African-American, Cedric "Ace" Andrews, is presented wearing a baseball cap off to the side, baggy clothing and athletic shoes as though he was starring in a rap video on Black Entertainment Television instead of playing golf at a country club. In suggesting that he used to be a basketball player and track star in high school, Andrews' introductory video image situates him in keeping with the predominant popular representation of the African-American male as a natural athlete. In keeping with this stereotype of the black athlete, Andrews is depicted as enjoying the opportunity "to rub it in the face of his competitors with a post-putt birdie dance. It's an end-zone gloat in

golf." Andrews is represented as the only opponent in the game who takes pleasure in displays of bravado and arrogance.

Like Cedric, the near octogenarian, Edwin "Pops" Masterson is also stereotyped by his clothing. In his case, a blue cardigan sweater over a white collared shirt paired with a set of plaid knickers do the trick. Masterson serves as the stereotypical angry old man as he apparently takes a cynical pleasure in "making the [retirement home] staff's lives hell with his grumpy attitude and general distaste for life." Masterson's golf prowess is undermined by the suggestion that he is only the best golfer in his local Hawaii retirement community and that he frequently wets the bed.

Moa "Big Mo" Ta'a Vatu, the twenty-seven year old Samoan, is represented wearing khaki shorts, sandals and a Hawaiian shirt. Moa Ta'a Vatu is stereotyped as the island warrior. With his bulging muscles, spiked hairstyle, large tattoos and tribal victory celebrations, Vatu appears to be an intimidating physical presence. The narrator states that Vatu generates immense power from every swing. The narrator also states that Vatu focuses all of his energy into this powerful swing because he has learned "to crush small things with big sticks." Even though Vatu is represented as an imposing figure, the childish simplicity of crushing "small things with big sticks" suggests that this physicality is not accompanied by an equally strong intellect. As a result, Vatu may be dominated by user's deploying intelligent, strategic decision-making skills.

Melvin "Yosh" Tanagawa represents the stereotype of the Asian-American intellectual child prodigy. Although Tanagawa is only twenty years old, he has already managed to complete a Masters degree in mathematics from the University of California at Berkeley. Tanagawa spends countless hours in attempting to figure out the game of golf and "prides himself on knowing what club to use, from any lie, from any distance, on any hole." Given that Tanagawa's video mentions nothing that the player might take advantage of like Andrews' bravado, Masterson's age or Vatu's intellect, it might be

plausible to argue that the intelligent Asian-American represents the greatest threat to the playing subject.

Dominic "The Don" Donatello is represented as the Italian-American mafia boss replete with slicked-back jet black hair, five o'clock shadow and heavier build. Donatello sports a button down short sleeved shirt that reveals a hairy chest on which sits a gold chain and brown slacks that provide a connection between his black leather belt and leather loafers. Donatello's mob connections have apparently allowed him to dispose of opponents who dare to finish ahead of him in tournaments he enters. As a result, his opponents are said to frequently crumble under pressure.

Hamish "Mulligan" McGregor and Takeharu "Tsunami" Moto are featured as the foreign stereotypes of Scottish and Japanese peoples. McGregor wears a kilt and a tartan plaid while Moto wears a hairstyle that characterizes him as the sumo wrestler he apparently used to be. Both of these foreign characters are derided for the way they stumbled into golf. McGregor's simple lifestyle led him to the game in that he "grew up near the Firth of Tay, hitting balls around and into the sea with a shepherd's crook." Moto was rejected by the Japanese sumo wrestling community for "wearing an undersized thong" and subsequently went into a five year exile in the mountains outside Tokyo. The stereotypical representations of these two figures and the absurd manner in which they came to play the game would seem to position the player with little hope of respecting the cultures from which these characters allegedly come.

Although the set of male characters perpetuates stereotypes, the female set of characters represents these stereotypes in an even more blatant manner. The female contingent is represented by a twenty-two year old African-American, a twenty year old white Texan, a twenty year old Hollywood film producer's daughter, a twenty-two year old Latin-American and a twenty-six year old Norwegian. Whereas the age range of the male characters spans fifty-eight years, the age range of the female characters is merely

six years. This narrow age range associates these female characters with a youthful femininity typically deemed desirable within the framework of dominant hegemonic masculinity. This desirability is also translated into the appearance and vital statistics of each of the female characters. None of the female characters have short hair and none of them weigh more than 130 pounds suggesting that the ideal female is associated with long locks and a thin, shapely figure. With its stereotypical representation of the female body, *TW 2004* situates itself firmly in the ideology perpetuated by a dominant hegemonic masculinity.

The clothing each of the female characters wears also positions them within the desire of dominant hegemonic masculinity by accentuating female sexuality. Felicia "Downtown" Brown wears tight Capri pants accompanied by an equally tight striped halter top, Kellie Newman appears in excessively short cutoff denim shorts and form fitting polo shirt, Solita Lopez can be found sporting a clinging midriff-baring long sleeve shirt, Val "Sunshine" Summers is featured in a short skirt and figure flattering top, while Erika von Severin masquerades in an all black ensemble that heightens her model-like physique. In each case, the female character's clothing suggests that women adorn themselves to play golf in order to garner attention from men.

This apparent preoccupation with appearance carries over into other aspects of the female characters' actions. The female characters celebrate their golf successes with sexualized movements that imply an awareness of the male gaze. Felicia Brown, Solita Lopez and Erika von Severin are all represented celebrating birdies and eagles by swinging their hips as though walking on a catwalk like models parading in a fashion show or dancing in the background of a music video. Val Summers apparently makes herself complicit in attracting the male gaze by refusing to play golf unless "the temperature is exactly 72 degrees and the wind is less than 2 mph, which she contends is

'perfect hair weather.'" The background video's narrator implies that Summers has more interest in her appearance than in her game.

In a perhaps even greater indicator of male power over women in these character introductory videos, four of the five videos suggest that these women have needed male help in order to achieve golf success. Felicia Brown was only able to begin to play golf through a charity clinic sponsored by the Tiger Woods Foundation. Kellie Newman's father had a career allegedly allowing him to take her all over the world where she could gain experience on a variety of courses in a variety of conditions. Newman's father apparently continues to drive his daughter to golfing success. Val Summers plays golf because her movie mogul father has a membership at a prestigious country club in Beverley Hills. In each of these cases, women could only begin to golf through the intervention of men who allowed them to participate.

All of the introductory videos carefully elide the class based nature of golf. The only video to allude to the upper class nature of golf is Val Summers' as her father has a membership to golf club in Beverley Hills. The other videos remain vague as to how their referenced characters have become so proficient at the game. Some characters like Felicia Brown and Solita Lopez are mysteriously saved from trying lower class circumstances. Others like Hamish McGregor, Moa Ta'a Vatu, Melvin Tanagawa and Cedric Andrews pick up the game in mysterious circumstances that are not fully explained. Details about how these characters come to enter the rarified air of elite golf are conspicuous by their absence and obfuscate the class based nature of the sport.

The progressive potential of *TW 2004* is further closed down by the way in which the game requires the player to participate in commodity consumption to succeed. Although minor successes like improved putting, a greater ability to judge the wind's effect on one's shots and better experience with club selection may be garnered through

the practice of repetitive play, these successes utterly pale in comparison to those won by active engagement with the game's economy.

After the creation of a character in Game Face, the player is presented with a set of attributes—each of which are quantified on a scale of 10-110 percent. This set of attributes includes driving power, driving accuracy, recovery and ball striking. None of these attributes can be improved by a user's explicitly dedicated practice in keeping with the kinds of minor successes outlined above. Instead, these attributes can only be improved through either the direct application of prize money rewarded from various game segments to increasing a given skill or through the indirect application of this prize money to the purchase of a wide variety of commodities on offer in the game's virtual shop. Users are given virtual capital contingent on their performance throughout the game. As they complete birdies, eagles, chip in from sand traps or from moderate distance and defeat successive opponents, users have various amounts of money bestowed upon them. Although not required to spend this money, users can exchange it in the game's shop for a bevy of golf related products.

As with the 'revolutionary' nature of Game Face, the number of commodities available for purchase and the number of corporations who have lent their names to these commodities is staggering. Players are given the opportunity to equip their characters with a combination of 1,138 sponsored items. Where prior EA Sports games have included advertising like signage one might see were one watching a game on television or witnessing the event live as part of an attempt to improve the game's aesthetic, the mobilization of this form of advertising for *TW 2004* pushes the marketing envelope to new levels. Companies such as Nike, Adidas, Tag Heuer, Cleveland Golf, Maxfli, Target, Taylor Made, Ping and Callaway are just a few of the corporations who have sponsored products that can be purchased to improve the character's and the user's skills.

These commodities function within the paradigm of video game history's trope of the 'power-up', an object giving the user's character special dispensation in defeating opposition or improving a particular skill. *TW 2004* seems no different in this respect, however, the substitution of the conventional power-up for virtual versions of real world commodities pushes the trope in a new direction. Purchasing an Adidas Climacool jacket will improve the user's driving accuracy and recovery from poor shots. Donning a pair of Nike stretch pants will improve the user's chances of avoiding bad bounces from tree limbs or uneven rough. Acquiring Callaway drivers, irons, wedges and putters will improve how far the user can hit the ball, their touch around the green and putting savvy. Should players be fortunate enough to acquire enough virtual capital to upgrade their equipment, they may sell the used equipment at a discount price. Participation in the game's commodity fueled skill development system is also encouraged by daily sales of select items in concert with the game console's internal clock. As the console's clock turns over to the next day, new sets of items appear at fifty percent off of their regular price.

Pre-commodity consumption, the user-character can only hit the ball an average of 250 yards. After purchasing Nike sandals, Maxfli golf balls, Taylor Made irons and a Callaway Big Bertha driver, the player-character can hit the ball accurately and consistently an average of 330 yards. Given that the average golf hole in the game rounds out at 400 yards, the eighty yard difference between the pre-consumption and post-consumption player works itself out to at least one stroke per hole. When four round tournaments in the game might be decided by one or two shots, the potential loss of eighteen shots per round positions the user who abstains from the intoxicating, seductive commodities with little hope of achieving the success of victory from the experience of this competition. In an echo of Hall's notion of oppositional reading strategies, Finn (2000) suggests that players may potentially "read against" the videogame text placed

before them in an attempt to accomplish the game's goals through an alternative route. In the case of *TW 2004,* a resistive reading of the text is certainly possible, however it certainly seems as though one cannot accomplish the game's apparent goals through a route that does not involve commodity acquisition. In the basest of terms, the user-character must buy to win.

Given that commodity consumption operates as such a key component in *TW 2004,* we can plausibly argue that it reinforces the traditional association of golf as an upper class game. Although it is certainly possible to read the skill upgrade via commodity consumption in the same vein as the 'power up' digital game trope like Mario's hammer in *Donkey Kong* or Pac Man's energy pellet, the mini-market system in *TW 2004* pushes this traditional aspect of character development to an entirely different level. The commodity consumption system of skill improvement implies that success in golf only comes at a price, thereby potentially discouraging the marginalized from taking up the game and challenging golf's entrenched class structure. *TW 2004* suggests that the acquisition of one golf club and one ball combined with a lot of hard work will not be rewarded with success. Instead, the game positions one potentially interested in golf with the notion that they must gradually ascend up the commodity hierarchy to achieve golf superstardom.

<div align="center">Back Nine—Conclusion</div>

Tiger Woods is the perfect endorser for this game given his variegated reception as an icon of social and cultural change. Royster (1998) suggests that Woods has been embraced by those who seek to symbolically appropriate him for his raced, non-raced and mixed race statuses. Much like the digital game on which his face appears, Tiger Woods could be interpreted to be one who could move golf and its associated culture away from the strictures of its narrow traditions. Commentators have been more than willing to make this observation. Nordlinger (2002) explains the burgeoning numbers of black

golfers he saw at the driving range he frequents on the weekends following Woods' first Masters championship. Comer applauds Woods for generating increased black interest in his sport. Hugh B. Price, president of the National Urban League, praises Woods and his achievements suggesting that his accomplishments open doors for people of color to play golf and in doing so, enter the networks of the business world (Black America 1997). Owen's (2001) hagiography of Woods applauds him for playing an important role in reversing "the most shameful theme of golf's long history—its legacy as a decadent pastime for white people with too much time on their hands…" (p. 177). It appears that Woods could certainly be interpreted as a pioneer in these respects.

At the same time, Woods could also be perceived as one who has the potential to radically alter golf, but has been appropriated by the forces surrounding the game such that he cannot or will not challenge the game's racist, sexist and class-based traditions. Woods' failure to actively promote minority membership in golf clubs around the country could be interpreted as symbolic of his co-optation by the system. Woods' apparent apathy about the admission of women into Augusta National could align him with the interests of an 'old boys network' and the traditional powers who run the game. In these respects, Woods' pioneering role could certainly be questioned. This inability, apathy or willful denial of his place in progressive cultural change has led some to conclude, "Tiger Woods has refashioned himself—from a proponent of radical change and activism to a neutered, nonraced establishment golfer" (Houck, p. 471).

This tension between Woods as a pioneer and Woods as one who simply walks in the path laid out before him neatly parallels the videogame he endorses. *Tiger Woods PGA Tour 2004* replicates the dialectical forces surrounding the way in which Woods and his real life experiences have been interpreted. In the same way that some interpretations of Woods have represented him as a progressive figure in the golf world, *TW 2004* could be praised for the way in which it generates interest in the game of golf among an

audience who might otherwise never consider participating. The game's hip populist soundtrack distances it from more conservative, soothing forms of music that would seem to fit with golf culture. The range and diversity of opponents the player faces introduces players to representations of golfers that could serve the interests of those who have been traditionally marginalized by golf culture. The Game Face feature theoretically opens up the game of golf to minorities who might not be allowed to play on some of the courses they can challenge in *TW 2004*. All of these features provide the potential to change users' perceptions of the sport and may position some to begin participating in the game. These features also demonstrate new media's ability to free the material body from constraints imposed upon it in the real world by allowing the marginalized body not fitting into Maas and Hasbrook's paradigm citizen golfer to virtually participate in the sport.

However, much like those Woods detractors who have argued that he has been co-opted by conventional golf culture, *TW 2004* also suffers in that it positions players to participate in their own potential subjugation to the race, class and gender restrictions associated with the traditions of golf. Even if the *TW 2004* player might be delighted to hear a hip-hop and rock soundtrack, excited about the prospect of seeing a representation of golfers who are not male, white and wealthy and impressed by a newfound ability to insert a virtual representation of a self into the game, they cannot escape from participating in a world where money buys success and a world where this success comes in the context of the furtherance of ethnic, racial and gender stereotypes. It is ultimately an examination of these kinds of specific contexts that ought to frame our understanding and theorizing of the body and the positioning of users in new media.

CHAPTER FOUR

"WHAT'S IN A NUMBER?": QUANTIFICATION AND THE

DIGITAL SPORTS GAME TEXT

Numbers and quantification have come to play a crucial role in the development of the contemporary digital sports game[11]. Although numbers and quantification have played a role in the development of other game genres, the digital sports game seemingly cannot do without them. Certainly, so-called 'god games' such as *SimCity* (1989), *Railroad Tycoon III* (2004), and *Civilization* (1991) employ numbers to great effect in enabling users to plan and execute game actions for maximum economic efficiency. First person shooters such as *Halo* (2001)*, Medal of Honor* (2002) and *Doom* (1993) calculate a user's proficiency with given weapons. Role-playing games such as *Neverwinter Nights* (2002)*, Star Wars: Knights of the Old Republic* (2003) and *Thief II* (2000) typically use numbers to signal a given character's attributes and how these attributes develop over time. However, these digital game genres have not traditionally depended on the explicit representation of numbers to the same degree as the sports game genre. A given quarterback in Solecismic's *Front Office Football 2004* will be represented by forty-five rating and statistical categories. A given shortstop in SI Games' *Out of the Park Baseball* series will be represented by more than two hundred different rating and statistical categories. The difference in the amount of quantified information may vary by the sport being mediated; however the persistent presence of numbers in these sports games does not.

---

[11] Obviously, the binary system used by computers necessitates the processing of numbers and numbers have been used to keep track of which team or individual has won a given game. However, what the user sees on a computer screen or television monitor need not be numerically oriented.

This chapter provides an important discussion of arguably the most pervasive ideology at work in the digital sports game—the ideology attached to quantitative discourses. Certainly ideologies linked to the identification with the mediated body manifest themselves in the variegated texts that are *FNR2* and *TW 2004*, however, this explicit positioning of the user's connection to the body fails to occur to the same degree in other sports games. One might accord this fact to the individualized character of these two sports, an individualization which seems to necessitate a greater focus on the virtual bodies users will deploy to play these games. In addressing the mediation of these bodies, I have demonstrated the ways in which these sports come to be understood and interpreted through potentially novel frameworks offered by these game texts as they position their users and enable them to identify with in game avatars.

With the previous two chapters providing textual analyses of *FNR2* and *TW 2004* as a way into considering questions of ideology, subject positioning and the mediation of bodies in their respective sports, this chapter aims to examine these ideas with a focus on the ubiquitous nature of quantification and the positioning of users in the digital sports game by analyzing *MVP Baseball 2005* (hereafter *MVPB '05*). Because of the nature of baseball as a team sport heavily preoccupied with enumeration rather than an individual sport, this positioning process functions slightly differently in *MVPB '05* than in *FNR2* or *TW 2004* and raises the following question. How do numbers function in this game text and what ramifications does the emphasis on numbers have for the user as positioned by the game?

In this chapter, I address these questions with a brief survey of quantification and sport. I then discuss numbers as a medium of communication and power mechanism in *MVPB '05* before considering some of the potential results of the quantified nature of the experience. I argue that numbers in the digital sports game function as a medium of communication in positioning users to interact with the game world across virtual space

and time while also allowing them to exercise power over the virtual bodies within it. The result of this stress on quantification suggests *MVPB '05* generates a subjectivity positioning users as calculable selves interacting with calculable others and serves as a useful explanation as to why users publicly narrativize their experiences. I argue these latter two developments come together under the aegis of gendering the experience of the game masculine. This final section serves as a bridge linking this chapter to the more thorough relation of user experience to follow in the next chapter specifically discussing digital sports game audiences and their interpretation of their activity.

Undoubtedly, numbers certainly have their place in the games analyzed in the previous two chapters. *FNR2* religiously computes the number of punches thrown and landed in each fight and even breaks these punches down into their respective types so that users can effectively compare the relative degree of success of their left upper cut versus their right cross. Users also see the quantitative results of training in being rewarded with skill improvement points after hitting the heavy bag or the sparring dummy. Similar kinds of data compilation occur in *TW 2004* as the game tracks, among many other things, user success in driving balls into the fairway, safely escaping from sand traps, minimizing the number of putts and overall scoring on the variety of courses available. The commodities on offer in the game's shop provide upgrades to player skills such that purchases lead to quantified improvements on a 0-100 scale in areas such as iron accuracy and ball striking.

Even as boxing and golf, in both their virtual and material iterations, have become increasingly amenable to enumeration in recent years, baseball is arguably the sport most tightly linked to numbers and has been associated with the aggregation of numbers almost from its inception. According to Guttmann (1978), it is baseball's tendency to quantify all manner of individual and collective action that serves as one of the

explanations for its historical popularity.[12] Thorn and Palmer (1985) describe how the

game's first elementary box score was printed in the *New York Herald* as early as 1845.

Player statistics also became key components of sports reporting as early baseball

journalists employed and invented them to analyze games for readers. Thorn and Palmer

outline how Henry Chadwick's cricket reporting background served as the impetus for

his quantitative chronicling of baseball numbers. Chadwick's seasonal summaries of

baseball statistics appeared in various publications and his record keeping developed

basic versions of modern numbers like the batting average, on base average and slugging

percentage. Chadwick's *The Ball Player's Chronicle*, begun in 1867, annotated "home

runs, total bases, total bases per game—and hits per game" (p. 14). Given the historic

importance of quantification for the game of baseball, the twenty-first century mediation

of the sport that is EA's *MVPB '05* seems an appropriate choice in discerning how

numbers engage and position the digital sports gamer.

<center>Numbers as Medium of Communication, Quantification

and Baseball</center>

As part of a discussion concerning the significance of numbers for democratic

political discourse, Peters (2001) speaks about the import of the number as a medium of

communication in arguing that "numbers mediate and orchestrate distant and complex

social relations" (p. 436). In this sense, processes associated with and information

produced by quantification function to bind people and social structures together across

space and time. Social groups separated by geography or chronology may communicate

with one another through the medium of the number. Similarly, Porter (1995) perceives

---

[12] Over and against other explanations such as ease of access, technological innovations, the game's generation of folk heroes and its propensity for nostalgia, Guttmann argues for baseball's tendency to quantify and the game's natural chronology within the seasonal cycle as most persuasive in explaining the popularity of America's national pastime.

quantification to be a means used to overcome space. The rule bound nature of numerical calculation makes it highly portable to a variety of different spaces and allows for easier communication between them by minimizing the amount of labor needed to move information. Different localities and social groups can quite easily employ numbers to more effectively communicate between them. Rose (1999) also implicitly speaks to this utility of numbers in describing how they further the coordination of activity across space stating, "Events must be inscribed in standardized forms, the inscriptions must be transported from far and wide and accumulated in a central locale, where they can be aggregated, compared, compiled and the subject of calculation" (p. 211). Desrosieres (1998) asserts the advantages of enumeration in that the quantitative information gathered can be efficiently "transportable, generalizable, and repeatable to an identical degree" (p. 31-32). Patriarca (1996) implies the space-binding and time-binding power of numbers by arguing they "insure the mobility of things by "immobilizing" them" (p. 9). Given the ease with which numbers could be standardized and transported, they became an important mechanism for communication across space and time.

The cultural field of sport has not always taken advantage of the communicative possibilities offered by quantification. Guttmann (1978) situates the move to quantify performance in sporting events as a particularly modern phenomenon. As part of his discussion of the characteristics of rule-bound and bureaucratized modern, as opposed to informal and free-flowing, premodern sport, he suggests the tendency to count and record athletic performance in the modern period serves as one of the key distinctions between sport in the two periods. Guttmann's assertions have been challenged by those who would situate the move to quantification and record-keeping much earlier than the modern period he posits,[13] but his response aims to solidify his prior thesis on

---

[13] Carter and Kruger's (1990) collection of essays trace the predominance of numbers in sport back to ancient Egypt (Decker, 1990), through ancient Greece and Rome (Ramba,, 1990), into medieval (Carter, 1990) and Elizabethan (Ruhl, 1990) England and Renaissance Europe (McClelland, 1990).

quantification in sport as a distinctly modern phenomenon associated with rationalization and bureaucratization (Guttmann, 1991).

In the modern period numbers typically measure and record in many real world sports by quantifying player or ball movement through space and time. Football player performances are frequently measured by yards gained, baseball hitters are evaluated by how often they have successfully advanced around the bases, while basketball players are compared by how often they have shot the ball into the opposition's basket. Numbers provide the means of efficiently recording these past actions without recourse to providing an extensive narrative of what has occurred. As such, they generate a shorthand for communicating the expression of bodily movement and productivity across time and space.

Baseball's early managerial and administrative staff employed these numbers as a way to bind space and time. Goldstein (1989) quotes founding member of the National Association of Professional Base Ball Players and prominent Boston Red Stocking player-manager, Harry Wright, attempting to deal with the difficulty of evaluating potential new signings across great geographical distances. In responding to the inquiry of a player from Pennsylvania, Wright wrote, "James White is not here so I can learn nothing from him in regard to your playing abilities, but if you will send me the record of your play this season…I can form a good idea" (p. 146). In the absence of face to face contact with a trusted confidante like James White, the scout who may have seen this individual play, or face to face communication with the player himself, the numbers become the medium through which decisions about player personnel are made.

