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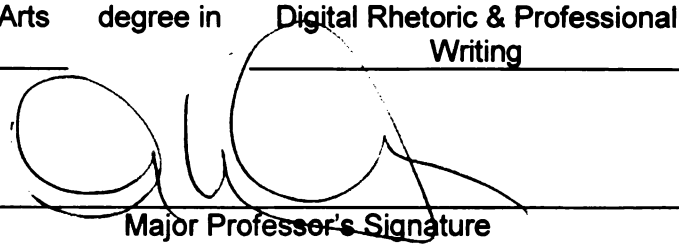

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"GAMING" GENRE: SERIOUS GAMES, GENRE THEORY, AND RHETORICAL ACTION

By

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ABSTRACT

"GAMING" GENRE: SERIOUS GAMES, GENRE THEORY, AND RHETORICAL ACTION

By

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Despite recent increases in digital gaming research from rhetoric/composition scholars, there have been relatively few scholarly treatments of serious games as sites of rhetorical action and critique. In response to this gap, I argue for the need for rhetoric/composition scholars to start "paying attention" to serious games. The disciplinary frameworks of rhetorical studies, literacy studies, and communication are employed to survey the current literature on serious gaming and identify points of synthesis. I then introduce a more focused idea drawn from rhetorical studies, genre theory, to examine the question of why scholars in rhetoric/composition should pay attention to and focus their work on serious games. I conclude by discussing implications of the relationship between serious games and genre in various contexts, including implications for first-year composition pedagogies, digital rhetoric and new media pedagogies, and potential research projects and questions to be taken up by rhetoric/composition as a field.

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Chapter 1: Introduction

Ask any gaming aficionado who grew up in the early 80s, pouring hours into *Pac-Man* and *Space Invaders* in the local arcade, and you'll discover that video games aren't exactly new. On the academic scene, though, and especially for scholars in rhetoric and composition, video games seem as alien a subject for scholarly inquiry as the 8-bit monsters in *Space Invaders* marching creepily across the screen. However, there have been a few recent attempts to pull together scholars who are interested in the curious intersection between video games and rhetoric/composition studies. At the 2006 Conference on College Composition and Communication (CCCC), Scott Reed organized a special interest group on the topic, "1UP: Perspectives from Scholar/Practicioners of Video Games." Beyond the continuation in 2007 and 2008 of this initial special interest group, the most recent iteration of CCCC in New Orleans, LA served as a site where serious games were put more closely into conversation with discussions of composition research and pedagogy. In their statement of purpose for the group, Cynthia Haynes and Jan Holmevik note that "while the obvious 'serious' application for games is for education (and training), many games are studied rhetorically as a means of critiquing broader cultural phenomena." Much of the interest in video gaming from scholars in rhetoric and composition was inspired by James Paul Gee's 2003 book *What Video Games Have to Teach Us about Learning and Literacy*. For instance, the collection *Gaming Lives in the Twenty-First Century: Literate Connections*, edited by Cynthia L. Selfe and Gail E. Hawisher, references Gee's book as a foundational text for gaming literacies and sets out to "examine Gee's claim that good computer games can provide better literacy and learning environments than U.S. schools" (Selfe and Hawisher 1).

At the 2008 CCCC in New Orleans, several scholars also framed workshops and panel presentations around the intersection between gaming and composition. Workshop speaking sessions included "Burke's *Pentad*: The Video Game" in the workshop "The Invention of Reality" and a workshop on "Writing Is a Serious Game: Improvisation as Exploration and Performance" ("NCTE - CCCC Searchable Program"). Panels devoted to the topic included "Reading and Writing Virtual Realities: Computer Games and Writing Instruction," "Changing Writing, Alternate Realities: Games and Game Theory in the Writing Classroom," "Constructing Identities/Constructed Identities: Game Work in College Writing Courses," "Our Avatars, Ourselves: The Rhetoric of Identity in Role-playing Games," and "Where Everyone Knows Your Username: The Realities of Cyberspace as Third Space" ("NCTE - CCCC Searchable Program"). Finally, a few individual presentations, such as "The Literate War Graft Gamer: Literacy Development through Multimodal Acquirement in the MMORPG Semiotic Domain" and "Alternate Reality Games: Collaboration, Composition, and Serious Play" ("NCTE - CCCC Searchable Program") took up issues of gaming in relation to composition.

So what does all of this tell us about the status of digital gaming as a subject of inquiry in rhetoric and composition? The main objective I have in tracing out this recent history is to assess how *visible* the connection is between these two areas; thus, I'm concerned about how consistently and how strongly this connection to gaming appears in conversations surrounding rhetoric and composition. Despite the recent efforts mentioned above, the main argument motivating this thesis is that rhetoric scholars (as a collection of researchers bound by this disciplinary label), need to pay stronger attention to digital games, and especially serious games that hold the potential to "critique broader cultural

phenomena." My claim here echoes other calls to "pay attention," such as the argument (and subtitle) of Cynthia Selfe's *Technology and Literacy in the Twenty-First Century: The Importance of Paying Attention* and Carolyn Handa's introduction to *Visual Rhetoric in a Digital World.* Additionally, a corollary to this argument is that we need to be more attendant to the challenges and insights to rhetorical theory that digital gaming and serious gaming might suggest.