These numbers are not only used to record past action in space and time, but they also fuel speculation about future game outcomes. Recorded data about how often a hitter has successfully bunted for a single against a left-handed pitcher with one man on base during day games in May enables baseball enthusiasts to forecast what might occur

in a situation where these variables come to their attention. The tension between the statistically frozen past and uncertain future generates potential interest in the range of possibilities that could follow with the next thrown fastball.

Traditionally, baseball's basic statistical categories would be increasingly invented, tracked, reproduced, and modified by media outlets as the sport became more popular. Following from Chadwick's lead in the mid to late nineteenth century, other publications created their own statistical measures—a practice that would continue well into the twentieth and twenty-first centuries. The *Chicago Tribune* began tabulating runs batted in as of 1879. The *New York Press* began counting the number of times runners were caught stealing in 1907. The save became an official statistic at the behest of Jerry Holtzman of the *Chicago Sun-Times* in 1960. Tom Boswell of *The Washington Post* invented total average in 1979. Throughout the game's history, readers of these media texts could integrate new statistics into their spectating, thereby allowing them to take a more systematic and analytic approach to the game irrespective of whether they had watched the game at the ballpark (Kemper, 2000).

This resultant quantitative data aggregated by baseball statisticians enables the contemplation of an event that, for some, magically transcends the space and time of the here and now. Guttmann (1978) quotes celebrated baseball writer Roger Angell as he describes how the beauty of baseball correlates with the beauty of enumeration in that baseball "is the most intensely and satisfyingly mathematical of all our outdoor sports….Scientists speak of the profoundly moving aesthetic beauty of mathematics, and perhaps the baseball field is one of the few places where the rest of us can glimpse this mystery" (p. 110). Audiences attending to collections of statistics could theoretically unlock aspects of the mystery of mathematics' systematic beauty by looking to baseball and easily comparing the performance of players from different locations playing games on different days. These beautiful baseball numbers mobilize bodily movement across

space and time while immobilizing the information for the sake of cross chronological and cross geographical comparison (Patriarca, 1996).

The mediation of baseball and its attendant numbers in print would be accompanied by the game's representation via the telegraph in the late nineteenth and early twentieth century. Baseball's discretely quantifiable series of events and numerical system of annotation[14] enabled the easy translation of game outcomes. The telegraph's efficient ability to relay information generated urban networks as baseball fans rushed to taverns after work in order see the latest scores recorded on blackboards (Kemper, 2000).

Even as print and the telegraph encouraged and perpetuated the use of numbers in baseball, it is the sports board game that arguably provides the clearest forerunner to the heavily quantified contemporary digital baseball game. Baseball board games emerging in the middle of the twentieth century such as Ethan Allen's *All Star Baseball* (1941) and Harold Richman's *Strat-O-Matic Baseball* (1961) mediated traditional statistical categories involved in tracking the sports they represented (Schwarz 2005). In these baseball games, users would select a team, either real or of their own creation, from a series of individual player cards and roll dice to determine game outcomes. Each dice roll represented a discrete game event and these events would be compiled and correlated to generate entire baseball games and seasons. Robert Coover's (1971) novel, *The Universal Baseball Association*, provides a fictional account of one individual so immersed in the league he creates with a baseball board game that he, ultimately tragically, cannot separate his game world from life outside it.

---

[14] For example, 6-4-3 DP means: 1) the batter hit the ball to the shortstop (position six); 2) the shortstop tossed the ball to the second baseman (position four) for the first out; 3) the second baseman relayed the ball to the first baseman (position three) for the second out, resulting in a 6-4-3 double play. This kind of shorthand could easily be relayed through the telegraph such that baseball games could be reconstructed by fans hundreds of miles from the ballpark where the game was being played.

In his work on fantasy sports, Lomax (2006) situates the computer sports game at the nexus of the sports board games of the mid twentieth century and the development of fantasy sports in the 1980s. He conflates the digital sports game with fantasy sports in going so far as to label digital sports games "computerized fantasy sports games" (p. 385). Although fantasy baseball and the digital baseball game might be linked, these two kinds of experience seem to be considerably different kinds of activity if we consider the ways in which numbers function as a communication medium. Fantasy baseball is tightly bound to the present and future, while digital baseball games extend this present to engage users with past, present and future. One cannot play fantasy baseball in 2006 and draft Babe Ruth as the Bambino is not going to come back from the dead to join this year's edition of the New York Yankees and produce points for the fantasy team's owner. By contrast, a digital baseball game with a thorough database easily enables a mixing and matching of Ruth with Joe DiMaggio, Mickey Mantle and Derek Jeter. To conflate these two forms of experiencing baseball ignores variations in their respective engagements with time.

Whether or not we agree with Lomax's conflation of these two forms of sport media, the contemporary digital sports game certainly follows in the generic footsteps of tabletop and fantasy sports games. However, I contend that the digital sports game extends the mobilization of numbers to a much greater degree.

Numbers as Communication Medium and *MVPB '05*

If we suggest that numbers function differently in fantasy baseball than they do in the digital baseball game, how does this communication operate in *MVPB '05*? In keeping with the arguments offered by Peters (2001) and Porter (1995), numbers function as a medium of communication in *MVPB '05* by allowing the space and time of the game world to be understood in the space and time of the user's world and potentially vice-versa. Although it would be entirely possible for the game to make sense in a user's

world without the explicit representation of quantification[15], the calculation of virtual

athletic performance and ability remediates (Bolter and Grusin, 1999) many facets of the

quantification of real world sport performance such that the real and the digital become

imbricated with one another. A user's in-game decisions in the digital world may be

influenced by quantified information from the real, while simultaneously the experience

of the virtual may influence a user's perceptions of the real. To move away from the

quantification of virtual athletic aptitude in digital sports games could potentially limit

the popularity, marketability and 'realism' of the genre because the time-space relations

of the real would be less actualized in the simulated. As such, numbers as a medium of

communication position the user within a liminal space between the virtual and real.

Besides enabling communication, Peters (2001) also argues that numbers

communicate productivity in space and time. This fact certainly applies to baseball's

tendency toward quantification of player performance. Goldstein (1989) explains the

increasingly sophisticated complexity of baseball statistics in the context of the

transformation from baseball player to baseball worker occurring in the middle of the

nineteenth century. When amateur baseball players were professionalized as part of the

development of open professional leagues in the 1860s, statistical measurements of

player performance became much more complex. The game became a business and

statistics became the medium through which businesses could objectively measure the

productivity of their employees. Goldstein quotes Chadwick's faith in his statistical

system from 1864,

> Many a dashing general player, who carries off a great deal of
> *éclat* in prominent matches, has all "the gilt taken off the
> gingerbread," as the saying is, by these matter-of-fact figures,

---

[15] Certainly baseball video games were popular before the increased processing power and data storage ability of computers in the late 1980s enabled the aggregation of numbers. *Major League Baseball* (1980) for the Intellivision was lauded for its audible umpire calling 'out' and 'safe' in a way that only the system's 'Intellivoice' could.

> given at the close of the season; and we are frequently surprised to find that the modest but efficient worker, who has played earnestly and steadily through the season, apparently unnoticed, has come in, at the close of the race, the real victor.

For Chadwick, quantifying player performance rewarded the unspectacular, workmanlike productivity of the diligent over and against the flashy, depthless profligacy of the 'dashing.' The numbers revealed the difference between genuine productive labor and disingenuous allegedly productive labor.

In the case of *MVPB '05*, numbers certainly provide a representation of productivity in the game world that is reflected in tracking player performance across space and time. Numbers in this game remediate practices of quantification associated with productive physical movement through space. In this sense, *MVPB '05* tracks the major statistical categories one would see on a sports-dedicated web page, a televised sporting event or in a newspaper. Like their older media counterparts, the game quantifies how often a hitter overcame space to successfully reach base, the number of times a pitcher moved a baseball past a hitter or how frequently a runner was caught trying to cross the distance between first and second.

Numbers in *MVPB '05* also work to measure progress through time by tracking the productivity of player performance and player skill improvement. Every time users begin a game, they see the pitching statistics of the respective starting pitcher. Every time a player comes to bat, users see the results of his past productivity on the screen. To check the top home run hitters in *MVPB '05* is to see that these home runs must have been hit at some point in the past. Without any change in the number of home runs a given player may have whacked, it would be more difficult to discern whether any time had passed in the game. A change in numbers can also signify the improvement or degradation of a virtual athlete's skill set over time. In looking at a given virtual player's ratings, a numerical change may signify that the athlete's physical prowess or mental acumen has improved or declined and thereby signal the passing of time. Without the

numerical signifier, users would have less understanding of the passage of time and virtual athletes could potentially possess eternal greatness.

Such seems to be the case with former two sport athlete, Bo Jackson. As part of an ESPN Gamer poll dedicated to determining the greatest virtual athlete of all time, Jackson was voted number one for his 'performances' in *Tecmo Super Bowl* (1991). *Tecmo Super Bowl* tracked basic statistical categories and featured dynamic player ratings tracking player skills through time. However, because the game did not allow for multiple, continuous seasons of play, Jackson's virtual greatness has been chronologically frozen such that he can say, ""Every autograph signing I do, someone always comes up to me with *Tecmo Bowl* and asks me to sign it" (Rovell, 2003, paragraph 2). In part, Jackson's athletic legacy derives not only from his brief careers with baseball's Kansas City Royals and football's Oakland Raiders, but from his cryogenic virtual self in the 1991 version of *Tecmo Super Bowl*.

Numbers do more work than merely remediate existing forms of quantification. In *MVPB '05*, numbers also mediate social relations between the user and the game world. Although, given the current limitations of technology, it is difficult to suggest that the interaction between a user and a virtual athlete is truly a social interaction,[16] the quantification of that athlete into a series of ratings and statistics positions users to quickly assess the value of a given athlete relative to the game world thereby necessitating a relation to that entity. Should a given user have a star shortstop go down for four weeks with a sprained knee, the game's system of quantification allows for an efficient solution to the injury problem. A user can cull through the list of available free

---

[16] If we define social interactions as those involving person to person relations, even this aspect of sports games is changing as player personalities are modeled into the software. For example, Sports Interactive's *Football Manager 2006* describes players as (among other traits) temperamental, unsporting, professional, ambitious, unmotivated, lazy, decisive and cultured. These players' respective personalities cause them to respond in a variety of ways to the user's decisions about playing time, team strategies, discipline, and responses to questions from the virtual media.

agent infielders by moving to a transaction screen and measure them against one another by examining the numerical values of how many doubles they may have hit, how many bases they may have stolen and of course their respective batting averages. Perhaps more importantly, users must also make player evaluations by examining numerical representations of player skills such as agility, decision-making or arm strength.

The numbers, in Desrosieres' (1998) terms, "provide forms for describing the *relationship* between objects thus constructed, and for testing the consistency of these links" (italics in original, p. 61). Making this provision allows the user to decide which shortstop best serves the team's needs. The highest rated option, according to the numbers, will typically be the free agent chosen to replace the injured player. A second game option allows the user to make a trade for a new shortstop. As with the survey of free agent players, the user compares the ratings and statistics of the players to be traded with those of the players to be received and then (with the computer's artificial intelligence factored into the equation) decides if the trade will be beneficial. The numbers become the medium through which the time and space of the replacement shortstop come to be understood in the time and space of the user's world such that the user can make the most appropriate decision in any given game scenario.

Dealing with myriad numbers in a variety of different forms serves as one of the most prevalent tasks for the *MVPB '05* user. The mediation offered by the numbers frames the user's on field activity upon physically moving the control sticks as they swing at pitches, field ground balls and throw strikes. Users cannot make every player perform like Babe Ruth no matter how skilled they might be in terms of their manual dexterity. The quantifiable system establishes the parameters of how well a give player might perform under the user's control such that the replacement for the injured shortstop will likely fail to play as well as his predecessor. As a consequence, engaging with the game positions users as expert navigators through this somewhat complex field of

quantification. In order to achieve the game's goals of winning championships and in some cases, generating virtual revenue, users must employ the quantified attributes and performances of virtual athletes to assess present game events and plan future in-game choices. Simply becoming more proficient with the game's controls will only provide a partial boost to a user's success. The emphasis on quantification positions subjects with either a desire to be or the ability to be well-versed in discourses of quantification. Without the patience to learn these discourses and the ability to negotiate them, a game like *MVPB '05* appears impossible to navigate and more difficult to enjoy. Although this point will be developed in more detail later in the chapter, at this point we can suggest that in occupying themselves with this world of quantification, users are positioned as 'calculable selves' interacting with 'calculable others' (Rose, 1999).

<div align="center">Numbers as Mechanism of Power</div>

Numbers not only function as a medium of communication, but also as a mechanism of power. Crosby (1997) traces the genesis of quantification back to Western Europe from the middle of the thirteenth century, but the expansive social practice of quantification appears to be a particularly modern development arising in the late eighteenth and early nineteenth century and is associated with the state's desire to exercise power over increasingly large numbers of people. In following Foucault's (1991) notion of governmentality, Rose's (1999) work on the history of statistics situates them as a key mechanism of power in the nineteenth century used to produce knowledge which could be deployed in administrative calculation for the government of populations (see also Hacking, 1982). Rose cites political arguments circulating at the time

advocating that good government necessitated statistically substantiated knowledge of the governed if their problems were to be solved.[17]

This communication became particularly important in the context of the rise of modern society. Given the increasing mobility of populations, numbers served as a means of dealing with problems attached to anonymity and increasing social complexity. Rose (1999) asserts that an excessive dependence on quantification arose as a control mechanism needed to deal with these constantly moving people groups. Peters echoes this idea in arguing that statistics allowed for the tracking of both "simultaneous activities of dispersed populations" (p. 438) and the mediation of events that could not possibly be experienced personally.

Numbers allow for the exercise of power over populations at this macro level in the digital sports game by enabling the government of the bodies of virtual athletes. By imposing a system of quantification upon real athletes in games like *MVPB '05* such that simulacra of their performances can be translated into virtual space, discourses of quantification plausibly extend their reach even further than the conventional numerical information typically generated by sports-media outlets and the teams themselves. Where the bodies of professional athletes will already be governed by enumerative discourses, the quantitative rating systems adopted by digital sports games push this form of measurement into spaces conventionally depicted qualitatively. For example, a given second basemen in *MVPB '05* will not only have their stolen bases calculated by the game engine, but will also have qualitative categories such as their ability to steal and their speed quantified into ratings. The latter two ratings could be equated to conventional qualitative linguistic descriptors such as "reads pitchers well," "is a smart

---

[17] See Patriarca (1996), Desrosieres (1998) and Sybilla (2001) for more descriptions of the early use of statistics in governing populations in eighteenth and nineteenth century Italy, France and Germany respectively.

base-runner" or "gets a good jump", but in the digital baseball game these descriptions are translated into numbers. This quantitative extrapolation from the measurement of athletic achievement in the statistical categories users see daily in the sports media complex to the measurement of athletic attributes increases the power of enumerative discourses over the population of those subject to them. This enumeration of athletes transforms them from subjects into objects and positions users to instrumentally arrange and manipulate them as they exercise power in hopes of maximizing in game success.

Herbst (1993) furthers our understanding of the role of quantification in social relations and power structures by suggesting that the mobilization of quantitative discourses allows for the appearance of authority. To present numbers to another in a discussion is to generate a persuasive ethos supplementing one's position. Given the arguments from quantification supporters, who employ numbers to allegedly present the truth of various matters and reduce the influence of personal bias, Herbst's argument about the implied authority of the number accords with their claims. The production of knowledge independent of those generating this knowledge—a production theoretically yielding untainted communication—provides communicators with an appearance of authority. Rose (1999) affirms this argument in agreeing that numbers enable the exercise of power because of their representation of subjects and objects which have been effectively depoliticized by quantification. Rose states that numbers are mobilized as surrogates for authority appearing when existing authorities cannot be trusted or when authority claims are weak.

Peters (2001) also addresses the implied authority which appears resident in quantification. In presenting the arguments of quantification apologists, Peters states, "Numbers serve as a language that hides no private meaning and leaves all intermediate steps open for public inspection" (p. 436). This kind of idea is also evident in the work of dedicated baseball statisticians. In their preface to a collection of essays designed to

shake up conventional thinking about baseball in the 1980s, Thorn and Palmer (1985) depict the statistician as one whose task "is not mere accounting; [instead] to bring the hidden game of baseball into the open is an act of imagination, an apprehension and approximation of truth, and perhaps even a pursuit of beauty and justice" (my addition, p. 4). The numbers apparently unveil baseball's versions of the transcendent Platonic values of truth, beauty and justice. To Thorn and Palmer, statistics uncover "the true stars, the honored impostors, the real percentages behind "percentage plays," what makes teams win…." (p. 6). With respect to the authority of the number, who can disagree with truth, beauty and justice, especially when these values reveal what makes teams win? It is this kind of authority and its accompanying values that serve to govern the bodies of virtual athletes and the users positioned by them.

Not only is this power over the body of the virtual athlete exercised at the macro level of population, but numbers in *MVPB '05* enable the exercise of power over virtual athletes at the micro level given the game's player editor feature. This move from the macro to the micro mirrors the ways in which numbers came to govern not just populations, but individuals. As institutions increasingly adopted Frederick Winslow Taylor's (1911) quantitatively oriented principles of scientific management at the beginning of the twentieth century, individuals would experience the pressures from above exerted upon their experience by discourses of enumeration. As part of his desire to see the United States increase its level of national efficiency, Taylor advocated the prioritization of a system of production based on what he nominated the 'true science' of management—a science involving the considerable deployment of quantification. Although he encouraged the adoption of his system for industry, he argued that the principles could be applied

> to all social activities, to the management of our homes, the
> management of our farms, the management of the business of our
> tradesmen, large and small, of our churches, our philanthropic

institutions, our universities, and our governmental departments"
(paragraph 14).

In using time and motion studies, Taylor sought to quantify precisely how much horsepower a given individual could exert by calculating the productive capacity of a worker's individual movements. The calculation of this capacity became the basis for a manager's ability to maximize both the efficiency of production and output of the worker. As more and more managers adopted this form of supervision, the macro power of numbers over populations deployed by the State was extended to the micro power of numbers over individuals laboring in industries. Interestingly, Taylor used the example of the baseball team in testifying before Congress about the beauty of an efficiently operating corporation (Puerzer, 2002).

With specific reference to this exercise of micro power in *MVPB '05*, the game allows users to alter the database of individual player ratings to reflect their understanding of a given player's skills such that the productivity of an individual player can be carefully monitored. The game encourages this exercise of micro power via the application of Taylor's principles of scientific management in effectively positioning users with the ability to oversee the athlete's actions in virtual time and space. Should a player be producing in a way the user may not deem appropriate, that player's ratings in the game's database may be modified.[18] The inclusion of the player editor might lead us to question the aforementioned arguments about the implied, but incontrovertible authority of numbers considering the fact that many digital sports games, like *MVPB '05*, allow users access to the player ratings database thereby opening up a space for the alteration of the way the game works. After all, the inclusion of a player editor appears to imply that the default numbers provided by the game cannot be trusted and that they can indeed be arbitrary, challengeable authorities. For example, if a given *MVPB '05*

---

[18] For a detailed discussion of how users engage the statistical production of virtual athletes, see the following chapter.

user does not believe that Oakland A's pitcher, Barry Zito, has a curveball that can be rated a ninety-two out of one hundred, then that user is free to alter that valuation for Zito's virtual counterpart to something more in keeping with their perception of his best pitch. The fact that these numbers can be freely modified seems to call into question arguments about the extensive power of numbers over *MVPB '05's* virtual athletes and users. In this respect, users would appear to have the ability to negotiate the meaning of the text (Hall, 2001).

However, in spite of the fact that these games allow users to change the ratings of individual players through these player editors, they do not allow for the overhaul of the system of quantification behind the ratings. Whether overt or implicit, users must engage the player database as they play the game. Therefore, the authority of the quantitative system remains intact. Whether or not the user decides to edit Zito's curve ball rating does not change the power the numbers exert over the perception of the virtual Zito. If Zito's curve ball is edited from ninety-two to fifty-six, both he and the user making the change are still subject to the unflinching micro power of the number in the game. The authority inherent in quantification remains in play regardless of the degree to which users modify *MVPB '05's* player database. Both the virtual players and the user must still submit to the micro power of the number's unflinching and naturalized authority for the experience to function.

The fact that numbers seem a natural part of experience, appear to remove the scales from our collective eyes and enable an apparently unsullied access to the real suggests their power and the authority of those who mobilize them cannot and need not be interrogated. Consequently, this notion moves scholars such as Harold Lasswell to claim that numbers encourage greater communicative trust. Quantification apparently dismisses the potential for the influence of personal bias and the problem of ambiguity to increase trust between individuals and social groups who deploy numbers. Similarly,

Porter (1995) argues that the common move to calculate allows for suspicions between different social groups to more easily dissipate. To render a given phenomena calculable is to subject it to "a highly disciplined discourse [that] helps to produce knowledge independent of the particular people who make it" (p. ix). Numbers become an important medium in the absence of interpersonal community. By contrast to the ambiguities and potential difficulties inherent in interpretations offered by diverse discourse communities with the linguistic representation of data, numbers appear to open up the possibility for transparent and pure communication.[19]

The communicative trust fostered by numbers becomes especially important in the context of *MVPB '05*. A user has no ability to watch games played by prospects on other teams and the scouts the game provides lend little helpful linguistic information in assessing a minor league player's talent. In evaluating whether or not a Double A pitcher on an opposing team will strengthen a user's major league squad, that user has no recourse but to trust the statistics—statistics that "produce knowledge independent of the particular people who make it" (p. ix). The game positions users to interpret the numbers generated by the machine as pure, transparent communication without any alternative means of assessing a potential trade addition's skill level. Users must trust the numbers if they hope to have any success in *MVPB '05*.

---

[19] Peters adds to the idea of transparent and pure communication by suggesting that the impersonal, universalizing nature of numbers can promote the ethical ideals of self-sacrifice and impartiality. Peters quotes one of the late nineteenth century purveyors of quantification, Karl Pearson, as one who declared an unflinching loyalty to "the single-eyed devotion to truth, even though its acquirement may destroy a previously cherished conviction" (p. 442). Rather than maintain a clutching hold on one's own perspective, surrendering to the numbers willingly opens the mind to see the truth of a matter. To give up one's deeply held convictions and to encourage others to do the same in the face of numbers "reveals, in short, a norm of enlightened self and community, of altruistic people who bow to the best data and power whose sole source is evidence" (p. 446). Porter (1995) suggests that yielding one's position to quantification equates to appearing "humble, self-effacing" (p. 19). He also quotes Pearson who stated, "The scientific man has above all things to strive at self-elimination in his judgments, to provide an argument which is as true for each individual mind as for his own" (p. 75). For Pearson, the rule-based nature of calculation usefully constrains the potential pitfalls of subjective analysis.

Numbers also further the exercise of micro power in the absence of the possibility of interpersonal relations between users and virtual athletes. Interpersonal relations between a user and the universe of virtual athletes cannot qualitatively occur in these digital sports games as they have been designed. Users cannot speak to players on their own team or potential additions to their team to gain a sense of that player's intangibles. As stated above, a given user of *MVPB '05* also does not have the opportunity to consistently watch other virtual baseball players not present on the user's team and thereby has no choice but to evaluate their relative talent through the game's numerical system.

The number's ability to mediate social relations also functions to aid users in organizing the potential chaos and relative unintelligibility of virtual athletic performance by enabling the exertion of authority through the processes of team selection. The system of virtual player ratings utilized by *MVPB '05* allows for the efficient arrangement of a given team's depth chart (the tool used by teams to order talent at various positions) from the roster screen while at the same time creating a hierarchy of talent in the game. This kind of ordering appears most evident in the user's establishment of a pitching rotation or a batting lineup in *MVPB '05*. Users can easily drag and drop pitchers and hitters into whichever places they desire via the game's interface based on the quantified information at their disposal. Where this order would be heavily influenced by the social relation between manager and player in the material baseball world, the numbers in the digital realm mediate the communication of the same task.

Although the user may bring some knowledge of real world baseball to their experience with the game and thereby have the ability to discern what the best talent in the game should theoretically look like, one would suspect the majority of users come to the game without a deep knowledge of marginal major and minor league talent. Without the ability to witness a virtual starting left fielder performing on a Single A team, a user

must rely on the numbers produced by the game's simulation of his performance in order to evaluate whether or not this player would be a useful addition to the user's squad. As such, twenty-first century users occupy a position akin to the aforementioned nineteenth century Red Sox general manager, Harry Wright, in that they can only rely on a player's 'record of play', a record of play generated by the game system, in evaluating that individual's potential contribution to the team.

Ramifications of Digital Sports Game Quantification

Given the ways in which numbers function as a medium of communication in a digital sports game like *MVPB '05*, what follows from this ubiquitous and naturalized quantification? Two of the more noteworthy results of the stress on quantification appear to be the positioning of game users as calculable selves engaging with calculable others and the development of user 'dynasty' writing. These two developments conjoin to further and reinforce the masculinization of the sports game.

The Calculable Self and the Calculable Other

The heavy presence of numbers in the digital sports game positions a user as a calculable masculine subject interacting with what might be termed 'calculable others'. Rose (1999) argues that numbers constitute a reality by the way they dictate the boundaries in which thought and action can happen. With the ascendance of quantitative methods employed in governing, he notes that we see the rise of the person operating within these boundaries—one who can be "rendered calculable to others and to him- or herself in terms of numbers" (p. 213). Numbers move people to be responsible for their own conduct in that "they turn the individual into a calculating self endowed with a range of ways of thinking about, calculating about, predicting and judging their own activities and those of others" (p. 214). As an example of the calculable self, Rose offers his readers the employee in a factory operating under Taylor's aforementioned principles of

scientific management. Managers working from these principles rationalize employee performance via quantification while employees working under these managers attempt to maximize their efficiency quantitatively. Dean (1999) agrees with Rose's contention in suggesting that technologies of performance linked to numbers transform professionals into "'calculable individuals' within 'calculable spaces', subject to 'calculative regimes'" (p. 169). From Dean's perspective, the calculated self performs in keeping with the standards established under regimes of calculation instead of freely acting as they wish.

However, the calculable self and calculable other does not arise ungendered. To glance at the history of quantification is to note that enumeration has most often been practiced by men. Anderson (1992) draws our attention to the gendered nature of statistics as a form of knowledge in tracing the field back to the late seventeenth and early eighteenth century. Anderson notes that data collection and production was an elite Western male enterprise mirroring the values of the dominant legal, political and economic arrangement of the society in which statistics arose. Oates and Durham (2004) posit the power to measure as one of the ways in which white males validated their position in social and cultural relations. In referencing the history of the masculine counting of slaves and colonial subjects and the more contemporary measurement of female beauty contestants and models, they argue for the historical prevalence of enumeration as a particularly male project. Recent scholarship on girls' perceptions of mathematics and female participation in advanced graduate mathematics programs betrays an anxiety that an involvement with numbers has been a masculine preserve for far too long.[20]

Although they have done so to a lesser degree in the past, digital sports games increasingly position their users as the calculable selves depicted by Rose and Dean. Not

---

[20] For some recent examples of this literature, see Anderson (2005), Herzig (2004), Kennedy (2005) and Mendick (2005).

only do these games position users as managers in a Taylorist formulation, but also as

versions of Taylorist employees subject to the power of discourses of quantification. In

this respect, the twenty first century Taylorism of the blue collar factory and the white

collar office finds its expression in leisure space. As I have argued elsewhere about

Sega's *ESPN NFL 2K5*[21], *MVPB '05* renders users as calculable selves in tracking a

variety of statistical categories correlated to their in-game performances. Upon playing

the game for the first time, users are asked to create a profile to personalize their

experience by generating a customized user name and potential identification of a

favorite team. This profile then aggregates the user's activity within the game. If a user

throws a no-hitter, hits a double or wins a playoff game, the profile is updated to reflect

these events. Users have the opportunity to examine their profile after each and every

game to observe their respective levels of productivity and/or efficiency. Much like the

time-space studies Taylor advocated to supervise workers, the profile feature functions to

track the actions of the user in virtual time and space.

The personal profile system positions users as calculators of their own

performances and of the performances of others. The profile positions users to associate

subjectivity with this numerical calculation of the self and the other. Both the

subjectivity of the user and that of the various opponents they face become reduced to a

---

[21] One of the most salient examples of this kind of positioning occurs in Sega's *ESPN NFL 2K5*. *ESPN NFL 2K5*'s Virtual Identity Profile (VIP) system effectively renders users as pieces of quantified data. Upon entering the game for the first time, gamers are asked to create a VIP. The VIP system quantifies a variety of user activities ranging from the kinds of plays the user calls in certain situations to the way they tap buttons on the controller while trying to get their defensive linemen to the quarterback to the number of passing yards they may give up in comparison to their opponents. The VIP is designed to create a numerical, digital profile of the way a user might be interacting with the game.

This VIP feature can be used in three ways. First, one's VIP may be placed on a game console memory card that can be moved from one system to another. Putting one's VIP on the card allows for the possibility that one user could play against another user's profile without needing to have that person physically proximate. Second, one's VIP may be uploaded to ESPN's game servers such that friends separated by miles can play against one another via their respective VIP's without having to take time to meet online. Third, users may play against their own VIP's in order to uncover their own tendencies and become more unpredictable in future game sessions.

set of percentages and quantifiable tendencies. This move away from linking the material body to subjectivity accords with Stone's (2001) contention about the shift towards a 'virtual' understanding of self away from what she calls 'physical facticity' even as users come to identify themselves with quantified virtual bodies. If one does not like one's existing profile, one can work to change this numerical device through practice and active intervention into the way one executes certain game features. However, much like the athlete subjected to the variety of quantified ratings, users can never escape the quantification process entirely.

In some respects the profile feature completes a circle that began with the quantification of the athlete into a series of ratings and arguably even earlier with the quantification of athletic performance in real world sport. Whereas prior digital sports games enumerated only the athletes and their performances, the profile feature extends this enumeration to users. Users become virtual athletes in their own right subject to the same quantitative discourses as the athletes themselves.

<center>'Dynasty' Writing</center>

As a game like *MVPB '05* positions its users as calculable selves interacting with calculable others and tracks their movements in virtual space and time, one could argue this positioning articulates to the ways in which users express their enjoyment of the experience in the face of the potentially alienating nature of quantification. One of the ways users have responded to this possibility centers around the production of 'dynasty' narratives chronicling their experience in and with the game.

Like the notions of the calculable self and the calculable other, so too might the development of dynasty narratives be linked to Taylorism. Although we might consider Taylorism to be a relic of the early twentieth century, Rochlin (1997) speaks to how the inception of information processing computers reinscribes forms of Taylorism that had been disappearing in the middle of the twentieth century after being applied with some

initial success. With the advent of operations research in the 1950s and the ascension of the information technology following quickly on its heels, automating processes eliminated some forms of previously desirable work[22] and deskilled others. This deskilling of labor and 'informating' of the workplace at the end of the century mirrored the destruction of craft guilds by the application of Taylorism at its beginning. Workers subject to the new Taylorism find themselves laboring in positions appearing to necessitate the application of skill and ingenuity, but in actuality being bound by the automated parameters of their activity. On the managerial side, Rochlin suggests that managers functioning under new Taylorism appear to be human and appear to act as human, but have little, if any, ability to measure and alter the path established for them by their respective organizations. As such, both workers and managers become alienated from their labor "deprived of both the context and meaning of action" (paragraph 56).

User narrativization of their experience in the digital sports game may serve as a reaction against the alienation of quantification fostered by the manifestation of Taylorism in information entertainment technology. The narratives provide a way for users to lend their activity both a context and a meaning for their otherwise highly abstracted interaction with quantified athletes and game actions. As such, these narratives become important for facilitating pleasure for digital sports game users.

Numbers in digital sports games also facilitate narrative pleasure[23] in a manner similar to the narrative pleasure offered by televised sport in that they establish

---

[22] For example, the skill required of the bookkeeper was rendered obsolete in the early 1970s causing a once highly respected occupation to effectively disappear (Rochlin, 1997).

[23] I use the term 'narrative pleasure' reservedly. One of the ongoing debates within contemporary digital game studies concerns the status of the digital game. As the first chapter outlines, narratologists argue for the digital game as a form of interactive narrative while ludologists argue for the digital game as a unique experience unto itself. For an extended discussion of the debate see my introduction and the collection of essays in Wardrip-Fruin and Harrigan, eds. (2004).

expectations about what is likely to happen. [24] In Ian Hacking's (1990) terms, numbers 'tame chance'. As they consider a series of potential outcomes in digital and televisual sport, users and audiences can reference numbers and statistics collected from previous events, actual and virtual, to guide their predictions about what may occur in a given sports game session. Individual match-ups within the game become intriguing in the face of the continuity with prior quantified performance and/or the discontinuity with this performance. The tension between the predictable and the unpredictable furthered by the representation of the quantified in digital sports games would appear to provide users with pleasures that readily lend themselves to narrativization.

Peters (2001) takes the narrative-producing tendency of numbers in a slightly different direction. He argues that numbers work well in dealing with populations, but often efface personal experiences and narratives. Statistics can only speak to the collective experience of a social group and in doing so, render the individual experience insignificant. It is the narrative form that allows for events to become significant to individuals. Although Peters is careful not to generalize by speaking to the potential for stories to abbreviate the way statistics do and the potential for statistics to produce individual exceptional cases the way stories do, he points us to the important functions both kinds of interpretation of experience offer subjects.

The narrative-inducing propensity of quantification appears to hold if we examine the history of early baseball journalism. In establishing a context for his discussion of baseball in the Progressive Era, Riess (1999) notes Chadwick's initial reporting of baseball scores and statistics in the 1850s and 1860s would be followed by the competitive sports writing coming out of Chicago in the late 1880s. Columnists like Leonard Washburn (*Chicago Inter-Ocean*), Finley Peter Dunne (*Chicago Daily News*),

---

[24] See Haralovich and Trosset (2004) for an example of how chance works to produce narrative pleasure for the non-sports, but game-like television program, *Survivor*.

and Charles Seymour (*Chicago Herald*) enhanced "bland game summaries…[with] colorful prose, baseball slang, and humor" (addition mine, p. 16). Although Riess fails to make the connection between these two forms of reporting, it seems that as the variety of statistics proliferated in baseball-related publications, so too did the creativity and proficiency of baseball writers in their generation of narratives about the game. Comparatively mundane numerical reports about each game were vivified by rich, descriptive linguistic accounts emphasizing the qualitative dimensions of player performance. This connection between statistical recordkeeping and its attendant prose would continue into the first decades of the twentieth century as New York's best baseball writers like Irwin Cobb, Charles Van Loan and the esteemed Grantland Rice would be deemed some of the finest journalists (sports or otherwise) anywhere. These writers "avoided clichés and supplied readers with interesting stories and new angles. They employed satire with relish and enjoyed making fun of colorful contemporary characters…" (Reiss, p. 16). One would suspect that the colorful nature of these characters was itself a construction of the baseball writers of the day. This kind of writing fleshed out the quantified record of baseball performances in providing fans with a fuller experience of the contests and the players they involved.

It is this kind of colorful narrativization of experience that has arisen around digital sports game culture as the volume of quantitative data generated by these games has increased. If we apply Peters' argument to relatively recent developments in digital sports game culture, it appears plausible to suggest that the emphasis on numbers in digital sports games has led users to subconsciously believe their individual experiences have been rendered insignificant. Digital sports gamers seem to have responded to this effacement of personal experience by producing and consuming—both commercially and non-commercially—narratives attached to their virtual athletic accomplishments. These

narratives appear intended to generate the kinds of pleasures afforded by the tension between the predictability and unpredictability of quantified performance.

One might suggest that these narratives simply derive from users' isolation and need for communication, however, if, what Ruggill, McAllister and Menchaca (2004) report about the prevalence of digital games in culture can be trusted, then it would seem that users cannot be perceived to be as isolated as the stereotypes might indicate.[25] Although one cannot dismiss the isolation argument completely, it would seem that the ubiquity of these narratives might be partially explained by the sports game's stress on quantification. It might also be possible to attribute the ubiquity of these narratives to the proliferation of internet access in North America and Europe. Without question, the internet has played a key role in the distribution of these narratives, but the popular use of the medium cannot explain the ascension of these narratives completely.

North American digital sports gamers have nominated these types of narratives 'dynasties' while British digital sports gamers have tended to use the more neutral term of the 'story.'[26] These narratives typically relate the experiences of a given user with the game world in a manner combining sports journalism with the diary. The organization of these narratives appears to have been formalized, but there is considerable latitude concerning their content and detail. Convention dictates that users explain their initial

---

[25] These authors cite data suggesting that 50% of those over the age of six play computer and video games. They also assert that 2003 witnessed the sales of 239 million digital games or two for every household in the United States. Certainly, many digital game users purchase multiple titles in a given year, however, these numbers (ironically enough given the subject matter of this paper) point away from the stereotype of the solitary computer geek towards a consideration of the digital game user as a relatively common member of American culture.

[26] An extended discussion of this difference goes far beyond the bounds of this project. However, the difference between the terms might connect to attitudes towards sport in North America and the U.K. The notion of the 'dynasty' relates to the term used to describe North American sports teams who would win consecutive championships in their respective leagues and would seem to reference a long history of dominance. The notion of the 'story' does not carry the same connotations of dominance. The difference between the two terms might speak to attitudes towards winning in these two sport cultures.

perceptions of their team and its players in one diary entry to ground readers in the narrative's context. Subsequent dynasty entries relate the user's continuing interaction with the game world relating team results, player movement and the user's successes and failures. A typical entry chronicles game outcomes in sports media journalistic format. *MVPB '05* user, CouchPotato94 (2006), describes how the virtual Cubs began a route of the Arizona Diamondbacks with the following,

> Marcus Giles went 3-for-5 with a homer, and Scott Podsednik hit a
> 3-run bomb as the Cubs win Opening Day over the Diamondbacks
> at Chase Field. Kerry Wood was solid, and the Cubs potent bats
> jumped on Jamie Moyer early and often. The scoring started in the
> 3rd inning, when B.J. Upton hit a one-out single. Wood followed
> with a single of his own, and one out later, Podsednik launched a
> 361-foot shot down the right field line to make it 3-0.

Other users, also in keeping with conventional modes of sports journalism, report quotations from players and managers on the team under their control. However, these invented quotations come from users themselves as they imitate the style of post game interview responses. User, giddyupzil (2005), created such a quote from Milwaukee's real world manager, Ned Yost, in an article for a Brewers' dynasty. In commenting on the return of injured catcher, Damian Miller, to the lineup, giddyupzil reported the virtual Yost to say,

> We have had our team built around Damian, and we know exactly
> what he can bring to the table. He'd been out for a while now, and I
> think he just really wanted to crush the ball in his debut. He
> certainly did, and was the difference maker in the game.

Given the 'career' modes built into many of these games, users can often chronicle their experiences from the virtual date of the game's release through thirty to sixty, and in some cases, as many seasons as they desire. Websites such as www.dynastymanager .com exist as internet clearing houses for users wanting to enhance their narratives with their virtual club's team pictures, logos, schedules, news, transactions, etc. The most recent development on dynastymanager.com has seen users supplementing their

narratives with highlight reels of games they have played in their dynasty recorded and digitized for others to watch (see marceg14, 2006, for an example).

The drive to narrativize the experience of playing digital sports games appears to be part of a reaction to the quantification of the virtual athlete and virtual athletic/managerial performance. Although the production of these kinds of narratives is certainly prevalent for god games such as *SimCity* (1989)*, Civilization* (1991) or *Europa Universalis* (2001) and a game like *The Sims* (2000) has fostered and encouraged an entire web community around digitally-based narratives, the digital sports game breeds these kinds of narratives prodigiously. Digital sports game users appear desperate to have their stories told. If, as Peters suggests, quantification reduces the individual experience to that of a collectivity, then these narratives operate as a "discursive construction, an illusion, an appearance that is the self" (Ott, 2003, p. 73) lending both the digital sports games' virtual athletes and the users of these games a sense of fuller subjectivity. Dynasty writing allows users to express their individuality under the barrage of enumerated information otherwise characterizing their experience with the text while also dealing with the potentially alienating effects of the re-Taylorization of experience arising with information technologies. By combining the experience of quantification with a narrative interpretation of the experience, the phenomenology of the digital sports game comes into focus.

What kind of fuller subjectivities do these narratives enable? This fuller subjectivity certainly does not manifest itself in gender-neutral terms. As with the nature of the calculable self and calculable other, the masculine orientation of enumeration becomes important when considering the narratives users produce from their experiences of digital sports games. When we combine the discussion of dynasty narratives above with the notion of the heavily quantified nature of the digital sports game experience, we can plausibly argue that enumeration in these games enables the male audience to

preserve, as masculine, a practice that might otherwise be gendered female. Without the appearance of numbers, the narratives produced by digital sports game users could potentially be typified by the eternally extended space between a beginning and end Fiske (1987) identifies as characteristic of a traditionally feminine genre of story telling, the soap opera. Fiske argues that "soap operas are never in a state of equilibrium, but their world is one of perpetual disturbance and threat" (p. 180). Fiske also notes,

> A soap opera narrative strand has no climax to close it
> off…indeed, the outcome of most plotlines is relatively
> unimportant, and often not really in doubt. What matters is the
> process that people have to go through to achieve it (p. 182).

Similar things might be said of *MVPB '05* users' experiences of the text as they face the constant challenge of building a winning team or defending a championship and the subsequent production of a serial narrative depicting these activities. Like the soap opera narratives Fiske outlines, so too the experiences of digital sports game users have no climax. Winning a virtual World Series might serve as the culmination of a given *MVPB '05* season, but the dynasty mode's open ended structure encourages users to continue with their virtual careers. The actions of computer-controlled teams and in-game challenges such as injuries to important players render the user's experience in a constant state of flux and it is this motion that becomes the core of the dynasty narrative. The extensive, detailed stories generated by dynasty writers suggest a deep-seated audience interest in the processes users undertake to produce success with their (hopefully, but usually) victorious squad of virtual athletes.

One of the crucial differences between soap operas and digital sports games involves the ubiquitous presence of numbers appearing in these games and the dynasty narratives deriving from them. *Dynasty* (1981) becomes dynasty with the imbrication of quantitative discourses into the serial narrative. The interjection of statistics and other kinds of enumerated information might be interpreted to be buttressing these serial narratives against charges that these games invoke a feminine style of storytelling. In

doing so, numbers save these narratives from feminization and affirm the masculinity of the primary text that is the game itself, the secondary text that is the dynasty narrative and the masculine subjectivity of the producers and consumers of the text.

Conclusion

In this chapter, I examined numbers as a medium of communication and power mechanism in the digital sports game and then related some of the potential results of this focus on quantification. Numbers in *MVPB '05* position users to interact with the game world across virtual space and time while also allowing for the exercise of power over the game world. The stress on quantification appears concomitant with users' narrativization of their experiences and positions users as calculable selves interacting with calculable others thereby gendering the experience masculine.

One might question digital sports game designers about why they have chosen to use numbers as the guiding, organizing principle for their games. Designers might be able to provide additional information as to the processes that have allowed and continue to allow for the ubiquitous presence of numbers. It might also be useful to consider exceptions to what appears to be the sports game quantification rule. As of this writing, apparently only one game based on professional sport refuses to adhere to the conventions of quantification, a soccer management game entitled *Sick as a Parrot* developed by independent producer, Mac Howard (2004). *Sick as a Parrot*'s only quantification occurs at the level of the scores of games the user's team plays. The user interacts with the game strictly through linguistic rather than numeric information. Probing a designer such as Howard may provide greater insight into the more typical design decisions associated with sports games.

This chapter demonstrated the ways in which the new medium of the digital game remediated and extended discourses found in prior forms of media. In being deployed as a medium of communication, numbers became one of the ways power could be exercised

across time and space. In following from what Hacking (1982) describes as the "avalanche of printed numbers" (p. 279) flowing in and through other cultural domains, the digital sports game extends an increasingly quantified subjectivity. In this respect, what is new about new media, in its digital sports game manifestation, is the medium's propensity to extend the abstraction of this subjectivity via the ever encroaching ubiquity of enumeration.

This chapter situated the question of calculability and the importance of numbers at the level of hypothesis. The following chapter will address internet message board discourse circulating around these games in an attempt to test the notions suggested here. An informal survey of audience responses to these games suggests that users certainly perceive the importance of the number and quantification to the digital sports game text's verisimilitude, however, few, if any, question the presence of the numbers themselves. Therefore, these users appear subject to the ideologies attached to quantitative discourses. It is to these users we now turn to gain a deeper understanding of the roles numbers play in their experience of the sports game.

CHAPTER FIVE

"MADDENED" FANS, REALISM AND EXPERIENCING *MADDEN*

FOOTBALL 2005

To this point, each of the previous three chapters has focused on digital game

texts. Chapter two considered the mediation of boxing with regard to the body in *FNR2*,

chapter three the mediation of the body in golf in *TW 2004* as it challenges and reinforces

the culture of golf and chapter four the heavily quantified mediation of the baseball body

in *MVPB '05*. Given these various forms and manifestations of mediated sport, it is

instructive to consider how digital sports game audiences interact with these texts. What

can we learn about these audiences through the sharing of their experiences as they

engage the ideologies discussed earlier in this project?

Little media studies scholarly work has been performed on gaming audiences,

much less digital sports game audiences. The research that does exist aims to measure

the potential connections between video games and violent behavior. The majority of

this work has come from child development psychologists interested in understanding the

ways in which video games either do or do not encourage excessively aggressive

behavior among the young who play them.[27] These empirically based studies typically

---

[27] The study of video games and violence can be traced back to the mid 1980s (for examples, see Dominick (1984), Graybill, Kirsch and Esselman (1985), Price (1985), Toles (1985)). However, the late 1990s and early 2000s witnessed the burgeoning growth of studies on the subject. Dill and Dill's (1998) review of the empirical literature suggested causal links between violent video participation and aggression. However, the article also observed a considerable lack of empirical data alongside a number of methodological problems which limited the viability of the findings.

Anderson and Bushman's (2001) meta-analysis of the existing psychological literature considering video games and violence argued for a clear connection between exposure to violent video games and increased levels of aggression and antisocial behavior. During the same year, Bensley and Van Eenwyk's (2001) survey of existing work on video games' effects on the real-life aggressivity of their users appeared wary of coming to any hard and fast conclusions on the issue. A call for papers on video games for a recent special issue of the *Journal of Adolescence* revealed developmental psychologists' ongoing concerns about

observe users as they engage with digital games and then follow their behavior after this engagement has occurred. Although considerable attention has been paid to video games deemed violent, much less attention has been afforded audience responses to nonviolent games.

Although the researchers cited above have queried digital game users about levels of aggression they may have felt after playing violent video games, fewer studies have contributed the kinds of qualitative audience research engaging the broader content of the user's experience. Discerning levels of perceived aggression after violent digital game play provides only one avenue into understanding how users engage digital games. These kinds of audience studies myopically narrow the broad range of experiences users have with digital games and, given the way they are popularly cited in the mainstream media, potentially taint the perception of the video game industry, its texts, the people who play these games and the field of digital game studies itself. Although quantitative social science audience research on violent video games certainly has import and value, to focus solely on these kinds of audience responses is to implicitly generate a caricature of the digital game audience and digital game research.

In order to begin to understand how audiences engage the ideologies identified in the previous chapters, I use this section to discuss audience responses to EA's digital

---

the potentially harmful effects of exposure to violent video games. As part of this special issue, Anderson (2004) updated readers on recent developments in the scholarly landscape. His article contrasted the prior findings of Bensley and Van Eenwyk (2001) and affirmed his own prior work by asserting that the most methodologically sound experiments posited a direct causal correlation between aggressive behavior, aggressive thought and video game participation.

The overwhelming number of texts from a psychological perspective dominate discussions of the issue. However, some scholars have moved beyond direct queries about content and representation to consider how interfaces work to position digital game users as agents of violence. Penny's (2004) work attempts to examine the space between simulation and pictorial representation as part of a larger concern with the ways in which representation becomes interactive. In drawing upon the U.S. military's enormous investment in simulations and simulation technologies as part of their training program, he asserts that digital games serve as training grounds which have the potential to produce automatic and potentially violent behavior.

football juggernaut, *Madden Football*. In this chapter, I identify some of the ways in which audiences understand their engagement with the comparatively non-violent[28] digital sports game through a qualitative textual analysis of message board discourses about *Madden Football 2005* (hereafter *Madden*). This analysis revealed two recurring and interrelated themes. First, users provided detailed critiques about their dissatisfaction with the game by questioning the game's relative degree of realism and 'realistic-ness'. Second, users deployed discourses and practices associated with scientific experimentation and community labor to solve the realism problem they perceived as endemic to the game.

This user discourse becomes significant for the way it functions to transform what might otherwise be labeled the profligate activity of a passive audience into the fruitful pursuits of an active audience. These discourses seemingly legitimated user participation in an activity popularly derided for the apparent mental and physical stultification of its heaviest users. In what appears to be an implicit reaction against these popular critiques, this set of *Madden* users centered their activity around an intellectualized, scientized quest for a quantitatively realistic experience of digital football. This scientifically informed pursuit affirmed both the masculine nature of their project and the masculinization of their identities.

This audience's preoccupation with questions of the game's realism and/or level of 'realistic-ness' provides an additional lens through which we can understand the

---

[28] Whether we construe *Madden* as violent or non-violent is open to question. Certainly some may perceive football as a violent sport for the way it sanctions the use of physical force. However, for my purposes, I define the violent videogame as one perceived to be violent by a broader public. Typically, these kinds of games would involve the deaths of other characters, virtual bloodshed and use of weaponry. Given the popular acceptance of football, its digitized representation would not fall into the same category as those games invoking considerable amounts of virtual killing. As such, *Madden* would not be deemed violent and no one would expect it to be used as an example of a violent video game in Senate hearings about the subject on Capital Hill.

degree to which they internalize the abstraction of the body discussed in the previous chapter.

<p align="center">Methodology</p>

These results were acquired through an examination of discussion board threads during the week of August 8th-15th, 2005 in the 'Madden Football' sections of the two of the more popular sports game internet message boards, Operation Sports (www. operationsports.com, hereafter OS) and Madden Mania (www.maddenmania.com, hereafter MM). This week proved unique for the community in that it heralded the release of *Madden Football 2006*. As such, choosing to analyze audience discourse from this particular week provided the greatest potential for considering what had occupied the community over the previous year in their consumption of *Madden Football 2005*.

As of this writing, OS had just under 40,000 members. A moderator at MM reported just under 20,000 members, but stated that the community had often had more than 20,000 before inactive memberships had been deleted (personal communication, 1/23/06). Both of these fora prove useful for the researcher in that they provide a quantitative record of how often a given thread has been viewed ('views') and how many messages have been contributed to it ('posts'). One could choose to focus on the discussion threads with the most posts on these boards as a way to gauge the general interest level of the community in a given topic, however, making this decision could potentially yield results biased towards threads in which a few posters decide to monopolize the conversation. Given this potential difficulty, I choose to focus on those threads with the most views rather than the most posts in that they provide arguably more tangible proof of the community's collective, rather than individual, interests. This methodology might generate the problems of finding threads a large population of users may have been seduced to read via a catchy thread title or threads in which a few posters constantly register a view by checking to see if their contributions have garnered

responses. However, in the long term, it would seem that the initial popularity of threads with catchy titles would slowly dissipate and the threads with the greatest longevity would overtake them in terms of the number of views generated. It would also seem unusual for a thread to generate a large number of views if only a select number of obsessive posters were constantly looking for responses to their messages. As a consequence, I hypothesize that those threads with the most views best reveal the interests of the *Madden* community in this historical moment.

In quoting some of the posters below, I have also chosen to leave their highly informal messages untouched as the general gist of the posts can be easily ascertained without adding what would be a considerable number of [sic]. For this project, the ten threads garnering the greatest number of views from both of these respective boards were saved and then qualitatively analyzed for recurrent themes.

<u>Realism and *Madden '05*</u>

In surveying digital sports games, Leonard (2006) argues that a commitment to "replicate every detail of the sports world is a defining element of the sports genre" (p. 395). This commitment manifests itself in one of the most prevalent user responses to the *Madden* experience. A brief survey of two extremely long threads in this data set yielded a considerable number of invocations of the terms 'realism', 'realistic' and their derivatives. The terms 'realistic', 'unrealistic' and 'realistically' appeared ninety-two times in the MM thread '1st Against the Run' and 124 times in the 'Brit Pitbull and Sm27's Madden 2005 "Manifesto" How to Fix the Game' thread. Given the number of times users employed the notion of realism and/or realistic in their forum postings, they provided the researcher with a clear sense of how they understood what counted as realistic and unrealistic in their experience of this digital sports game. As users explained their perspectives on *Madden's* realism and how to bend the game to better represent a

realistic game of football, they implicitly validated their activity by positioning themselves within traditionally scientized, masculine discursive frames.

Previous Research on Realism and Media

Many scholars have addressed the question of the realism of a media text in other media like film and television. Sorlin (1996) describes how questions of realism have been part of discussions of film since theorists began discussing the medium. Citing early film theorists like Kracauer, Arnheim and Bazin and their consideration of film's mimesis, Sorlin posits the import of the image's relation to the real as one that has been of central concern for film scholars. Nichols (1996) suggests that what we understand as realism in film derives from conventions derived from realist cinema given that our experiences cannot match all of the potential representations of life we might see onscreen. In his consideration of films representing historical events, Nichols aims to probe the functions of these conventions in generating a realist text to better understand how they operate as "interpretations subject to further interpretation" simultaneously "personal and subjective…moral and political" (paragraph 1). For Nichols, claims about the relative realism of narratives "come up against indications that the act of representation has shaped and determined the event in fundamental ways" (paragraph 5). Nichols' project does not intend to solve the paradoxes inscribed in these discussions of realism, but rather turns us toward recognizing how realist texts make "moral and political claims about the real and our relation to them" (paragraph 5). As such, two of the more important questions to ask in this project become what constitutes evidence for claims about whether or not a text is realistic and what explanations of the evidence gain greatest support from other readers of the text.[29]

---

[29] Montgomery (1996) is given the final word in this discussion. He argues that we must consider the realist text as a product of institutional anticipation of a given audience's reception of the text. Montgomery cites representations of World War I by the Nazi Party and the German Education Ministry in defense of his claims about these institutions' expectations of audience reception to their films. These films

Other scholars have addressed the realism question in the context of television effects research. Busselle and Greenberg (2000) aim to codify the numerous studies on perceived television realism and its effects as a way to provide some common definitions and better understand how television audiences' perceptions of realism have been measured and conceptualized. Of the six conceptual dimensions they discern, three prove most relevant for this study: (1) *Social realism*—the degree to which the content of television mirrors the real world; (2) *Plausibility*—the degree to which something seen on television could occur in lived reality; and (3) *Probability*—the chance of something witnessed on television occurring in lived reality or how often that event happens.

Still other researchers have also addressed prior studies by pointing out how researcher intervention into the subject's immediate experience of viewing can alter the perceived realism of the text. Busselle, Ryabovolova and Wilson (2004) question whether or not viewers stop to evaluate the realism of a given television program unless specifically prompted to do so by the text rather than by the researcher. Their study leads them to conclude that the perceived realism and subsequently, the effect of the program, is limited by the degree to which the text raises this kind of prompt.

In following from some of the television effects scholarship, McMahan's (2003) essay on realism in digital games argues for defining realism using the notion of social realism, but extends the discussion to include what he nominates 'perceptual realism.' Perceptual realism concerns the degree to which objects in the virtual environment match those in the real world environment. McMahan posits that perceptual realism is typically associated with what the user sees in the virtual world and has become increasingly linked to photorealistic graphics.

---

were deemed successful insofar as audiences interpreted them as 'realistic'. See the discussion below for further detail on Montgomery's argument.

Galloway's (2004) essay examines the question of realism and the digital game more extensively by considering the game world in comparison to the lived world in his article on realism in digital games. Galloway leads away from how realism is conventionally discussed in scholarship on visual media by arguing for a consideration of what he terms 'correspondences' in place of the more traditional notion of representation. Whereas debates about representation have typically revolved around questions of whether or not the image replicates or constructs the real, Galloway asserts representation to be inadequate in discussing the notion of realism because of the way digital game audiences engage the image. He would like scholars to examine the way a digital game corresponds to the real through its "kinetic, affective and material dimensions" (paragraph 4).

One of the more important facets of Galloway's notion of correspondence involves the criterion of a reciprocal "fidelity of context" between the social reality of the user and the game environment. Without this fidelity of context, Galloway argues that a user cannot perceive a game to be realistic. The fidelity of context criterion links a user's personal experience outside of the game to their personal experience inside the game.

Each of the aforementioned studies on realism and media demonstrates weaknesses this project aims to address. One of the primary shortcomings of the studies cited above concerns a lack of evidence about what audiences understand to be realistic about the texts they consume. Where the film studies scholars cited above considered audience perceptions of realism as a function of textual convention, evidence from audiences about how, or if, they deployed these conventions in their perception of a given film's realism failed to confirm their hypothesis. The aforementioned television studies alluded to what kinds of evidence viewers referenced to ascertain the relative realism of a television program, but they rarely pointed to explicit examples of this evidence. In their review of prior work on perceived realism in television, Busselle, Ryabovolova and

Wilson (2004) suggested audiences in effects studies readily identified whether a given character or event might be realistic, but then went on to state that, "it remains unclear what might make the character realistic or unrealistic (e.g. emotional responses, behaviors, or clothing" (p. 371). Although McMahan (2003) provided a description of what counts as evidence in a discussion of perceptual realism, he failed to provide empirical proof of the way users employ this criterion in discerning the relative realism of a game. Although useful, McMahan's project remains theoretical and fails to address the concrete ways in which users actually engage these games.

The problem with these prior studies seems to be one of audiences making visible the evidence for claims about perceived realism. Audiences surveyed in this research appeared willing to delineate a given text as realistic or unrealistic, but had a difficult time explicitly outlining the rationale behind their assessments. This study of *Madden* fans' discussion postings provides the researcher with a much clearer body of evidence as to why they as an audience believed the game fails as a realistic representation of football. This study also enables a deeper analysis of these discourses given the specificity with which these users described their activity.

This chapter also addresses another weakness the aforementioned researchers noted about their methodology. Busselle, Ryabovolova and Wilson (2004) wondered if the judgments their subjects were making about realism were organic or only arose in the context of prompts from researchers. They were concerned about the potential influence of their questions on subjects as these subjects either watched the show or recalled a program they had watched previously. With this study, the public nature of the message boards yielded a flood of non-prompted ideas about the perceived realism of the text under scrutiny. In this context, discourse flourished unimpeded by outside intervention from a researcher.

Although otherwise persuasive, Galloway's (2004) work on realism in digital games reveals a blind spot in failing to consider the sports game genre. Galloway suggests that the criterion of fidelity of context employed to gauge a game's realism rarely occurs in the consumer gaming market. In many cases, he appears entirely correct. This assertion would seem to hold for game genres such as fantasy role-playing, first person shooters, real time strategy and platform games. It certainly seems plausible to argue that users do not possess personal experience in casting spells to kill monsters, firing high powered plasma weapons at aliens, commanding squadrons of knights or leaping over burning barrels to save princesses. As one might expect, questions of realism rarely, if ever, enter the discussion about the quality of games in these respective genres. It would certainly be absurd to argue about whether or not Mario's ability to successfully avoid having his overalls catch on fire as he leaps over barrels in *Donkey Kong* falls within the realm of the laws of the physics. There simply is no real world correlative from which a user can apply the fidelity of context criterion to discern the relative realism of the Italian plumber's apparently inflammable clothing.

However, the sports game genre would appear to call Galloway's argument about fidelity of context into question. Although users may not have experience when it comes to dealing with player personnel transactions like signing free agents or trading aging veterans, it would seem that many sports game users have personal experience playing the sport they also engage virtually. If they have not actually played the sport, they likely possess considerable knowledge of how the sport functions through other sports media texts. Consequently, sports game users bring this knowledge to bear on their evaluation of how realistic a given sports game might be. The fidelity of context criterion would seem to be crucial to many users' enjoyment of digital sports games and a key component of the marketability of the genre in the consumer market.

Realism and (*Madden*)ed Fans

The posts on discussion boards at Operation Sports and Madden Mania clearly manifest the import of the fidelity of context criterion as important to the (dis)pleasures they derived from *Madden*. Many users appeared to be extremely concerned about a fidelity of context reflecting their demands for perceptual realism and quantitative realism. In keeping with Nichols' (1996) concerns about what kinds of proof audiences offer in defense of their perceptions of a realistic text, what counted as evidence of a perceptually realistic digital football text for these *Madden* users revolved around: (1) the perceptual realism of how closely the action on the virtual gridiron mirrored users' visual perceptions of action on the real world field; and (2) the quantitative realism of how accurately the game replicated statistics from the previous National Football League season. Focusing on these aspects of realism positioned these users within traditionally scientized discursive frames emphasizing the predominance of vision and enumeration.

The sport of football has long been tied to notions of rationality based in a scientific methodology. Oriard (1991) references football pioneer, Walter Camp's series of essays penned for *Harper's Weekly* in the late 1880s and 1890s on the game. Camp argued for the virtue of football from a technocratic point of view, "If ever a sport offered inducements to the man of executive ability, to the man who can plan, foresee, and manage, it is certainly the modern American foot-ball" (p. 13). The game of football offered a cultural space in which the values of masculine scientifically-informed authoritative organization and order could be upheld, encouraged and disseminated in order to engender maximum efficiency. Oriard elaborates on the ultimate purpose of this organization by linking Camp's notion of football to Frederick Winslow Taylor's studies on maximizing American manufacturing industrial productivity. Taylor's notion of scientific management paralleled Camp's understanding of the scientific rationality of football. Oriard goes on to suggest that Camp interpreted football as a site privileging

"science, perfectibility through hard work, hierarchical control and corporate cooperation, an aristocracy of merit based on absolute equality of opportunity" (p. 13). Oriard (1993) argues that Camp persistently compared football to the American corporate factory (p. 37) and perceived football players as "the rationalized, bureaucratic, specialized corporate work force" (p. 41). Camp's considerable influence on the rule structures of football transformed the game from the loosely configured running and kicking of rugby to the more reasoned and ordered sport he envisioned—the sport he would label a "scientific contest" (p. 42) necessitating "scientific planning" (p. 45). For Oriard, Camp's organization of the game neatly parallels Taylor's four principles of scientific management: "Science, Harmony, Cooperation and Maximum Output" (p. 45).

For Camp, it is not the 'woman of executive ability' who can play football nor does it seem as though he would expect a woman to possess the ability to practice Taylor's principles of scientific management. To Camp's mind, both football and the scientific approach informing the sport function as domains of strictly masculine activity. Feminist science historians have documented the masculine orientation of the scientific project. Lloyd (1996) traced the history of the gendered nature behind the assumptions grounding science back to classical Greek mythology, a mythology in which an implied masculine Reason overcomes all that associated with the cultic earth goddesses. Symbolically, irrationality came to be tied to women in contradistinction to the rationality associated with men. Lloyd notes the Platonic and Aristotelian association of maleness with form and rationality and femaleness with matter and the body. She extrapolates this historical trajectory to interpret Bacon arguing for "Nature as female and knowable….and the task of science is the exercise of the right kind of male domination over her" (p. 47, see also Green 1993, Fox Keller and Grontkowski 1996, p. 36). Bacon brings together the classical Platonic notion of the rational subjection of the body and the

anthropomorphizing of nature as female in what Lloyd terms, "a powerful new model of knowledge" (p. 48).

Fox Keller and Grontkowski (1996) move from their discussion of the masculine scientific subject operating on the feminized scientific object to address how this instantiation of the subject-object relation works. Where Jay (1988) situates ocularcentricity in a history that begins with the Renaissance and traces vision as modernity's master sense through Rorty's philosophy, Foucault's panopticon and Debord's society of the spectacle, Fox Keller and Grontkowski orient their discussion more specifically toward the gendered dimension of the dominance of vision. The 'powerful new form of knowledge' deriving from the scientific method arises in the context of science's commitment to vision as its master sense. In working from their historical narrative, Fox Keller and Grontkowski posit the existence of a masculine bias towards an epistemology centered around vision expressed through the exertion of power over what is seen—an epistemology that both structured and would structure the pursuit of scientific knowledge.

If we combine Camp's discussion of football as "a scientific contest", the historically gendered nature of science and Fox Keller and Grontkowski's contention that "the logic of the visual is a male logic" (p. 187), then the *Madden* audience's emphasis on visual and quantitative realism perfectly accords with what we might expect a stereotypically masculine, scientifically-oriented audience interested in football to deem important. It is precisely the scientized expression of this kind of power over the visual that serves as the epistemological frame through which *Madden* users interpreted the game's lack of realism. The technological manifestation of the sport of football in the medium of the digital game serves as an exemplar of the nexus of mediated sport, gender and science. The ensuing discussion of *Madden* fans provides us with a concrete illustration of the ways in which ideologies attached to this conjunction operate in fan

discourses while also lending us greater insight into the ways in which they engage the abstracted, quantified athletic body.

Perceptual Realism

Like Galloway (2004), McMahan (2003) has argued for defining realism in digital games using the notion of social realism, but extends the discussion to include perceptual realism. Perceptual realism concerns the degree to which objects in the virtual environment match those in the real world environment. *Madden* users clearly betrayed an interest in perceptual realism—specifically how what they were *seeing* matched or failed to match their experience of football. For many users, this experience appeared to be grounded in their visual interaction with mediated football as represented on television, the internet or in print. However, some users drew on narratives culled from participation on the real world field as the basis for their judgment.

This argument about the dominance of the eye agrees with Montgomery's (1996) contention about how institutions may establish expectations about what counts as realistic for a given audience. In this case, it seems entirely plausible to suggest that the corporate institution that is EA predisposes consumers to what should count as realistic. EA clearly markets *Madden* with an emphasis on perceptual realism. The visual is by far the easiest to represent in print, television and web advertisements and in game trailers promoting the product. Graphics can also be reproduced on the game package itself. Where it might be extremely difficult to provide a fuller sensual experience of how the game functions, EA orients its advertising focus around the optical. As such, *Madden's* publisher establishes the framework for user perceptions of the game's realism even before the commercial transaction and consumption of the product occurs. Users may certainly be predisposed to measure *Madden's* realism through what they see as a consequence of institutional influence.

This hypothesis may be difficult to prove. However, many users pointed to the realism of *Madden's* graphics, the game's perceptual realism, as their primary criterion of measurement. *Madden* users clearly betrayed an interest in this visual realism—specifically how what they were seeing matched, or more frequently, failed to match their experience of real world football. Skkrrt (2004, August 21) commented on *Madden's* (mis)representation of offensive line play in evaluating the perceptual realism of the game,

> In the NFL, when they make a hole they block the guy on his right or left side (depending) usually with a double team. They move him sideline to sideline (well attempt too) which creates a gap. In Madden, all blocking is head on, so too create that hole somebody needs to get pushed somewhere, and the only direction is back. Realistic, no, but we have to work with what is given. Likewise, there is no spacing in Madden. In the NFL there are naturally gaps between the lineman, in Madden their about half of what they should be. To keep the size of hte line (length) realistic the players are just thicker, that makes it a lot harder to run around, again, unless their is a gap somewhere.

Like Skkrrt, supersigma2of21 (2004, August 6) compared *Madden's* offensive line play to personal perceptions of real world offensive line play in speaking directly from experience,

> Being a former offensive lineman myself I'll say this. In EA games the linemen don't have the proper technique meaning they don't engage and turn defenders away from the direction of the play. So, you must depend on that push that you give them with sliders to get realistic statistical outcomes. Just my $0.02 on the whole situation.

Other users complained about how the physical movement of players had been modeled. caero (2005, August 9) argued that the technology being deployed to represent player movement was outdated in saying,

> …the way that the game works physically and how its game engine lets you interact with other models is something that was used before the new millennium…. Everything seems scripted and almost like the players a just big floating squares moving around this 2D field bumping into each other and thus invoking some prescribed animation.

caero's argument interpreted the on-screen movement of digital players to be a poor visual representation of the movement of their real world counterparts. caero implied that real world football players do not look as if they are floating and are not confined to a series of pre-choreographed physical motions. Lisa Bonami (2005, August 6) also cited problems with the animations rendering player actions,

> …the game starts to lose its appeal when I start to see those open field mid air super hero collision tackles and stumbles in the game.....or when a player gets whacked to the chorus of overexaggerated explosive pad cracking.......Or when the running back pulls his 360 degree stop on a dime pivot spin move.....or those pop tart wr [wide receiver] stand still leaps in the air to catch a pass….

Like caero, Lisa Bonami pointed to the visual representation of player movement as a clear violation of the fidelity of context criterion. Interestingly, Lisa Bonami suggested wide receivers appeared more machine-like in mimicking the motion of a pop tart coming out of a toaster rather than mimicking the fluidity of an NFL receiver leaping for a pass.

Quantitative Realism

Although visual realism served as an important aspect of audience perceptions of *Madden,* the quantitative realism of game outcomes appeared paramount to the experience of many users. In keeping with the discussion of the considerably quantitative nature of digital sports games in chapter four, it seems that the numbers provide a frame audiences mobilize in their responses to their experience. In this case, audiences communicated their expectation the *Madden* experience be quantitatively realistic through an expressed desire for statistical outcomes mirroring those of National Football League averages from the previous or current season's campaign. Without this reflection of real world statistical data, users scoffed at any claims that the game could ever be deemed realistic.

Before continuing this section of the discussion, a brief explanation of *Madden's* setup is necessary. As part of a way to deal with the potential problem of different user skill levels, playing styles and perceptions of what constitutes football, EA ships the game with a set of customizable options called 'sliders.' The notion of a slider comes from the appearance of these gameplay options on the screen as something akin to a bead sliding back and forth on an abacus wire. In many digital sports games, this virtual bead can be moved back and forth across a visually represented wire as a way to alter gameplay variables like, in the case of *Madden*, penalty frequency or the overall ability of all players to catch passes or to tackle. Pushing the pass catching slider all the way to the right will make it easier for receivers and running backs to catch passes thrown their way and minimize dropped balls during the game. Pushing this slider all the way to the left will yield the opposite effect. These sliders enable users to modify their experience of the game by tweaking aspects of gameplay to their liking such that novice users can make the game easier while expert users can make the game more challenging. However, users often employ the sliders for far more than altering a given sports games' respective level of difficulty. Many users experiment with these sliders to generate what they perceive to be a realistic game rather than using them as difficulty modifiers.

Another important aspect of the game concerns the difference between simulated games (truncated as 'simmed' for 'simulated' in its verb form or 'sims' for 'simulated games' in its noun form) and played games. The option to simulate games enables users to have the computer calculate the result of a given contest and then display and compile statistics from the game apart from any direct user activity. Users do not see the game being played graphically, but only see the final score and each team's and player's generated statistics. A played game, by contrast, directly involves a user's input. Users play out games by physically moving the controller to manipulate their players and teams on the virtual field. In played games, users interact with graphical representations of their

squad's players in competition with cpu (computer) or human opponents. Simmed games typically require only a second or two of calculation while played games may take anywhere from a half hour to two hours to complete.

This community of *Madden* users devoted themselves to modifying sliders in order to generate what they perceived to be realistic statistics for both simulated and played games. Lombardi (2004, August 14) carefully measured *Madden's* generated statistics against NFL totals while playing the game in relating, "I constantly have NLF.com up and Cnns sports site so i can see all the team stats at all times." Samantha, (2005, August 8) commented on the problems with the amount of rushing yards being gained with a comparison to NFL averages, "…those rushing stats are a little high. But, not too high. I'd say they're getting about 10-15 yards too many per game. Might be something where you could adjust the Rb1/RB2 [RB=running back] slider just slightly and give a few more carries to the backup and completely fix it." Brit Pitbull (2004, December 3) evoked the unrealistic statistical outcomes evident in excessive passing yards over rushing yards in making an argument about a perceived key problem with the game,

> …the cpu doesn't pass enough against each other in simmed games which causes schewed stats for every possible aspect of the game. Consider how the lack of a passing game effects the number of INT, how too much running increases pancake stats and how tackles are distributed. In played games the opposite is true, the cpu wil pass all over you and will have absolutely no interest in a running game. The effect that this has on the realism of your franchise is obvious, (we're all top against the Run, worst against the pass, etc).

In this example, Brit Pitbull contrasted the quantitative realism of played games versus simmed games by arguing for a statistical domino effect in which one quantitative problem—in this case, the computer's refusal to pass the ball during simmed games—generated a series of others. Ninerdynasty (2004, December 3) commented on how

difficult it was to match offensive and defensive rankings given the way in which

Madden had been designed,

> You can get the ratios right and get the actual yardage you want in one of the categories. The flaw that we will never be able to fix is the total yardage that the cpu sims. This is what causes the problems. When you make a set of sliders to replicate actual NFL stats in the games you play against the cpu it does not matter since the cpu simmed games will not replicate the actual NFL stats. They will always be about 500 yards short of total offense from top to bottom throughout the season. It does not seem like a lot but it is what throws the cpu offense & defensive rankings off.

Ninerdynasty's frustration identified statistical problems deriving from slider

problems, the very device EA inserted into the game to deal with differing playing styles.

Changing sliders from one position to another in order to yield realistic played games

failed to deal with the problem of unrealistic simmed games which generated statistics

that did "not replicate the actual NFL stats." Ninerdynasty noted how simmed games and

played games yielded vastly different statistical data sets in a way that prevented *Madden*

from doing what this user believed it should.

Users posted litanies of statistics as the primary source of evidence to support

their position about how realistic or unrealistic *Madden* might be in simulating real world

football. A few examples will suffice here. Many users reported statistics for individual

games they played as a way for the community to measure *Madden's* realism.

Footballfan26 (2005, January 1) relayed the numbers from a Philadelphia-Seattle game,

> POSTED SLIDERSET USED= Alleyfight
> PERSONAL SLIDER ADJUSTMENTS= N/A
> Eagles(HUM)=34
> Seahawks(CPU).=20
> Eagles(HUM)
> =OFFENSE
> =QB Drew Henson: 68.2% rtg, 15/22/191yds, 1 TD, 2 Int, 1 sack
> =RB Clinton Portis: 33/188yds, 2 TD, 0 fum
> =O-LINE(pancakes)
> Eagles(HUM)
> =DEFENSE
> =KEY DEFENSIVE PLAYER: CB- Dunta Robinson: 8 Tak, 1 Int
> =LB's: 16 Tak
> =D-LINE: 4 Tak!?

=PUNTS: 3
Seahawks(CPU)
=OFFENSE
=QB Marc Bulger: 59.6% rtg, 28/47/351yds, 2 TD, 2 Int, 2 sacks
=RB Ricky Williams: 15/56yds, 0TD, 1 fum
=O-LINE(pancakes)
Seahawks(CPU)
=DEFENSE
=KEY DEFENSIVE PLAYER: CB- Ronde Barber: 10 Tak, 1 Int
=LB's,(total number of tackles for all of the LBs)
=D-LINE,(total number of tackles for entire D-line)
=PUNTS 4
=Eagles(HUM) total yards: 391
=Seahawks(CPU). total yards: 400
=Eagles(HUM) # of penalties.
=Seahawks(CPU). # of penalties

Immortal (2005, January 1) performed the same task for a New England-Indianapolis

match up,

POSTED SLIDERSET USED=Alley Fight
PERSONAL SLIDER ADJUSTMENTS=None
·Indy(HUM)=27
· New England(CPU).=13
· Indy(HUM)=42/58
· New England(CPU).=45/55
· Indy(HUM)=27 pass/29 runs
· New England(CPU).=35 pass/16 runs
IndyHUM)
=OFFENSE
=QB Manning, 12/27, 192, 2td, 3 ints, 2 sacks
=RB James, 22/114, 1td(74 yards), 2 fumbles
=O-LINE 7 pancakes
Indy(HUM)
=DEFENSE
=KEY DEFENSIVE PLAYER, Robert Mathis: 7 tackles, 6 sacks,
1 forced fumble
=LB's,21 tackles
=D-LINE,13 tackles
=PUNTS,6
New England(CPU)
=OFFENSE
=QB.Brady, 19-35/175 yards, 0td, 4int, 9 sacked
=RB Dillon, 13/141 1td(89 yards), 0 fumbles
=O-LINE 8 pancakes
New England(CPU)
=DEFENSE
=KEY DEFENSIVE PLAYER, McGinest: 6 tackles, 1 sack, 1 int
=LB's,15 tackles
=D-LINE,5 tackles
=PUNTS,6 punts
=Indy(HUM) 289

=New England(CPU). 269
=Indy(HUM) 7 penalties
=New England(CPU). 0 penalties

Still other users went so far as to chart individual plays.

Series 1
11:56 left in Qtr 1
1&10 own 30 run - HB Toss Weak
2&5 pass – Anderson Option
1&10 own 41 run - HB Counter
1&10 KC 47 run – Griffin Blast (Hearst 3p injury)
2&2 pass – Anderson Option
1&10 KC 33 pass – TE Flat
2&3 run – HB Slam
3&5 pass – FL Deep Curl
1&10 KC 16 run – HB Gut
2&11 pass – Strong Flood
3&11 pass – Smith Option
DEN TD (Braindead, 2005, January 4)

This kind of data sharing was followed by commentary from each user about the

relative realism of the generated statistics or simply reported for community observation.

The numbers were then analyzed and evaluated by other forum members to generate

aggregate data about the degree to which *Madden's* statistical model fared against NFL

averages. Where this aggregate data approximated these real world figures, the users

deemed the experience realistic. Where the data did not approximate actual NFL

statistics, users rejected the game as unrealistic.

Given the vested interest these users seem to have in a quantitatively realistic

experience, the previous chapter's discussion of ideologies attached to quantitative

discourses becomes solidified. Users' deployment of numbers as evidence for what

counts as a realistic football experience certainly confirms enumeration as one of this

audience's key forms of communication across space and time. The quantified data they

collect serves as a kind of shorthand for the relation of their experiences in different

physical spaces at different times.

The apparently incontrovertible authority of the number also appears implied in

audience discourses. Users certainly question the validity of the type and range of

numbers they see related by other members of the community, but this data set did not yield one instance where the extensive system of enumeration was challenged. In fact, users appear desperate to yield themselves in trust to the power of the numbers as long as their data matches what they expect to see. The numerical system itself is construed to be entirely legitimate even if its output might be momentarily questioned under certain circumstances.

The plethora of posts consisting of mere data relation also positioned users as calculable selves interacting with calculable others. Users such as Footballfan26, Immortal and Braindead may have contributed little more than their aggregated statistical data to the *Madden* realism project. In posting their findings, these users positioned themselves as the calculable selves described earlier in chapter four. Likewise, sm27, Brit Pitbull and others examining their postings may have interpreted them as nothing more than calculable, data generating others. There were certainly users who went beyond the relation of statistics, however, several posters served merely as data producers in keeping with the notion of a calculable self.

Given the nature of this data collection, this community also positioned themselves as interacting with the calculable others that are the virtual football players themselves. These players became quantified cogs in a machine the audience aimed to twist to produce their vision of realistic football. Whether audience members proposed altering player ratings to change the way the game played or changing sliders to generate more realistic levels of enumerated productivity from the players, these virtual athletes became instrumentalized, calculable others at the behest of the *Madden* user community.

The discussion of *Madden's* realism is as interesting for what is present as what is absent. Given their emphasis on visual realism, users appear blinded to other sensory data that could be brought to their experience of the text. Although sound does enter the discussion in a few places, very little emphasis is placed on the relative realism of the

game's sonic environment. Lack of user attention to the digitized virtual commentary of play-by-play man, Al Michaels, and color commentator, John Madden may be due to the minimal changes to this component of the game from the 2004 to the 2005 version. However, other potential observations about the game's sound appear conspicuously absent. In spite of television's improved broadcasting of the sport's audio via devices such as on-field parabolic microphones held by technicians on the sidelines and wireless microphones attached to individual players, users appear to take these developments for granted in their expectations of a realistic experience. For this set of users, these kinds of sounds seem to pre-exist the experience and therefore fail to generate anything noteworthy[30].

Similarly (although again, there remain a few exceptions), very little attention is paid to the game's tactility via commentary on the interface and/or control set. Where *FNR2* introduced 'Total Punch Control' as a new way to fight to its boxing game audience, *Madden 2005* launched what EA nominated 'the passing cone' as a way to better simulate a quarterback's awareness and experience. As with *FNR2*, users were asked to learn an entirely new offensive play mechanic. However, extended discussion of the new feature in this data set failed to appear. In focusing on what they could see in *Madden's* graphics or generated numbers, *Madden* users betrayed the dominance of the eye in terms of what counted as a realistic digital football experience.

---

[30] Strangely enough, *Madden Football 2006* for the Xbox 360 features an explicitly radio style of commentary describing the action. This version effectively returns this aspect of the game to the pre-television and pre-John Madden as commentator era. However, even as the television commentary is exchanged for radio commentary, *Madden 06's* on-field sound arguably follows recent developments in television's audio football coverage by injecting more of the kinds of sound captured by wireless microphones attached to players.

"Looks like we may have nailed it"—Fixing *Madden '05*

Perhaps more interesting than the evidence offered as proof of *Madden's* lack of realism was the action users took to deal with what they perceived to be these visual and quantitative problems. The patterns of information seen here can be widely observed in other digital sports game discussion fora concerning the relative realism of a given sports game. In examining these *Madden* message boards, we find users willingly express themselves through discourses of experimentation as part of a collective pseudo-scientific community project designed to make *Madden* more visually and quantitatively realistic. Like users' emphasis on visual and quantitative realism, these scientifically-informed patterns of discourse served to gender their activity masculine.

Much like the dynasty writers discussed in the previous chapter who protect their serial narratives from feminization by deploying numbers and in concert with their emphasis on perceptual realism, forum users may also deploy these scientific discourses as a way to gender their activity masculine and insulate their activity from critique. Attaching scientific terminology to their video game play lends their actions the cultural and social capital associated with a theoretically more justifiable masculine, technologized enterprise.

As part of their scientific project, these users aim to master the software that is *Madden Football*. Like the scientists from whom they borrow this methodology of mastery, *Madden* users aim to bend the game to do their will such that it provides them with the domination they desire. At least one user explicitly outlined the otherwise implied masculine nature of the realism production project in responding to another poster, "I myself and GMBreaker, BritPitbul, Adembroski2, Fj47, and a whole lot of *the men* I have listed in the "Credits" post, (post #10) Have spent SO much time on this…" (sm27, 2005b, January 4, emphasis mine). Whether sm27 truly knows the sex of those working on this project is open to speculation, especially given posters with the

usernames 'Lisa Bonami' and 'Samantha', but posts like these assume the masculine orientation of the process. For these users, to perform their project rationally is to act scientifically. To act scientifically is to perform their masculinity in dominating the technological environment in which they live.

As they relate their thoughts and ideas, users explicitly follow the long lineage associating football with rational, scientific discourses by nominating their activity in scientific terms. In wanting to encourage further experimentation, King V2k5 (2004, December 11) exhorted fellow users saying, "Keep it commin' guys...you'll be deserving of some sort of 'Nobel Prize' as the true research scientists of 'Sliderology'...." Lombardi (2004, December 13) described his efforts as occurring in his "slider lab." After some initial trials, sm27 (2004, December 3) evoked a scientific methodology in declaring, "Our next step should be to come up with a controlled cohesive method to experiment and test and get this done." eTopps (2004, August 13) related gratitude to "everyone out there testing." A survey of the Madden Mania thread entitled "1st Against the Run/31st Against Pass" revealed the word 'test' and its derivatives appearing 287 times over a three and a half week period. One could certainly turn to other threads and easily find similar kinds of results emphasizing the import of this kind of scientifically informed testing.

Not only did users identify the scientific nature of their work, but they also consistently pointed out the importance of working in the context of this pseudo-scientific community to accomplish what they perceived to be the immense nature of the task at hand. nsantos (2004, December 4) insisted on the collective effort of the community in volunteering help to other forum members, "i´m offering to run some tests with you, but remember, this must be a team work, not individual." Later in the same thread, sm27 (2004, December 4) thanked the community for their input in stating, "I know it is a lot of typing and recording of stats to finally once and for all figure this stuff out, but they're

is NO WAY I was going to do this myself, I am glad we are working together on this…."

Brit Pitbull (2004, December 9) also expressed this need for community involvement,

> the point of this thread is to get as much input and contribution
> from from the madden players out there, so that we can actually
> really nail the gameplay and finally allow people to have their best
> games. One or two people cannot do this, it takes feedback and
> ideas from a range of people to imagine, create, and test
> everything. So all input is greatly appreciated.

At times some forum members chastised others who failed to function within the

scientific paradigm they had delineated for the community. sm27 (2005a, January 4)

seemed particularly upset with posters like Vikes who apparently were not taking the

project seriously enough,

> Vikes we are not here to address your every complaint about
> gameplay if you don't even know how to adjust sliders for your
> own style of play.
> Every single question you have posed in this thread and the old one
> was covered on earlier pages. I put a table of contents in this
> thread, if you must know, just for you and your whining in the
> other thread. What the hell am I supposed to do with your last post,
> All you are telling me is that once again, you expect me or
> somebody else to do all of the work for you. You expect the game
> to work perfectly for you. You have contributed nothing to this
> project and just expect us to do everything for you. You are not
> exhibiting the behavior that this thread and our project is all about.
> In case you didn't bother to read it, this is a TEAM EFFORT. All
> with a common goal of helping each other along VERY SPECIFIC
> LINES of testing.

With these kinds of posts, one surmises that this kind of collective project served as a

form of fraternal bonding in which a masculine pseudo-scientific community accepted a

challenge, moved forward in attempting to overcome the challenge and then worked to

complete it.

It would seem that this kind of scientific framing of their activity, whether it

meets the standards of legitimate science or not, appears as an implied defense against the

stereotype of the passive, juvenile, adolescent gamer. These users certainly maintain the

gendered aspect of this masculinized stereotype; however, their activity implicitly

defends them against charges that they are wasting time in a state of cathode-ray

digitally-induced stupor. To be exploring the vistas of quantified space and practicing endless tinkering of a plethora of variables within a self-proclaimed experimental paradigm positions these users far outside of this stereotypical image. Play then becomes legitimate in the virtual laboratory the community creates.

Statisticians Thorn and Palmer (1985) argue something similar about the origin of statistics in legitimating the sport of baseball in the game's early years stating, "statistics elevated baseball from other boys' field games of the 1840s and '50s to make it somehow "serious," like business or the stock market" (p. 9). Thorn and Palmer go on to describe the enthusiastic reception of baseball statistics at a science and technology exposition in 1876. To quantify what was otherwise play was to place baseball on the same cultural level as the innovative machines on display at this Centennial celebration. Much like baseball's pioneers and those who reported on them in the popular media, this *Madden* audience appears to place a strong emphasis on scientifically-informed quantifiable processes in order to lend their activity purpose akin to laboratory experimentation and distance it from wasteful play. To enumerate the results of their hours of activity is to justify it with a more serious masculine ethos.

Conclusion

This chapter has provided insight into how audiences understand their experience of the digital sports game through an analysis of *Madden* fan discourse reported on the popular digital sports game websites, *Madden Mania* and *Operation Sports*. This audience study revealed fan fixation on the game's visual realism and quantitative realism and improved on prior audience studies of realism by providing organic data from its subjects. Fan emphasis on this visual and quantitative realism and their scientifically informed project aimed at addressing *Madden's* realism situated this audience within a longer tradition of conventionally masculine discourses. These

masculine discourses served as a buttress against popular stereotypes of the juvenile, adolescent male gamer as an anti-social time waster.

This chapter also extended the previous chapter's discussion detailing the significance of quantification in the digital sports game by looking to the genre's fans for the ways they interact with these ubiquitous numbers. The results suggest that fan activity certainly follows from the way games like *MVPB '05* and *Madden* position their users as calculable selves interacting with calculable others.

To extend this discussion and engage this fan behavior more critically, we might consider how this fan activity functions within the context of the game community. Although they rarely, if ever, acknowledge their activity as labor, these *Madden* users appear to be performing just this kind of action. Albeit uncompensated labor. A cursory survey of sports game message boards reveals that companies like EA Sports profit from these dedicated fans in that potential consumers often wait to purchase the game until a realistic slider set has been created. Certain users develop reputations as 'slider gurus' as a consequence of their commitment to experimenting with the game's variables on behalf of the sports game community. Their unofficial capacity as game testers effectively serves both the interests of EA and other users who look to them for help. Instead of rejecting a sports game on the day of its release after hearing about how its simulation engine might be 'broken' or how the game might fail to meet the community's ideals, some users carefully monitor sports gaming message boards and allow the 'slider-ologists' to fix any of the game's apparent problems. It is only when this testing process has been completed that they move to purchase the product.

The most ardent laborers appear to acknowledge the arduous nature of the task to which they've committed themselves. 'Brit Pitbull' lamented the tedium inherent in this experimentation, "I never want to sim a league ever again. I've just simmed the same season literally dozens of times, maybe 50 or 60, with all manner of different coach

sliders" (1ˢᵗ Against the Run, MM). 'sm27' echoed the spirit of 'Brit Pitbull's' comments

in posting,

> I myself and GMBreaker, BritPitbul, Adembroski2, Fj47, and a
> whole lot of the men I have listed in the "Credits" post, (post #10)
> Have spent SO much time on this, I mean an UNBELIEVABLE
> amount of time, (I have put over 360hrs into this myself)….Posting
> results, analyzing data, drawing conclusions and finding out that
> you are wrong about something. Believe me, it isn't any fun at all.
> This is all Very dry and monatonous.   …I spent 4 1/2 days
> being extra careful to put as much information as possible into the
> first 10 posts in this thread, and also being as thorough and clear as
> I possibly could be to make it all understandable. I have included a
> fully functional table of contents right at the very top of page 1 of
> this thread. (Madden Manifesto, MM)

This kind of activity appears a vivid illustration of what new media scholar

Terranova (2000) defines as 'free labor'. Terranova describes free labor as the result of

developments fostered in advanced capitalist societies when "work processes have shifted

from the factory to society…." (p. 33). She characterizes free labor as entirely voluntary

and uncompensated activity that is simultaneously rewarding and exploited. Terranova's

examples of free labor include the construction of websites and other virtual spaces, the

modification of software and participation on mailing lists. In drawing upon Barbrook's

discussion of the web as a space in which people freely exchange information with their

only social obligations being generated by "gifts of time and ideas" (quoted in Terranova,

p. 135) and his notion of the "gift economy", Terranova moves us to consider the

collective knowledge generation invoked and encouraged by the social networks of the

internet as a form of labor outside the parameters of traditional waged labor.

Seemingly endless user adjustments to *Madden's* game sliders appear to generate

this kind of free collective knowledge labor EA can rely on season after season and

incarnation after incarnation. Although EA employs game testers very cheaply, the

conventional question and answer processes inherent in this testing cannot come close to

the level of scrutiny an ostensibly finished product undergoes once it hits the market.

Given the limited nature of game testing and the ways the process often fails to satisfy

gamers, these users might be deemed pseudo-testers as they do the work of generating sliders other users can employ to enhance their game experience. An informal glance at a variety of sports game message boards reveals that many users refuse to dedicate themselves to a long term dynasty experience until a solid set of 'realistic' sliders has been released by the community's slider gurus.

Whether EA's programmers and producers actually use information from these users is open to question even though some of these fanatical posters have been known to have received job offers from the company. However, these kinds of hirings prove to be the exception rather than the rule. As such, EA might be charged with exploiting these users' free labor in order to enhance their fiscal bottom line, but in doing so, they would only be following the advice of commentators who argue that one must enable users to have input into a website in order to keep them returning. Providing a slider set theoretically enables *Madden's* design team to offer a video game analogue to a website built by its visitors and enables the potential for the appearance an "open source" product (one in which a piece of software's underlying code is made available for alteration) in an otherwise relatively closed source console gaming environment.

However, as Terranova notes in her essay about new media producers, EA's inclusion of a feature like the slider blurs the boundary between "production and consumption" (p. 34). As these dedicated users consume the product, they become complicit in the production process as they labor to create an enjoyable experience for themselves and for other users. Ironically, the fact that these users go to such great lengths to generate what they perceive to be a realistic football experience would seem to ultimately dissuade *Madden's* designers from producing the very experience these users desire. Even though these users appear relatively knowledgeable about the context of the game's development in their critique of EA, they appear blind as to how their labor makes them complicit in the product's failure to meet their expectations. It would appear

that EA can freely market and sell their sports games with only a tacit concern for what counts as realistic confident in the knowledge that their customers will do the work of making the game realistic for them. An argument could be made that EA's inclusion of game sliders under the guise of individual freedom to play the game as one wishes effectively releases the designers from preoccupation with the labor needed to generate a realistic game. Optimistically, these additional labor resources could be employed to create improvements that would make *Madden* a more enjoyable gaming experience, but cynically, this labor could be employed to seduce users into purchasing a product whose only innovations come from, in the words of a poster quoted above, a "gimmick dog and pony show."

CHAPTER SIX

CONCLUSION

This dissertation has aimed to build on Wenner's (1989) claims about how the culture of sport is changed as it is mediated by examining the mediation of sport through the digital game. Each one of the chapters here has provided an example of how this new medium influences the way in which sport is understood be it through an analysis of the game texts themselves or through an audience study detailing responses to these texts. This project has also alluded, in varying degrees, to the ways in which these games position users and mediate the body throughout. The social and cultural site that is modern sport would seem to be ideal for investigating how the body so important to its material practice comes to be represented and engaged in virtual space.

Chapter two examined the mediation of the body in EA's boxing game, *Fight Night Round 2*. In this section, I drew on new media theorists proclaiming the freedom of the mind from the body to consider how the new medium of the digital game translates the highly corporeal sport of boxing in *FNR2*. I argued that even as the game aims to deal with this freeing property of new media through its attempt to reinscribe the body's importance into the gaming experience, its avatar construction system and kinesthetically iconic interface leaves *FNR2's* boxing body at the level of informational pattern. The avatar construction system represents the body as an externally observable and pliable object rather than rendering it an internalized and identified with subject. The construction of the face and body that could feasibly generate an empathetic connection between user and their virtual fighter comes undone with the ways in which the creation system operates to generate distance between the two.

The chapter also addressed *FNR2's* kinesthetically iconic control set. The critically lauded 'Total Punch Control System' seemingly intended to close the distance between user and the boxing body still falls short of constructing the seamless identification between user and avatar. Even as the 'Total Punch Control System' moves increasingly in the direction of simulating the trajectory of a real world fighter's punches, those punches coming from the game's virtual opponent fail to register with any significance both on the body of the user and on the user's ability to act through the control set. The control set also naturalizes offensive fighting by making attacking more intuitive than defending thereby further distancing users from a boxing body susceptible to damage. As such the identification users might otherwise experience in relating to real world boxers through the Total Punch Control System fails to mediate the sport in a way that adequately communicates its highly corporeal nature.

Chapter two's relation to new media suggests we not only consider how the body might be imbricated in new media, but also that we question the degree to which we can celebrate the freedom from the body advocated by some strands of aforementioned new media scholarship. This specific case study teases out the implications of how an avatar construction system and interface in digital media can deemphasize and potentially eliminate crucial facets of material, bodily experience. This eliding becomes especially important when the activity being mediated is fraught with questions of race, class and gender like the sport of boxing (see Sugden, 1996). Even as it attempts to inscribe the body into the user's interaction with the game, *FNR2's* elision of important aspects of bodily experience positions users to shift attention away from the heavily inflected raced, classed and gendered culture of boxing toward a preoccupation with an experience that effectively distances them from the importance of the body to the sport. An analysis of a text like *FNR2* alerts us to the importance of critically evaluating the implications of

digital technologies in terms of what a specific experience with new media includes and what it erases as the mediation process occurs.

Chapter three extended the discussion of user positioning and the body in new media by considering the ways in which *Tiger Woods PGA Tour 2004* both challenged and reinforced hegemonic classed, gendered and raced ideologies associated with bodies participating in the sport of golf. In taking on some of these ideologies, the game presents users with a broad array and diversity of opponents introducing them to representations of golfers that could serve the interests of women and ethnic minorities—those bodies traditionally marginalized by golf culture. *TW 2004's* Game Face feature theoretically opens up the game of golf to these marginalized groups who might not be allowed to play on some of the real world courses they can challenge in *TW 2004*. All of these features provide the potential to change users' perceptions of the sport and may even position some to begin participating in the game.

In this sense, *TW 2004* serves as an exemplar of how new media may create a symbolic space of bodily participation for those without access to restricted material space. The young, female, Hispanic-American living in an inner city apartment can virtually experience the otherwise inaccessible seaside fairways of Pebble Beach. An elderly, African-American man living in the rural south can virtually experience the lush forest and greenery of Seattle's exclusive Sahalee Country Club. The digital game's penchant for allowing its audience to 'get behind the screen' via its interfaces and three dimensional worlds over and against television's relative flatness alters the way subjects experience what their senses imbibe. Subjects no longer experience what they might be seeing and hearing from afar, but inhabit what they see and hear through the medium of the digital game. Whether we can claim this symbolic occupation of space provides a viable substitute in the context of the limitations of the material is an important question

that needs to be asked of users and goes beyond the immediate scope of this project,[31] however, the experience offered by a game like *TW 2004,* at the very least, affords the possibility of that outcome. Whether users take their experience from the digital tees and greens of the game world to the material tees and greens of the real is also a question that might be considered, but *TW 2004* provides the potential for the question to be raised.

The freedom offered bodies in *TW 2004* also extends to the ways in which the Game Face feature opens up a space of play with and for bodily identity. With its myriad options for constructing one's digitized on-screen representative, users are positioned to virtually occupy a body approximating that of their own choosing. Selecting a character of a different sex, race, age or ethnicity becomes a relatively easy way to virtually experience otherness. If we associate the body with subjectivity, the kind of openness afforded by *TW 2004* operates in keeping with the arguments of Turkle (1995), Poster (2001), Filiciak (2003) and Haraway (2003) about how new media generate the potential for new forms of subjectivity. It would seem these scholars would welcome the opportunities a feature like Game Face elicits.

However, even as these forms of freedom and new opportunities to experience inaccessible real world spaces might be available to *TW 2004's* users, this freedom remains ensconced within traditional frames of material experience. Where the analysis of *FNR2* responded to the celebratory new media theorists by urging a critical engagement with the implications of new media texts for the interpretation of their material analogs, the analysis of *TW 2004* suggests we must examine the specific contexts in which these alleged new media freedoms occur. To examine the ways in

---

[31] Recent developments in Massively Multiplayer Online Role-Playing Games would suggest the freedom offered by the virtual may certainly become a viable substitute for the limitations of the material. When certain users pay thousands of dollars for virtual edifices or tracts of virtual land that outstrip, in their virtual size, anything users could afford in the material world, it would seem that we could plausibly suggest the symbolic adequately stands in for the material.

which *TW 2004* mediates this freedom is to see that we must not jump to celebrate the possibilities afforded by new media in keeping with arguments offered by Turkle, Poster, Filiciak and Haraway, but rather be cautious about the contexts in which these ostensibly new forms of freedom arise. The textual context of *TW 2004* suggests that the freedom the game offers is potentially co-opted in the same way Tiger Woods' detractors have argued that he has been co-opted by conventional golf culture (e.g. Houck 2006). In spite of the freedom offered users by the Game Face feature, several of the game's options, including the lauded Game Face tool, position users to participate in their own potential subjugation to the race, class and gender restrictions associated with bodies and the traditions of golf. Even if the *TW 2004* player might be delighted to hear a hip-hop and rock soundtrack, excited about the prospect of seeing a representation of golfers who are not male, white and wealthy and impressed by a newfound ability to insert a virtual representation of a desired body into the game, they cannot escape from participating in a world where money buys success and a world where this success comes in the context of dominating the traditionally marginalized bodies linked to ethnic, racial and gender stereotypes. The Game Face feature that would seem to offer so much freedom to users desiring the semblance of a golf experience is also offset by the fact the choices made in this game segment make no difference in terms of the represented body's ability on the virtual links. This flattening of bodily skill is furthered by the fact that users are forced to purchase virtual goods as the only way to distinguish their character's ability from that of others and improve their game on the course.

I argued that the tension between the features that would open up the game of golf to those bodies previously marginalized by the sport and those features that close down this potential neatly coincide with Tiger Woods' social and cultural position as one who has been deemed both a pioneer and one who simply walks in the path laid out before him. *TW 2004* replicates the dialectical forces surrounding the way in which Woods, his

multi-racial body and his real life experiences have been interpreted. In the same way that some interpretations of Woods have represented him as a progressive figure in the golf world, *TW 2004* could be praised for the way in which might generate interest in the game of golf among an audience who might otherwise never consider participating. At the same time, *TW 2004* could be critiqued for the way it reproduces ideologies attached to bodies and golf culture the way Woods has perpetuated these ideologies.

Chapter four continued the examination of the digital sports game's positioning of its users as I analyzed the important place of the quantification in the genre through the lens of *MVP Baseball 2005*. I examined numbers first as a medium of communication and then as a power mechanism in the digital sports game before relating some of the potential results of this focus on quantification. In applying the ideas of communication theorists, I argued that numbers in *MVPB '05* enable users to interact with the game world across virtual space and time. Quantification enables the space and time of the game world to be understood in the space and time of the user's world. I also applied the work of communication scholars to argue that the ubiquitous quantification of *MVPB '05* also positions users to exercise power over the game world. Users can order the hierarchy of virtual athletes and teams in order to make choices about what will best serve their interests.

What kinds of power might users be exercising as they survey reams of statistical data in order to arrange their pitching rotations and batting lineups? We might apply Hacking's (1982), from Foucault, notion of biopower to speak to processes associated with the historical quantification of the body. Hacking quotes Foucault's assertion about how biopower exercised in the nineteenth century transferred "life and its mechanisms into the realm of explicit calculation and made knowledge-power an agent of transformation of human life" (quoted in Hacking, p. 279). As Hacking makes quite clear, this quantifying mechanism certainly had its historical roots in print. However new

media's capacity to store, aggregate and process enumerated information extends the reach and influence of biopower to increasingly detailed domains of life such that many experience portions of the world via the mediation of the quantitative.

It would seem that virtual sport and the bodies of its athletes would be no exception. The annual excitement surrounding the release of individual player ratings in the *Madden* series appears to manifest this tendency. Although perhaps not as anticipated as the release of the game itself, the publishing of player ratings with each iteration of *Madden* furthers considerable debate and discussion among members of the digital football community. When athletic aptitude and temperament become entirely quantified as an accepted and necessary part of the digital game, it seems plausible to argue that users internalize this enumeration process such that biopower impinges on their experience of the world and arguably moves them to interpret their bodies, their bodily production and that of others through a quantitative, instrumentalizing lens. As a consequence users potentially interiorize (Ong, 1982) a quantified and quantifying mode of subjectivity. Where older forms of media enabled a select few to exercise biopower as subjects, a new medium like the digital game disperses the exercise of this power to the realm of the virtual athletic body. As users exercise this virtual form of biopower, they may end up blinded to the material effects of biopower and/or perceive its purview as natural and inevitable. No one wants to be treated as 'just a number' and yet the new medium of the digital sports game would seem to naturalize precisely this kind of position, both from above and below. The digital sports game's emphasis on the number and the power behind its processing would seem to exacerbate and extend developments in older media's manifestations of biopower begun roughly two hundred years earlier.

The internalization of quantitative discourses was borne out in the second section of chapter four where I argued that the stress on quantification in a game like *MVPB '05* positioned users as calculable selves interacting with calculable others and plausibly

explained users' narrativization of their experiences. The calculable self and the calculable other appears to increasingly be the abstracted, quantified body of new media. The profile feature in *MVPB '05* tracking the user's bodily movements renders users calculable selves as they aggregate data about their own performance in the game. Users would also seem to be subjecting themselves as calculable selves in bringing this data to their dynasty narratives. Who these users are in terms of their bodily production becomes the net result of their quantifiable subjectivity. The presence of numbers in *MVPB '05* also positions users as interacting with and imposing a version of biopower on calculable others. Whether these others might be the virtual athletes themselves or other users, it would seem that this transformation of the other into a calculable other renders them an instrumentalized body.

The users' considerable engagement with the numbers in the digital sports game also encouraged the prolific production and consumption of narratives related to their interaction with the game. Given the ways in which numbers potentially abstract and efface personal experiences, it seems that users have responded to the immense amount of enumeration and the concomitant instrumentalization of the body in digital sports games by generating narratives of their respective trials, tribulations and successes for the consumption of other users. These narratives serve as a response to the calculable self and the calculable other even as the experiences of the digital game position users as such. Consequently, they become an attempt to vivify and more fully manifest the user's subjectivity over and against the abstracted, potentially alienated, calculable body of new media. However, this fuller sense of subjectivity is limited at the level of gender in that the serial mode of storytelling often linked to the soap opera and associated with femininity is accompanied by the inclusion of numbers. It seems users include these numbers to preserve the masculine orientation of their activity.

In some respects, chapter five became a litmus test for gauging the degree to which the digital sports game audience responded to ideologies depicted earlier in this project, specifically chapter four's discussion of quantification. This chapter provided insight into how audiences understood their experience of the digital sports game through an analysis of *Madden* fan discourse reported on the popular digital sports game websites, *Madden Mania* and *Operation Sports*. This audience study revealed fan fixation on the game's visual realism and quantitative realism and improved on prior audience studies of realism by providing organic data from its subjects. Fan emphasis on this visual and quantitative realism and their scientifically informed project aimed at addressing *Madden's* realism situated this audience within a longer tradition of conventionally masculine discourses. These masculine discourses served as a buttress against popular stereotypes of the juvenile, adolescent male gamer as an anti-social time waster.

This chapter also extended the previous chapter's discussion detailing the significance of quantification in the digital sports game by looking to the genre's fans for the ways they interact with these ubiquitous numbers. The results suggest that fan activity certainly follows from the way games like *MVPB '05* and *Madden* position their users as calculable selves interacting with calculable others. These findings demonstrate that the fans themselves appear to have integrated the abstracted, quantified body into their understanding of what constitutes a realistic experience of football. If the production generated by the quantifiable, new media body does not match the production of the quantifiable body of material sport, then this group of fans refuses to acknowledge the new media version as realistic. The fans' desire for this data correlation suggests the possibility they have internalized what it means to be subject to and to subjugate the other to the enumerated discourses of biopower. The evidence offered in this chapter implies that audiences of new media willingly accept the ways in which ideologies position them as long as they are provided the flexibility to work within the boundaries the ideology's

producers have established. Like the freedom offered users with *TW 2004*, this freedom

to bend and twist one's experience is framed within the parameters of ideologies

articulated to older forms of media.

Each of these chapters suggests the potential for the new medium of the digital

game to alter our experience of sport and the body. The body's central role in material

sport makes its digitized counterpart a useful cultural site for examining how the body is

translated as it is virtualized. In all of the case studies above, this mediation of the body

in the digital sports game opens up space for identification with new forms of experience.

Whether this be a deeper appreciation of the boxer's craft through the interface of *FNR2*,

access to previously restricted spaces of golf through the Game Face feature in *TW 2004*

or the communicative efficiencies offered by quantified attributes of the baseball and

football player in *MVPB '05* and *Madden '05*, these forms of experience plausibly follow

from the arguments offered by Moravec, Haraway, Gibson and Stone as to how new

media enable the potential for novel subjectivities. In each of these sports games, the

user's mind is largely freed from the constraints of the material body such that users can

virtually experience and perform things not possible in the real world. As I alluded to

earlier, we may question the degree to which the experience of the virtual serves as an

adequate substitute for what a user cannot do with their own physical body, but new

media plausibly suggest the potential for this substitution to occur.

However, the textual analysis performed here should move us to address the

implications of new media for interpreting bodily, material experience and the specific

contexts in which these possibilities arise, contexts which broach questions about the

broader theoretical conclusions relevant for new media's relation to the body and

subjectivity. Scholars such as Nakamura (2001) have critically questioned the potential

of new media to free us from the constraints of the material body in the context of the

chat space LambdaMOO. As Nakamura has considered the specific context of

LambdaMOO, so this dissertation has examined the specific context of the digital sports game in addressing a similar idea. The avatar creation system and kinesthetic iconicity of an interface in *FNR2* generates distance from rather than empathy with one's digitized representative while erasing key aspects of boxing culture. *TW 2004's* Game Face feature that would theoretically allow for experimentation with the body occurs in the frame of sexist, racist, ageist and capitalist discourses. The heavily quantified athletic body and, via the software's tracking mechanisms, the quantified user's body of *MVPB '05* and *Madden '05* mitigates against the potential for stepping out of these enumerated discourses—a mitigating potential the users appear to affirm as they work tirelessly to bend the game to yield the numerical data they desire. In each of these specific contexts, the mediation of the material body has important consequences for our understanding of sport, and by extension, our understanding of our virtual and material experience.

At this juncture, this project has the potential to be extended to more broadly speak to questions about interactivity, forms of freedom and power in the digital age and how the information society functions. I have only touched on a select few examples of how interactive new media technologies simultaneously open up and close down the potential for new forms of subjectivity to emerge. Even as this dissertation opens up a space for considering the ways in which the apparent freedom offered subjects within new forms of interactivity such as EA's digital sports games, this analysis needs to be applied in other new media contexts to better situate its conclusions. This project begins an investigation into the kinds of promises offered by optimistic new media theorists and the respective technologies' corporate marketeers alike as they present their audiences with ideas about the virtues of interactivity. Broadening the socio-cultural focus of the analyses performed here serves as a springboard to future thinking about new media's place in our experience of the world.

This critique begun here also becomes important in the context of how we define what it is to be human. As more and more of our labor and leisure time is spent mediated by digital technologies, we might consider how the ontology of humanness changes as we increasingly and willingly submit ourselves to the binary calculus of the virtual realm. As part of this inquiry, we could ask about the degree to which biopower impinges on our experience and examine its consequences more fully. Investigating the similarities and differences between the more explicit forms of biopower inherent in the quantification of credit and tax information and workplace productivity and the more subtle forms of biopower that would seem to be coming to the fore as the zeroes and ones operate tirelessly 'behind' the virtual spaces of our forms of leisure. Whether we become increasingly less human as we become more calculable to ourselves and to others is a question requiring further scrutiny.

<u>Contributions to the Field</u>

This project contributes to sports studies scholarship by adding another dimension to sports-media studies and digital game studies. Even though digital sports games have been in existence for three decades, sports media and digital games scholars have been slow to study them. Prior work in the field of sport and the media has engaged how the culture of sport has been changed as it has been mediated by print, radio, television and the internet. Digital games scholars have attended to the first person shooter, role-playing and strategy genres. However, this dissertation serves as the first extended examination of the digital sports game addressing the sport-media relation and the sports game genre. Both sport studies and digital game studies scholars have yet to take this form of experience seriously—an avenue through which many come to deeply experience sport in new ways. It is my hope that this project both alerts academics in the field to the previously untapped potential for further inquiry while motivating them to perform this kind of work in the future.

This project also aims to provide sports game designers and perhaps, game designers more broadly, with a deeper understanding and critical awareness of the ways in which their production of these games communicates assumptions about cultural processes and the values informing them. A cursory survey of articles from prominent digital game industry production site, www.gamasutra.com, reveals designers spending an inordinate amount of time focusing on the use of increasingly powerful computing technologies without an accompanying concentration on the broader significance of the cultural and ideological implications of their creations. Even as the seeds of this kind of critical awareness are beginning to germinate, the majority of game designers at this juncture in the medium's history appear more concerned about what their game's graphics look like, how its characters move, its capacity to become a franchise, whether or not it might be 'cool' or how well it sells than what their game might be communicating as a 'cultural system' (Salen and Zimmerman, 2005). Both the methodology I have employed and the conclusions I have drawn from this study provide designers with new insights into how to more effectively and carefully consider the outcome of their production. To make game designers more aware of how a critical gaze might improve their creation potentially lends their activity greater cultural legitimacy and enables the medium to become a greater force for positive social change. To elide this critical awareness is to leave games, gamers and game producers themselves at the margins of cultural legitimacy and relegate their work to an historical footnote.

<u>Future Directions</u>

The strengths of this project concern the depth of textual analysis performed. In examining these texts, I have provided a framework from which to engage other aspects of the digital sports game as communication. With this analysis, I have proven that the digital sports game is not merely a benign entity users, digital games scholars and sports media scholars can uncritically ignore. Instead, these texts provide rich insights into how

this aspect of the sports-media complex changes and challenges the culture of sport as it is mediated by this new medium.

Considerably more research can still be done in following up, extending and complementing the project begun here. Many avenues of further scholarship avail themselves with only a few appearing below. The following multiple possibilities suggest the extensive limits of the project I have completed here.

One could certainly address the digital sports game industry. The analysis of these texts can now be brought to producers in order to assess whether and/or how their intentions (as these intentions can be ascertained and articulated) have been communicated to users. Bringing chapter two's discussion of the mediation of the boxing body in *FNR2* to EA Chicago or chapter five's study of *Madden 2005* audiences to the Tiburon Studios in Florida could open up a dialogue with producers about their design strategies and game development processes. It would seem that interviews concerning designers' understanding of concepts like 'realism' and questions about their reliance on quantitative discourses needs to occur in order to gain a deeper sense of why we have the sports games we do.

On a broader level, the political economy of the sports game industry might be studied, especially with regard to EA's relatively recent acquisition of exclusive rights to National Football League games and Take Two's reactionary acquisition of exclusive rights to Major League Baseball games. Researching the history of licensing of team logos and player names could provide us with a fuller description of why these properties have become so valuable. A critical essay into EA's marketing strategies and attempts to position their products in other forms of media could also lend insight into the nature of these games as cross-mediated commodities. Kline, Dyer-Witherford and de Peuter (2003) have provided a broader examination of the political economy of the digital game

industry, but a focused study on a popular genre like the sports game could supplement their work.

Further work could also be done in examining how sports fans construct the experience of fandom in digital sports spaces. It might be interesting to study the ways in which new media discourses suggesting the possibility of freedom from material world subjectivities reflect upon users' subjectivities as they negotiate allegiance to their supported team(s) as they play these games. How might users be dealing with the potentially contradictory combination of a desire to beat a computer or human opponent, the instrumental value of a given team or player in the digital space and their loyalty to a sports organization or athlete? Do users remain aligned with material world allegiances and subjectivities or can users cast off these allegiances the way MMORPG users cast off gender identity? Do these games enable users to develop hierarchies of fandom in which they might be willing to use a team other than their material world favorite for a better chance to win against a friend or online opponent? If so, how might these secondary, digital loyalties reciprocally influence this fan's behavior outside of the digital game context both with respect to their favorite team and their adopted team? Investigating fandom in relation to sports games could prove a fruitful site for studying new media subjectivities.

The textual analysis of the digital sports game might also be extended to areas I have not considered here. Certainly one of the potential avenues of future text-based research concerns sound in digital sports games. In the late 1980s and early 1990s, sports games began to integrate rudimentary broadcast commentary into gameplay such that it would describe the action as it unfolded. The challenge for game designers became how to keep the commentary from quickly becoming repetitive—a challenge that in many respects remains as of this writing. Examining how the real voices of broadcasters like Al Michaels and Marv Albert are sampled and then quickly pieced together to create

game narratives users hear could enable us to gain a better sense of the intersection between the digital sports game and its representation in other media like radio and television. Although a scholar like Jeremijenko (2005) has taken up the questions of voice and speech recognition chips in considering technologies like talking watches and greeting cards, dealing with the dynamic reconstitution of real world voices in constantly variable digital space seems a slightly different project. Other kinds of sound in digital sports games might also be examined in conjunction with this look at reconstituted broadcast voices. Future research could attend to the nature of ambient and atmospheric sound within the arenas and stadiums of virtual sport. One might also query users as to why sound seems so frequently neglected in their online communication about the game. Outside of complaints that the commentary might be repetitive, it seems users rarely make reference to how games sound. Further consideration of this aspect of the sports game design should lend further insight into how producers conceptualize and understand their activity.

Conclusion

Where does the digital sports game go from here? Will its audience ever dissipate and tire of the yearly updates? Will sports game designers and project teams crumble under the pressures of having to produce new features with each annual upgrade to an existing sports game franchise? What will happen when one company successfully hits the elusive target that is photorealistic graphics? These questions are obviously difficult to answer. Fifteen years of EA's highly successful development, publishing, marketing and distribution strategies would suggest the EA Sports juggernaut should continue along its merry way. However, even as its highly profitable history would suggest a similar

kind of future, a few of the company's recent fumbles imply that continued success can hardly be ensured.[32]

Sports games may increasingly move in the direction heralded by *FNR2* in which an approximation of real world motion is translated into digital activity. At the most recent Electronics Entertainment Expo in spring 2006, Nintendo wowed attendees with its demonstration of *Wii Sports* (2006), a title to be released for the company's next generation console. Nintendo executives stood onstage in front of a gigantic screen featuring the tennis component of *Wii Sports*. Crowds cheered as they witnessed four executives utilize Nintendo's innovative interface. As they played their doubles match, the executives swung their wireless controllers through the air in order to hit the virtual ball across the net, just as a real tennis player would. They showed off the ability to apply topspin and backspin to the ball via the angle of their swing. Although some commentators joked about whether consumer living rooms would be large enough to house a space of controller swinging tennis players, others lauded the increasing move to what they perceived to be a more realistic experience of sport. Whether Nintendo's version of a kinesthetically iconic interface becomes a model for our future experience of sport or a costly, unsuccessful gimmick remains to be seen.

---

[32] Two of EA's most recent releases, *Madden 2007* and *NBA Live 2007*, have been given a harsh reception by fans and digital game journalists alike. The Xbox 360 version of *Madden* was released without any way for users to identify which players were tiring. When fumbles occur because of player fatigue, a user's inability to identify when a given running back or receiver needs to be substituted for a break on the sidelines can be the difference between winning and losing.

The release of *NBA Live 2007* has been met with even greater criticism. Users have flooded youtube.com with video clips from in-game action revealing players sticking their arms through the backboard as they dunk the basketball, seemingly magnetic hands improbably attracting rebounds and players leaping twice as high as their real world counterparts to block shots. A community of longtime users of the franchise has taken the unprecedented step of sending a collective letter to EA identifying the game's problems and then flooding sports gaming websites with its contents to publicize their position. Whether the letter's widespread publication will have any effect remains to be seen, but at least some sports gamers appear to be looking to it as a model for what might be done in the future if sports games fail to meet their expectations.

What cannot be questioned is that these games are undeniably fun for a considerable number of digital game audiences. Whether this fun derives from user fantasies about participation on real athletic fields, hopes of succeeding with their favorite professional team or recreating sports history, the 'fun factor' cannot be easily dismissed. The immense popularity of the sports game genre suggests that users are still having fun as they purchase each season's iteration of their favorite sport. These games are certainly occupying an important place in the leisure culture of many.

That having been said, this fun factor potentially makes the study of digital sports games that much more important. The entertainment value of these products potentially obfuscates the ideologies guiding and framing the experience of these texts. Without the critical gaze performed in this project, users will ultimately continue to be subjected to the exercise of various strands of power expressed in and through the digital sports game.

BIBLIOGRAPHY

Aarseth, E. (2001). Computer Game Studies, Year One. *Game Studies: The International Journal of Computer Game Research, 1*(1).

Aarseth, E. (2004). Genre Trouble: Narrativism and the Art of Simulation. In N. Waldrip-Fruin & P. Harrigan (Eds.), *First Person: New Media as Story, Performance, and Game* (pp. 45-55). Cambridge, Massachusetts: The MIT Press.

Acclaim Entertainment (1997). *Riven: The Sequel to Myst*. Cyan Worlds Inc.

Anasi, R. (2002). *The Gloves: A Boxing Chronicle*. New York: North Point Press.

Anderson, C. A., & Bushman, B. J. (2001). Effects of Violent Video Games on Aggressive Behavior, Aggressive Cognition, Aggressive Affect, Physiological Arousal and Prosocial Behavior: A Meta-Analytic Review of the Scientific Literature. *Psychological Science, 12*(5), 353-359.

Anderson, C. A. (2004). An update on the effects of playing violent video games. *Journal of Adolescence, 27*(1), 113-122.

Anderson, C.A., Funk, J.B., & Griffiths, M.D. (2004). Contemporary issues in adolescent video game playing: brief overview and introduction to the special issue. *Journal of Adolescence, 27*(1), 1-3.

Anderson, D. (1991). *In the Corner: Great Boxing Trainers Talk About Their Art*. New York: William Morrow and Company, Inc.

Anderson, D. L. (2005). A Portrait of a Feminist Mathematics Classroom: What Adolescent Girls Say About Mathematics, Themselves and Their Experiences in a "Unique" Learning Environment. *Feminist Teacher, 15*(3), 175-194.

Anderson, M. (1992). The History of Women and the History of Statistics. *Journal of Women's History, 4*(1), 14-37.

Anonymous. (2004). Retrieved August 26, 2004 from http://memorycard.blogs.com/ memorycard/2004/06/sports_games_th.html.

Atari (1972). *Pong*. Atari.

Atari (2002). *Neverwinter Nights*. Bioware.

Baerg, A. (2004, November 6, 2004). *Technologies of Government, Freedom and ESPN NFL 2K5*. Paper presented at the Annual Conference of the North American Society for the Sociology of Sport, Tucson, AZ.

Barbrook, R. (1999). The High Tech Gift Economy. In J. Bosma & e. al. (Eds.), *Readme! Filtered by Nettime: ASCII Culture and the Revenge of Knowledge* (pp. 132-138). Brooklyn, NY: Autonomedia.

Baroffio-Bota, D., & Banet-Weiser, S. (2006). Women, Team Sports, and the WNBA: Playing Like a Girl. In J. Bryant & A. A. Raney (Eds.), *Handbook of Sports and Media* (pp. 485-500). Mahwah, New Jersey and London: Lawrence Erlbaum Associates.

Barthes, R. (1972). Myth Today (A. Lavers, Trans.). In R. Barthes (Ed.), *Mythologies* (pp. 109-159). New York: The Noonday Press.

Baudrillard, J. (1983). *Simulations* (P. Foss, P. Patton & P. Beitchman, Trans.). New York: Semiotext(e).

Baudrillard, J. (1988). Simulacra and Simulations. In M. Poster (Ed.), *Jean Baudrillard: Selected Writings* (pp.166-184). Stanford, California: Stanford University Press.

Beasley, B., & Collins Standley, T. (2002). Shirts vs. Skins: Clothing as an Indicator of Gender Role Stereotyping in Video Games. *Mass Communication & Society, 5*(3), 279-293.

Bensley, L., & Van Eenwyk, J. (2001). Video games and real-life aggression: Review of the literature. *Journal of Adolescent Health, 29*(4), 244-257.

Berger, A. A. (2002). *Video Games: A Popular Culture Phenomenon*. New Brunswick, NJ, Transaction Publishers.

Bernstein, A., & Blain, N. (2002). Sport and the Media: The Emergence of a Major Research Field. *Culture, Sport, Society, 5*(3), 1-30.

BezO. (2005, August 9). Re: 8.2 review…Gamespot. Message posted to http://forums.operationsports.com/vBulletin/showthread.php?t=135959.

Billings, A. C. (2003). Portraying Tiger Woods: Characterizations of a "Black" Athlete in a "White" Sport. *The Howard Journal of Communications 14*(1): 29-37.

Black America and Tiger's Dilemma (1997, July). *Ebony 52*(9): 28-33.

Blue Byte (1998). *Settlers 3*. Phenomic Game Development/ Blue Byte.

Blumberg, F. C., & Sokol, L. M. (2004). Boys' and Girls' Use of Cognitive Strategy When Learning to Play Video Games. *Journal of General Psychology, 131*(2), 151-158.

Bolter, J. D., & Grusin, R. (1999). *Remediation: Understanding New Media*. Cambridge, Massachusetts: The MIT Press.

Boyle, R., & Haynes, R. (2002). New Media Sport. *Culture, Sport, Society, 5*(3), 95-114.

Braindead. (2005, January 4). GMBreaker. The end of 1st against run/31st against pass? Message posted to http://www.maddenmania.com/forums/showthread .php?t=77267.

Brit Pitbull. (2004, December 3). The end of 1st against run/31st against pass? The end of 1st against run/31st against pass? Message posted to http://www.maddenmania .com/forums/showthread.php?t=77267.

Brit Pitbull. (2004, December 8). The end of 1st against run/31st against pass? Message posted to http://www.maddenmania.com/forums/showthread.php?t=77267.

Brit Pitbull. (2004, December 9). The end of 1st against run/31st against pass? Message posted to http://www.maddenmania.com/forums/showthread.php?t=77267.

Broderbund (1996). *Myst*. Visual Sciences.

Brown, D., & Bryant, J. (2006). Sports Content on U.S. Television. In J. Bryant & A. A. Raney (Eds.), *Handbook of Sports and Media* (pp. 77-103). Mahwah, New Jersey and London: Lawrence Erlbaum Associates.

Brubaker, J. D. (Producer) & Stallone, S. (Director). (1985). *Rocky IV* [Motion Picture]. United States: Metro-Goldwyn-Mayer.

Bryce, J., & Rutter, J. (2003). Gender dynamics and the social and spatial organization of computer gaming. *Leisure Studies, 22*(1), 1-15.

Bukatman, S. (1993). *Terminal Identity*. Durham, N.C.: Duke University Press.

Bungie Software (2001). *Halo: Combat Evolved.* Microsoft.

Burnett, M. (2005). *The Contender.* Bristol, Connecticut: ESPN.

Buse, P. (1996). Nintendo and Telos: Will you ever reach the end? *Cultural Critique*(34), 163-184.

Busselle, R. W., & Greenberg, B. S. (2000). The Nature of Television Realism Judgments: A Reevaluation of Their Conceptualization and Measurement. *Mass Communication & Society, 3*(2&3), 249-268.

Busselle, R. W., Ryabovolova, A., & Wilson, B. (2004). Ruining a Good Story: Cultivation, Perceived Realism and Narrative. *Communications, 29*, 365-378.

caero. (2005, August 9). Re: 8.2 review…Gamespot. Message posted to http://forums.operationsports.com/vBulletin/showthread.php?t=135959.

Caldwell, N. (2000) Settler Stories: Representational Ideologies in Computer Strategy Gaming. *M/C: A Journal of Media and Culture* 3(5). Retrieved October 2, 2003 from http://www.api-network.com/mc/0010/settlers.html.

Carr, D. (2003). Play Dead: Genre and Affect in *Silent Hill* and *Planescape Torment. Game Studies: The International Journal of Computer Game Research, 3*(1).

Carter, J. M. (1990). Sports Records in Medieval England: An Inquiry. In J. M. Carter & A. Kruger (Eds.), *From Ritual to Record: Sports Records and Quantification in Pre-Modern Societies* (pp. 41-52). New York: Greenwood Press.

Carter, J. M., & Kruger, A. (Eds.). (1990). *Ritual and Record: Sports Records and Quantification in Pre-Modern Societies*. New York: Greenwood Press.

Cassell, J., & Jenkins, H. (Eds.). (1998). *From Barbie to Mortal Kombat: Gender and Computer Games*. Cambridge, MA: MIT Press.

Clarke, T. L., McBride, D. K., & Reece, D. (2002). All But War is Simulation. In A. Miah & S. B. Eassom (Eds.), *Sport Technology: History, Philosophy and Policy* (pp. 215-224). London and New York: Elsevier Science Limited.

Consalvo, M. (2003). Hot Dates and Fairy-Tale Romances: Studying Sexuality in Video Games. In M. J. P. Wolf & B. Perron (Eds.), *The Video Game Theory Reader* (pp. 171-194). New York: Routledge.

Coover, R. (1971). *The Universal Baseball Association, inc., J. Henry Waugh, prop.* New York: New American Library.

CouchPotato94 (2006, August 3). Breaking the Curse: A Cubs Dynasty. Message posted to http://z6.invisionfree.com/GameBreakerCentral/index.php?showtopic=140.

Crawford, C. (2003). Interactive Storytelling. In M. J. P. Wolf & B. Perron (Eds.), *The Video Game Theory Reader* (pp. 259-273). New York: Routledge.

Crosby, A. W. (1997). *The Measure of Reality: Quantification and Western Society, 1250-1600*. Cambridge: Cambridge University Press.

Cummins, R. G. (2006). Sports Fiction: Critical and Empirical Perspectives. In J. Bryant & A. A. Raney (Eds.), *Handbook of Sports and Media* (pp. 185-204). Mahwah, New Jersey and London: Lawrence Erlbaum Associates.

Curlew, A. B. (2005). *Liberal Sims?: Simulated Difference and the Commodity of Social Diversity.* Paper presented at the DiGRA 2005 "Changing Views: Worlds in Play" International Conference, Vancouver, Canada.

Davis, L., & Harris, O. (1998). Race and Ethnicity in US Sports Media. In L. A. Wenner (Ed.), *Media Sport* (pp. 154-169). New York: Routledge.

Dean, M. (1999). *Governmentality: Power and Rule in Modern Society*. London: Sage Publications.

Decker, W. (1990). The Record of the Ritual: The Athletic Records of Ancient Egypt. In J. M. Carter & A. Kruger (Eds.), *From Ritual to Record: Sports Records and Quantification in Pre-Modern Societies* (pp. 21-30). New York: Greenwood Press.

Desrosieres, A. (1998). *The Politics of Large Numbers: A History of Statistical Reasoning* (C. Naish, Trans.). Cambridge, MA: Harvard University Press.

Dill, K. E., & Dill, J. C. (1998). Video game violence: A review of the empirical literature. *Aggression and Violent Behavior, 3*(4), 407-428.

Dominick, J. R. (1984). Videogames, Television Violence, and Aggression in Teenagers. *Journal of Communication, 34*(2), 136.

Duncan, M. C., & Messner, M. A. (1998). The Media Image of Sport and Gender. In L. A. Wenner (Ed.), *Media Sport* (pp. 170-185). New York: Routledge.

Eagleton, T. (1994). Ideology and Its Vicissitudes in Western Marxism. In S. Zizek (Ed.), *Mapping Ideology* (pp. 179-226). London: Verso.

Easton, J. (2005). *U.S. Sales Charts: August 2005 to December 2005*. Retrieved August 7, 2006 from http://www.dsrevolution.com/article.php?articleid=1315.

Eastwood, C. (Producer and Director). (2004). *Million Dollar Baby* [Motion Picture]. United States: Warner Brothers.

Eidos Interactive (1996). *Tomb Raider*. CORE Design Limited.

Eidos Interactive (2000). *Thief II*. Looking Glass.

Ekberg, B. (2005). Fight Night Round 2. *Gamespot.com.* Retrieved February 4, 2006 from http://www.gamespot.com/ps2/sports/fightnight2005/review.html?page=3.

Electronic Arts Inc. (2000). *SSX*. Electronic Arts Canada.

Electronic Arts Inc. (2000). *The Sims*. Maxis.

Electronic Arts Inc. (2001) *NBA Street*. Electronic Arts Canada.

Electronic Arts Inc. (2002). *Medal of Honor: Frontline*. Electronic Arts Inc.

Electronic Arts Inc. (2003). *Def Jam Vendetta*. Electronic Arts Canada.

Electronic Arts Inc. (2003). *NBA Street Volume 2*. Electronic Arts Sports Big.

Electronic Arts Inc. (2003). *Tiger Woods PGA Tour 2004*. Electronic Arts Pacific.

Electronic Arts Inc. (2004). *Madden Football 2005*. Tiburon.

Electronic Arts Inc. (2003). *NBA Street Volume.2*. Electronic Arts Canada.

Electronic Arts Inc. (2004). *NFL Street Volume 1*. Tiburon.

Electronic Arts Inc. (2005). *FIFA Street*. Electronic Arts Canada.

Electroic Arts Inc. (2005). *Fight Night Round 2*. Electronic Arts Sports Chicago.

Electronic Arts Inc. (2005). *Madden Football 2006*. Tiburon.

Electronic Arts Inc. (2005). *MVP Baseball 2005*. Electronic Arts Sports Canada.

Electronic Arts Inc. (2005). *Nascar 2006: Total Team Control*. Tiburon.

Electronic Arts Inc. (2005). *NBA Live 2006*. Electronic Arts Sports Canada.

Electronic Arts Inc. (2005). *NBA Street Volume 3*. Electronic Arts Canada.

Electronic Arts Inc. (2005). *NFL Street Volume 2*. Tiburon.

Electronic Arts Inc. (2006). *Tiger Woods PGA Tour 2006*. Electronic Arts.

Electronic Arts Inc. (2006). *Fight Night Round 3*. Electronic Arts Sports Chicago.

Eskelinen, M. (2001). The Gaming Situation. *Game Studies: The International Journal of Computer Game Research, 1*(1).

Eskelinen, M., & Tronstad, R. (2003). Video Games and Configurative Performances. In M. J. P. Wolf & B. Perron (Eds.), *The Video Game Theory Reader* (pp. 195-220). New York: Routledge.

Eskelinen, M. (2004). Towards Computer Game Studies. In N. Waldrip-Fruin & P. Harrigan (Eds.), *First Person: New Media as Story, Performance, and Game* (pp. 36-44). Cambridge, Massachusetts: The MIT Press.

eTopps. (2004, August 13). Coach Mode Discussion. Message posted to http://www.maddenmania.com/forums/showthread.php?t=60137.

Fairweather, N. B. (2002). Disembodied Sport: Ethical Issues of Virtual Sport, Electronic Games and Virtual Leisure. In A. Miah & S. B. Eassom (Eds.), *Sport Technology: History, Philosophy and Policy* (Vol. 21, pp. 235-249). London and New York: Elsevier Science Limited.

Filiciak, M. (2003). Hyperidentities: Postmodern Identity Patterns in Massively Multiplayer Online Role-Playing Games. In M. J. P. Wolf & B. Perron (Eds.), *The Video Game Theory Reader* (pp. 87-102). New York: Routledge.

Finn, G. P. T., & Giulianotti, R. (1998). Scottish fans, not English hooligans!: Scots, Scottishness and Scottish football. In A. Brown (Ed.), *Fanatics! Power, identity and fandom in football* (pp. 189-202). London: Routledge.

Finn, M. (2000). Computer games and narrative progression. *M/C: A Journal of Media and Culture 3*(5). Retrieved October 2, 2003 from http://www.apinetwork.com/ mc/ 0010/narrative.html.

Fiske, J. (1987). *Television Culture*. New York: Routledge.

Footballfan26. (2005, January 1). BritPitbul and Sm27's Madden 2005 "Manifesto", How to fix the game…. Message posted to http://www.maddenmania.com/ forums/showthread.php?t=80344.

Foucault, M. (1991). Governmentality. In G. Burchell (eds.), *The Foucault Effect* (pp.87-104). Chicago: University of Chicago Press.

Fox Keller, E. (1996). Feminism and Science. In E. Fox Keller & H. E. Longino (Eds.), *Feminism and Science* (pp. 28-40). New York: Oxford University Press.

Fox Keller, E., & Grontkowski, C. R. (1996). The Mind's Eye. In E. Fox Keller & H. E. Longino (Eds.), *Feminism and Science* (pp. 187-202). New York: Oxford University Press.

Frasca, G. (2003). Simulation versus Narrative: Introduction to Ludology. In M. J. P. Wolf & B. Perron (Eds.), *The Video Game Theory Reader* (pp. 221-235). New York: Routledge.

Frasca, G. (2004). Videogames of the Oppressed: Critical Thinking, Education, Tolerance, and Other Trivial Issues. In N. Waldrip-Fruin & P. Harrigan (Eds.), *First Person: New Media as Story, Performance, and Game* (pp. 85-94). Cambridge, Massachusetts: The MIT Press.

Friedman, T. (1995). Making Sense of Software: Computer Games and Interactive Textuality. Retrieved October 2, 2003 from http://www.duke.edu/~tlove /simcity.htm.

Friedman, T. (1999). *Civilization and its Discontents: Simulation, Subjectivity, and Space*.

Galloway, A. R. (2004). Social Realism in Gaming. *Game Studies: The International Journal of Computer Game Research, 4*(1).

Gee, J. P. (2003). *What Video Games Have to Teach Us About Literacy*. New York, Palgrave MacMillan.

Geertz, C. (1973). Deep Play: Notes on a Balinese Cockfight. In C. Geertz (Ed.),*Interpretation of Culture* (pp. 413-453). New York: Basic Books.

giddyupzil (2005, May 27). Brewers Open Key Series Against the Astros with Four Bombs. Retrieved August 24, 2006 from http://www.dynastymanager.com/ teamreport.cgi?u=giddyupzil&s=mlb&id=31510&t=1.

Goldstein, W. (1989). *Playing for Keeps: A History of Early Baseball*. Ithaca and London: Cornell University Press.

Grainger, A., Newman, J. I., & Andrews, D., L. (2006). Sport, the Media and the Construction of Race. In J. Bryant & A. A. Raney (Eds.), *Handbook of Sports and Media* (pp. 447-467). Mahwah, New Jersey and London: Lawrence Erlbaum Associates.

Gramsci, A. (1971). *Selections from the prison notebooks* (Q. Hoare & G. Nowell-Smith, Eds.). New York: International.

Graybill, D., Kirsch, J. R., & Esselman, E. D. (1985). Effects of Playing Violent Versus Nonviolent Video Games on the Aggressive Ideation of Aggressive and Nonaggressive Children. *Child Study Journal, 15*(3), 199-205.

Grazer, B. (Producer), & Howard, R. (Director). (2005). *Cinderella Man* [Motion Picture]. United States: Universal Pictures.

Green, B., Reid, J.-A., & Bigum, C. (1998). Teaching the Nintendo Generation? Children, computer culture and popular technologies. In S. Howard (Ed.), *Wired Up: Young People and the Electronic Media* (pp. 19-42). London: Routledge.

Green, M. (1993). *The Adventurous Male: Chapters in the History of the White Male Mind*. University Park, Pennsylvania: The Pennsylvania State University Press.

Guttmann, A. (1978). *From Ritual to Record: The Nature of Modern Sports*. New York: Columbia University Press.

Guttmann, A. (1990). Rituals, Records, Responses**.** In J. M. Carter & A. Kruger (Eds.), *Ritual and Record: Sports Records and Quantification in Pre-Modern Societies* (pp. 153-160). New York: Greenwood Press.

Hacking, I. (1982). Biopower and the Avalanche of Printed Numbers. *Humanities in Society, 5*, 279-295.

Hacking, I. (1990). *The Taming of Chance*. Cambridge: Cambridge University Press.

Hall, S. (2001). Encoding/Decoding. In M. G. Durham & D. M. Kellner (Eds.), *Media and Cultural Studies Keyworks* (pp. 166-176). Malden, Massachusetts: Blackwell.

Haralovich, M. B., & Trosset, M. W. (2004). "Expect the Unexpected": Narrative Pleasure and Uncertainty due to Chance in *Survivor*. In L. Ouellette & S. Murray (Eds.), *Reality TV: Remaking Television Culture* (pp. 75-96). New York: New York University Press.

Haraway, D. (2003). A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century. In N. Wardrip-Fruin & N. Montfort (Eds.), *The New Media Reader* (pp. 516-541). Cambridge, Massachusetts: The MIT Press.

Hayles, K. N. (1993a). The Materiality of Informatics. *Configurations: A Journal of Literature, Science and Technology, 1*(1), 147-170.

Hayles, N. K. (1993b). Virtual Bodies and Flickering Signifiers. *October, 66*, 69-91.

Hayles, N. K. (2001). The Seductions of Cyberspace. In D. Trend (Ed.), *Reading Digital Culture* (pp. 305-321). Malden, Massachusetts: Blackwell Publishers.

Herbst, S. (1993). *Numbered Voices: How Opinion Polling Has Shaped American Politics*. Chicago & London: The University of Chicago Press.

Herz, J. C. (1997). *Joystick Nation: How Videogames Ate Our Quarters, Won Our Hearts, and Rewired Our Minds*. Boston, MA: Little, Brown and Company.

Herzig, A. H. (2004). 'Slaughtering this beautiful math': Graduate women choosing and leaving mathematics. *Gender & Education, 16*(3), 379-395.

Houck, D. W. (2006). Crouching Tiger, Hidden Blackness: Tiger Woods and the Disappearance of Race. In J. Bryant & A. A. Raney (Eds.), *Handbook of Sports and Media* (pp. 469-484). Mahwah, New Jersey and London: Lawrence Erlbaum Associates.

Howard, M. (2004). *Sick as a Parrot*. Midnight Oil.

Huizinga, J. (1955). *Homo Ludens: A Study of the Play Element in Culture*. Boston: Beacon Press.

id Software (1993). *Doom.* id software.

Interplay (1999). *Planescape: Torment*. Black Isle Studios.

Immortal. (2005, January 1). BritPitbul and Sm27's Madden 2005 "Manifesto", How to fix the game…. Message posted to http://www.maddenmania.com/forums/ showthread.php?t=80344.

James, P., & Carkeek, F. (1997). This Abstract Body: From Embodied Symbolism to Techno-Disembodiment. In D. Holmes (Ed.), *Virtual Politics: Identity and Community in Cyberspace* (pp. 107-124). London: SAGE.

Jameson, F. (2001). Postmodernism, or, the Cultural Logic of Late Capitalism. In M. G. Durham & D. M. Kellner (Eds.), *Media and Cultural Studies Keywords* (pp. 550-587). Malden, MA: Blackwell Publishing.

Jay, M. (1988). Scopic Regimes of Modernity. In H. Foster (Ed.), *Vision and Visuality* (pp. 3-28). Seattle: Bay Press.

Jenkins, H. (2004). Game Design as Narrative Architecture. In N. Waldrip-Fruin & P. Harrigan (Eds.), *First Person: New Media as Story, Performance, and Game* (pp. 118-130). Cambridge, Massachusetts: The MIT Press.

Jenkins, H. (2005). Games, the New Lively Art. In J. Raessens & J. Goldstein (Eds.), *Handbook of Computer Game Studies* (pp. 175-191). Cambridge, MA: The MIT Press.

Jeremijenko, N. (2005). If Things Can Talk, What Do They Say? If We Can Talk to Things, What Do We Say? In N. Waldrip-Fruin & P. Harrigan (Eds.), *First Person: New Media as Story, Performance, and Game* (pp. 262-287). Cambridge, Massachusetts: The MIT Press.

Jhally, S. (1984). The spectacle of accumulation: Material and cultural factors in the evolution of the sports/media complex. *Insurgent Sociologist, 12*(3).

Jhally, S. (1989). Cultural Studies and the Sports/Media Complex. In L. A. Wenner (Ed.), *Media, Sports and Society* (pp. 70-93). Newbury Park, CA: SAGE Publications Inc.

Jordan, J. W. (2003). (Ad)Dressing the Body in Online Shopping Sites. *Critical Studies in Media Communication, 20*(3), 248-268.

Juul, J. (2004). Introduction to Game Time. In N. Waldrip-Fruin & P. Harrigan (Eds.), *First Person: New Media as Story, Performance, and Game* (pp. 131-142). Cambridge, Massachusetts: The MIT Press.

Kane, M. J., Lenskyj, Helen. (1998). Media Treatment of Female Athletes: Issues of Gender and Sexualities. In L. A. Wenner (Ed.), *Media Sport* (pp. 186-201). New York: Routledge.

Kemper, T. (2000). *Instant Re-Players - From Sports Fans to Video Game Players: A Cognitive History*. Retrieved May 10, 2006 from http://web.mit.edu/comm-forum/papers/kemper.html.

Kennedy, H.W. (2002). Lara Croft: Feminist Icon or Cyberbimbo? On the Limits of Textual Analysis. *Game Studies: The International Journal of Computer Game Research 2*(2). Retrieved October 2, 2003 from http://www.gamestudies.org/0202/kennedy/.

Kennedy, K. (2005). A Collaborative Project to Increase the Participation of Women and Minorities in Higher Level Mathematics Courses. *Journal of Education for Business, 80*(4), 189-193.

Kent, S. L. (2001). *The Ultimate History of Video Games: From Pong to Pokemon and Beyond, The Story Behind the Craze that Touched Our Lives and Changed the World*. Roseville, CA: Prima.

Kinkema, K. M., & Harris, J. C. (1998). MediaSport Studies: Key Research and Emerging Issues. In L. A. Wenner (Ed.), *MediaSport* (pp. 27-54). New York: Routledge.

KingV2k3. (2004, December 11). The end of 1st against run/31st against pass? Message posted to http://www.maddenmania.com/forums/showthread.php?t=77267.

Kline, S., Dyer-Witheford, N., & De Peuter, G. (2003). *Digital Play: The Interaction of Technology, Culture, and Marketing*. Montreal & Kingston: McGill-Queen's University Press.

Konami (1999). *Silent Hill*. Konami.

Laurel, B. (2001). Computers as Theatre. In D. Trend (Ed.), *Reading Digital Culture* (pp. 109-114). Malden, Massachusetts: Blackwell Publishers.

Leland, J. and Beals, G. (1997, May 5). In Living Colors. *Newsweek 129*(18): 58-60.

Leonard, D. (2006). An Untapped Field: Exploring the World of Virtual Sports Gaming. In A. A. Raney & J. Bryant (Eds.), *Handbook of Sports Media* (pp. 393-407). Mahwah, New Jersey and London: Lawrence Erlbaum Associates.

Lisa Bonami. (2005, August 6). I'm not really sure how I feel about Madden 06. Madden 06 Impressions. Message posted to http://forums.operationsports. com/vBulletin/showthread.php?t=135668.

Lister, M., Dovey, J., Giddings, S., Grant, I., & Kelly, K. (2003). *New Media: A Critical Introduction*. New York: Routledge.

Lloyd, G. (1996). Reason, Science and the Domination of Matter. In E. Fox Keller & H. E. Longino (Eds.), *Feminism and Science* (pp. 41-53). New York: Oxford University Press.

Lomax, R. G. (2006). Fantasy Sports: History, Game Types, and Research. In J. Bryant & A. A. Raney (Eds.), *Handbook of Sports and Media* (pp. 383-392). Mahwah, New Jersey and London: Lawrence Erlbuam Associates.

Lombardi. (2004, August 13). Coach Mode Discussion. Message posted to http://www.maddenmania.com/forums/showthread.php?t=60137.

Lombardi. (2004, August 14). Coach Mode Discussion. Message posted to http://www.maddenmania.com/forums/showthread.php?t=60137.

Lucas, K., & Sherry, J. L. (2004). Sex Differences in Video Game Play: A Communication-Based Explanation. *Communication Research, 31*(5), 499-523.

Lucas, S. (1999, November 6-9). *Who's Your Daddy? Fatherhood, Race and the Home Run Chase.* Paper presented at the Annual Meeting of the North American Society for the Sociology of Sport, Cleveland, OH.

Lucasarts (2003). *Star Wars: Knights of the Old Republic*. Bioware.

Maas, K. W., Hasbrook, C. A. (2001). Media Promotion of the Paradigm Citizen/Golfer: An Analysis of Golf Magazines' Representations of Disability, Gender, and Age. *Sociology of Sport Journal 18*: 21-36.

Mailer, N. (1975). *The Fight*. Boston and Toronto: Little, Brown and Company.

marceg14 (2006). Padres win 7-4 in slugfest with Indians! Retrieved August 25, 2006 from http://www.dynastymanager.com/dm360.cgi?u=marceg14&s=mlb.

Mattel Electronics (1980). *Major League Baseball.* APh Technological Consulting.

Mason, D. S. (2002). "Get the puck outta here!" Media transnationalism and Canadian identity. *Journal of Sport and Social Issues, 26*(2), 140-167.

Mateas, M. (2004). A Preliminary Poetics for Interactive Drama and Games. In N. Waldrip-Fruin & P. Harrigan (Eds.), *First Person: New Media as Story, Performance and Game* (pp. 19-33). Cambridge, Massachusetts: The MIT Press.

Maxis Software Inc. (1989). *SimCity.* Broderbund.

McClelland, J. (1990). The Numbers of Reason: Luck, Logic, and Art in Renaissance Conceptions of Sport. In J. M. Carter & A. Kruger (Eds.), *From Ritual to Record: Sports Records and Quantification in Pre-Modern Societies* (pp. 53-64). New York: Greenwood Press.

McLuhan, M. (1964). *Understanding Media*. New York: McGraw-Hill.

McMahan, A. (2003). Immersion, Engagement and Presence: A Method for Analyzing 3-D Video Games. In M. J. P. Wolf, Perron, Bernard (Ed.), *The Video Game Theory Reader* (pp. 67-86). New York: Routledge.

Mendick, H. (2005). Mathematical Stories: Why do more boys than girls choose to study mathematics at AS-level in England? *British Journal of Sociology of Education, 26*(2), 235-251.

Miah, A. (2002). Immersion and Abstraction in Virtual Sport. In A. Miah & S. B. Eassom (Eds.), *Sport Technology: History, Philosophy, and Policy* (Vol. 21, pp. 225-233). London and New York: Elsevier Science Limited.

Microprose Software Inc. (1991). *Civilization.* Microprose Software Inc.

Mikula, M. (2003). Gender and Videogames: the political valency of Lara Croft. *Journal of Media & Cultural Studies, 17*(1), 79-87.

Montfort, N. (2004). Interactive Fiction as "Story," "Game," "Storygame," "Novel," "World," "Literature," "Puzzle," "Problem," "Riddle," and "Machine". In N. Wardrip-Fruin & P. Harrigan (Eds.), *First Person: New Media as Story, Performance and Game* (pp. 310-317). Cambridge, Massachusetts: The MIT Press.

Montgomery, G. (1996). Film Realism: A Comment. *Historical Journal of Film, Radio & Television, 16*(2), 269-271.

Moravec, H. (1988). *Mind Children: The Future of Robot Intelligence*. Cambridge, Massachusetts: Harvard University Press.

Moravec, H. (1999). *Robot: Mere Machine to Transcendent Mind*. New York: Oxford University Press.

Morse, M. (2001). Virtually Female: Body and Code. In D. Trend (Ed.), *Reading Digital Culture* (pp. 87-97). Malden, Massachusetts.

Moulthrop, S. (2004). From Work to Play: Molecular Culture in the Time of Deadly Games. In N. Waldrip-Fruin & P. Harrigan (Eds.), *First Person: New Media as Story, Performance, and Game* (pp. 56-69). Cambridge, Massachusetts: The MIT Press.

Murray, J. H. (1997). *Hamlet on the Holodeck*. New York: Free Press.

Murray, J. H. (2004). From Game-Story to Cyberdrama. In N. Wardrip-Fruin & P. Harrigan (Eds.), *First Person: New Media as Story, Performance, and Game* (pp. 2-11). Cambridge, MA: MIT Press.

Nakamura, L. (2001). Race In/For Cyberspace: Identity Tourism and Racial Passing on the Internet. In D. Trend (Ed.), *Reading Digital Culture* (pp.226-235). Malden, MA. Blackwell Publishers Limited.

Neitzel, B. (2005). Narrativity in Computer Games. In J. Raessens & J. Goldstein (Eds.), *Handbook of Computer Game Studies* (pp. 227-245). Cambridge, MA: The MIT Press.

Nichols, B. (1996). Image and Reality: The Real Story. *Historical Journal of Film, Radio & Television, 16*(2), 267-268.

Ninerdynasty. (2004, December 3). The end of 1st against run/31st against pass? Message posted to http://www.maddenmania.com/forums/showthread .php?t=77267.

Nintendo (2004). *Mario Superstar Baseball*. Nintendo.

Nintendo (2006). *Wii Sports*. Nintendo.

Nordlinger, J. (2002, September 16). Hunting Tiger. *National Review 54*(17): 38-40.

nsantos. (2004, December 4). The end of 1st against run/31st against pass? Message posted to http://www.maddenmania.com/forums/showthread.php?t=77267.

Oates, T. P., & Durham, M. G. (2004). The MisMeasure of Masculinity: the male body, 'race' and power in the enumerative discourses of the NFL Draft. *Patterns of Prejudice, 38*(3), 301-320.

Ong, W.J. (1982). *Orality and Literacy*. New York: Routledge.

Oriard, M. (1991). *Sporting With the Gods: The rhetoric of play and game in American culture*. Cambridge: Cambridge University Press.

Oriard, M. (1993). *Reading Football: How the popular press created an American spectacle*. Chapel Hill, NC: University of North Carolina Press.

Ott, B. L. (2003). "I'm Bart Simpson, who the hell are you?" A Study in Postmodern Identity (Re)Construction. *Journal of Popular Culture, 37*(1), 56-82.

Out of the Park Developments (2004). *Out of the Park Baseball 6*. Markus Heinsohn.

Owen, D. (2001). *The Chosen One: Tiger Woods and the Dilemma of Greatness*. New York: Simon & Schuster.

Patriarca, S. (1996). *Numbers and Nationhood: Writing Statistics in Nineteenth-Century Italy*. Cambridge: Cambridge University Press.

Pearce, C. (2004). Towards a Game Theory of Game. In N. Waldrip-Fruin & P. Harrigan (Eds.), *First Person: New Media as Story, Performance, and Game* (pp. 143-153). Cambridge, Massachusetts: The MIT Press.

Peirce, C.S. (1894). *What is a Sign?* Retrieved August 17, 2006 from http://www. marxists.org/reference/subject/philosophy/works/us/peirce1.htm.

Peirce, C.S. (1958). *Selected Writings*. In P. O. Wiener (Ed.), New York: Dover.

Penny, S. (2004). Representation, Enaction, and the Ethics of Simulation. In N. Waldrip-Fruin & P. Harrigan (Eds.), *First Person: New Media as Story, Performance, and Game* (pp. 73-84). Cambridge, Massachusetts: The MIT Press.

Peters, J. D. (2001). "The Only Proper Scale of Representation": The Politics of Statistics and Stories. *Political Communication, 18*, 433-449.

Polumbaum, J., & Wieting, S. G. (1999). Stories of Sport and the Moral Order: Unraveling the Cultural Construction of Tiger Woods. *Journalism & Communication Monographs, 1*(2), 69-118.

PopTop Software (2004). *Railroad Tycoon III*. Gathering of Developers.

Porter, T. M. (1995). *Trust in Numbers: The Pursuit of Objectivity in Science and Public Life*. Princeton: Princeton University Press.

Poster, M. (2001). Postmodern Virtualities. In M. G. Durham & D. M. Kellner (Eds.), *Media and Cultural Studies Keyworks* (pp. 611-625). Malden, Massachusetts: Blackwell.

Price, J. A. (1985). Social Science Research on Video Games. *Journal of Popular Culture, 18*(4), 111-125.

Provenzo, E. F. (1991). *Video Kids: Making Sense of Nintendo*. Cambridge, MA: Harvard University Press.

Puerzer, R. J. (2002). From Scientific Baseball to Sabermetrics. *NINE: a journal of baseball history, 11*(1), 34-48.

Ramba, D. (1990). Recordmania in Sports in Ancient Greece and Rome. In J. M. Carter & A. Kruger (Eds.), *From Ritual to Record: Sports Records and Quantification in Pre-Modern Societies* (pp. 31-40). New York: Greenwood Press.

Raney, A. A., & Bryant, J. (Eds.). (2006). *Handbook of Sports and Media*. Mahwah, New Jersey and London: Lawrence Erlbaum Associates.

Ratnesar, R. (2000, August 14). Changing Stripes. *Time 156*(7).

Real, M. R. (2006). Sports Online: The Newest Player in Mediasport. In J. Bryant & A. A. Raney (Eds.), *Handbook of Sports and Media* (pp. 171-184). Mahwah, New Jersey and London: Lawrence Erlbaum Associates.

Rehak, B. (2003). Playing at Being: Psychoanalysis and the Avatar. In M. J. P. Wolf, Perron, Bernard (Ed.), *The Video Game Theory Reader* (pp. 103-127). New York: Routledge.

Riess, S. A. (1999). *Touching Base: Professional Baseball and American Culture in the Progressive Era*. Urbana and Chicago: University of Illinois Press.

Rochlin, G.I. (1997). *Trapped in the Net: The Unanticipated Consequences of Computerization*. Princeton, New Jersey: Princeton University Press. Retrieved October 28, 2006 from http://www.pupress.princeton.edu/books/rochlin/chapter_04.html.

Rose, N. (1999). *Powers of Freedom: Reframing Political Thought*. Cambridge: Cambridge University Press.

Rovell, D. (2003). *Bo Knows Video Games*. Retrieved June 8, 2006 from http://sports.espn.go.com/espngamer/story?id=1623293.

Rowe, D. (1999). *Sport, Culture and the Media: The Unruly Trinity*. Philadelphia, PA: Open University Press.

Royster, F.T. (1998). The 'End of *Race*' and the Future of Early Modern Cultural Studies. *Shakespeare Studies 26*: 59-70.

Ruggill, J. E., McAllister, K. S., & Menchaca, D. (2004). The gamework. *Communication & Critical/Cultural Studies, 1*(4), 297-312.

Ruhl, J. (1990). Sports Quantification in Tudor and Elizabethan Tournaments. In J. M. Carter & A. Kruger (Eds.), *From Ritual to Record: Sports Records and Quantification in Pre-Modern Societies* (pp. 65-86). New York: Greenwood Press.

Ryan, M.-L. (2001). Beyond Myth and Metaphor: The Case of Narrative in Digital Media. *Game Studies: The International Journal of Computer Game Research, 1*(1).

Salen, K., & Zimmerman, E. (2005). Game Design and Meaningful Play. In J. Raessens & J. Goldstein (Eds.), *Handbook of Computer Game Studies* (pp. 59-79). Cambridge, MA: The MIT Press.

Samantha. (2005, August 8). Re: Madden 06 Impressions. Madden 06 Impressions. Message posted to http://forums.operationsports.com/vBulletin/showthread .php?t=135668.

Schwarz, A. (2005). *The Numbers Game: Baseball's Lifelong Fascination with Statistics*. New York: St. Martin's Press.

Schreier, M. (2004). "Please Help Me; All I Want to Know Is: Is It Real or Not?": How Recipients View the Realilty Status of *The Blair Witch Project*. *Poetics Today, 25*(2), 305-334.

Sierra Studios (1998). *Half-Life.* Valve.

Skkrrt. (2004, August 21). Coach Mode Discussion. Message posted to http://www.maddenmania.com/forums/showthread.php?t=60137.

sm27. (2004, December 3). Let's buckle down and get this whole thing straightened out. The end of 1st against run/31st against pass? Message posted to http://www .maddenmania.com/forums/showthread.php?t=77267.

sm27. (2004, December 4). The end of 1st against run/31st against pass? Message posted to http://www.maddenmania.com/forums/showthread.php?t=77267.

sm27. (2004, December 20). These Are The Results Of A Solid Week! I'm Using Alley Fight! The end of 1st against run/31st against pass? Message posted to http:// www.maddenmania.com/forums/showthread.php?t=77267.

sm27. (2005a, January 4). BritPitbul and Sm27's Madden 2005 "Manifesto", How to fix the game…. Message posted to http://www.maddenmania.com/forums/ showthread.php?t=80344.

sm27. (2005b, January 4). The more people that want to test the better! BritPitbul and Sm27's Madden 2005 "Manifesto", How to fix the game…. Message posted to http://www.maddenmania.com/forums/showthread.php?t=80344.

Solecismic Software (2004). *Front Office Football 2004.* Jim Gindin.

Sorlin, P. (1996). That Most Irritating Question: Images and Reality. *Historical Journal of Film, Radio & Television, 16*(2), 263-266.

Spelling, A. (1981). *Dynasty*. Los Angeles: American Broadcasting Company.

Sports Interactive Games (2004). *NHL Eastside Hockey Manager.* Sega.

Sports Interactive Games (2004). *Football Manager 2005.* Sega.

Square Electronic Arts (2000). *Final Fantasy IX.* Square.

Squire, K. (2002). Cultural Framing of Computer/Video Games. *Game Studies* 2(1).
    Retrieved October 2, 2003 from http://www.gamestudies.org/0102/squire/.

Starr, P. (1987). The Sociology of Official Statistics. In W. Alonso & P. Starr (Eds.), *The
    Politics of Numbers* (pp. 7-58). New York: Russell Sage Foundation.

Strategy First (2001). *Europa Universalis*. Paradox Interactive.

Stone, A. R. (1995). *The War of Technology and Desire at the Close of the Mechanical
    Age*. Cambridge, Massachusetts: MIT Press.

Stone, A. R. (2001). Will the Real Body Please Stand Up?: Boundary Stories about
    Virtual Cultures. In D. Trend (Ed.), *Reading Digital Culture* (pp. 185-198).
    Malden, Massachusetts: Blackwell Publishers.

Sugden, J. (1996). *Boxing and Society: An International Analysis*. Manchester:
    Manchester University Press.

Sullivan, D. B. (2006). Broadcast Television and the Game of Repackaging Sports. In J.
    Bryant & A. A. Raney (Eds.), *Handbook of Sports and Media* (pp. 131-145).
    Mahwah, New Jersey and London: Lawrence Erlbaum Associates.

supersigma2of21. (2004, August 20). Coach Mode Discussion. Message posted to
    http://www.maddenmania.com/forums/showthread.php?t=60137.

Surette, T., & Feldman, C. (2004, December 13). Big Deal: EA and NFL ink exclusive
    licensing agreement. *Gamespot.com,*(retrieved from http://www.gamespot.com/
    news/2004/2012/2013/news_6114977.html on January 21, 2006).

Sybilla, N. (2001). A.F.W. Crome's Measurements of the "Strength of the State":
    Statistical Representations in Central Europe around 1800. *History of Political
    Economy, 33*(4), 23-56.

Taylor, F.W. (1911). *The Principles of Scientific Management*. (retrieved from
    http://melbecon.unimelb.edu.au/het/taylor/sciman.htm on October 27, 2006).

Tecmo (1991). *Tecmo Super Bowl*. Tecmo.

Terranova, T. (2000). Free Labor: Producing Culture for the Digital Economy. *Social
    Text, 18*(2), 33-58.

The Midnighter (2005). Fight Night Round 2. *ControllerFreaks.com*. (retrieved
    February 4, 2006 from
    http://microsoft.controllerfreaks.com/review.asp?RevID=319).

Thorn, J., & Palmer, P. (1985). *The Hidden Game of Baseball: A Revolutionary Approach to Baseball and Its Statistics*. New York: Doubleday.

Tiger, Tiger, Burning Bright. (2001, June 16). *The Economist 359*(8226): 36.

Toles, T. (1985). Video games and American Military Ideology. *Arena Review, 9*(1), 58-76.

Tomas, D. (1989). The Technophilic Body: On Technicity in William Gibson's Cyborg Literature. *New Formations, 8*, 113-129.

Turkle, S. (1995). *Life on the Screen: identity in the age of the internet*. London: Weidenfeld & Nicolson.

Vande Berg, L.R., Wenner, L.A., & Gronbeck, B.E. (1998). *Critical Approaches to Television.* Boston: Houghton Mifflin Company.

Visual Concepts (2004)*. ESPN NFL 2K5.* Sega.

Wacquant, L. J. D. (1992). The Social Logic of Boxing in Black Chicago: Toward a Sociology of Pugilism. *Sociology of Sport Journal, 9*(3), 221-254.

Wacquant, L. (1995a). Pugs at Work: Bodily Capital and Bodily Labour Among Professional Boxers. *Body & Society, 1*(1), 65-93.

Wacquant, L. (1995b). The pugilistic point of view: how boxers think about their trade. *Theory and Society, 24*(4), 489-535.

Wacquant, L. (2004). *Body & Soul: Notebooks of an Apprentice Boxer*. Oxford: Oxford University Press.

Wanta, W. (2006). The Coverage of Sports in Print Media. In J. Bryant & A. A. Raney (Eds.), *Handbook of Sports and Media* (pp. 105-115). Mahwah, New Jersey and London: Lawrence Erlbaum Associates.

Wardrip-Fruin, N., & Harrigan, P. (Eds.). (2004). *First Person: New Media as Story, Performance, and Game*. Cambridge, Massachusetts: The MIT Press.

Wenner, L. A. (1989). Media, Sports and Society: The Research Agenda. In L. A. Wenner (Ed.), *Media, Sports and Society* (pp. 13-48). Newbury Park, CA: SAGE Publications Inc.

Wenner, L. A. (Ed.). (1998). *Mediasport*. London: Routledge.

Wolf, M. J. P. (2001). The Video Game as a Medium. In M. J. P. Wolf (Ed.), *The Medium of the Video Game* (pp. 13-34). Austin, TX: University of Texas Press.

Woo, J. (2005). Fight Night Round 2. *GameAxis.com.* (retrieved February 4, 2006 from http://www.gameaxis.com/articles/view.gax?id=540&gid=901&pg=2).

Woodward, K. (2004). Rumbles in the Jungle: Boxing, Racialization and the Performance of Masculinity. *Leisure Studies, 23*(1), 5-17.