Who Needs to Pay Attention?

Before outlining the need to pay attention to serious games, though, I'd like to first lay some groundwork for who I'm talking about when I say "we" need to pay attention. The field of rhetoric/composition is defined by a curious tension between the very two terms it includes on either side of the slash. As Cynthia Haynes writes, "I have been hailed by a slash, called into these questions (How has the slash between rhet/comp come to be and to mean? Will the slash between rhet/comp persist?) by a virgule, a solidus, a dia/critical mark (of sorts)." While keeping this tension in mind, I admit here that my immediate focus is on exploring the "rhetoric" side of the slash in relation to serious gaming. Composition, especially in the sense of the first-year composition class, is a topic that I take up toward the end of the thesis, but works in the domain of rhetorical studies receive a more thorough treatment. Beyond this disciplinary tension, though, the question remains of how we in rhetoric/composition are located more broadly.

In their article "Remapping Curricular Geography: Professional Writing in/and English," Patricia Sullivan and James E. Porter start to negotiate disciplinary spaces and roles within a larger geographical frame. Although their focus is more specifically on professional writing, their discussion of rhetoric/composition articulates how that field

has been developed in relation to English. Sullivan and Porter note, "a now common alternative to the literature view sees English as more appropriately focused on the activities of reading and writing—and perhaps even more broadly, written language—from a variety of critical perspectives" (396). Since their geographical exploration in 1993, the various treatments of "the activities of reading and writing" and "written language" have grown to include more robust collections of scholarship on digital and visual rhetorics, which I touch on in Chapter 2. However, the main implication is one of expansion: expansion out from the domain of literature to include practices of reading and writing that do not fall under such a classification.

The theme of expansion is also taken up by Patricia Bizzell and Bruce Herzberg, who note that rhetoric, as it became revived in the twentieth century, has "grown to encompass a theory of language as a form of social behavior, of intention and interpretation as the determinants of meaning, of the way that knowledge is created by argument, and of the way that ideology and power are extended through language" (1183). Bizzell and Herzberg also offer a shortened definition of rhetoric (if not in scope, then in verbiage), claiming that "in short, rhetoric has become a comprehensive theory of language as effective discourse" (1183).

The "we" that I refer to, then, as I claim that we need to pay more attention to serious games, includes scholars who take interest in these various dimensions and histories of rhetoric. The implicit association is that serious gaming has something valuable to offer along the lines of "activities of reading and writing" or "the way that ideology and power are extended through language," even if serious games are not a traditional site for these kinds of inquiries. Before I begin outlining some of the reasons

that rhetoric should pay attention to serious gaming, I would also like to foreground the work that has already started to shift us toward this objective, even if indirectly.

Foundations of/for Paying Attention

Beyond the landmark book from James Paul Gee and the other texts and events already mentioned, one of the most sustained efforts to place serious games and rhetoric in conversation with each other is Ian Bogost's *Persuasive Games: The Expressive Power of Videogames*. Bogost's first chapter includes an overview that surveys relevant work from rhetorical theory, which should help rhetoricians envision how serious games might be positioned as a site for rhetorical analysis and rhetorical theory-building. Although Bogost condenses much of the "classical" rhetorical tradition in favor of reviewing more recent theories on digital and visual rhetorics, the very juxtaposition of serious games with rhetorical theory is a valuable and necessary move in legitimizing serious games as worthy of our attention. In Chapter 2, I spend more time looking at how Bogost frames this literature review as a means of setting up the main argument of his book. Another major project along these lines is Ken McAllister's *Game Work: Language, Power, and Computer Game Culture*. Although McAllister focuses on the rhetorical situation surrounding mass-market entertainment games rather than serious games, his framework starts to unpack the implications of digital gaming as a site of argumentation and meaning-making. Both of these works are discussed in more detail in Chapter 2, when I review the ways in which digital gaming has been approached as a subject of inquiry in various disciplinary contexts. Despite these recent works that have positioned digital games as a more visible topic underneath the rhetoric umbrella, my argument here is that digital gaming, and serious gaming in particular, need to be taken up more actively

through the work of rhetoricians. Because most of the scholarship in this area is so recent, and because the development technologies, distribution, and popularity of serious games are rapidly changing, I would suggest that there is much more work left to be done and much value to be had in paying attention.

One rationale for paying attention is suggested by James Paul Gee's book *What Video Games Have to Teach Us about Learning and Literacy*. Gee notes that video games are one kind of multimodal text, which, put rather simply, are texts that "mix words and images" (18). The larger point, though, which is connected to Gee's discussion of "semiotic domains," is that "the combination of the two modes communicates things that neither of the modes does separately. And, indeed, multimodality goes far beyond images and words to include sounds, music, movement, and bodily sensations" (17-18). I would agree that multimodality is something that rhetoric needs to pay attention to, and I would hardly be the first in doing so (see, for example: Selfe; the New London Group; Wysocki; Kress and van Leeuwen; Losh; Lemke; and Handa).

However, my more specific reason for bringing in Gee's discussion of multimodality here is that video games offer something unique to multimodality, or at least how we look at multimodality from the perspective of rhetoric. For example, Gee's discussion of embodied action and experience in digital games points to how "every potentially meaningful sign in a game like *Deus Ex*—whether word, deed, artifact, or action—is a particular sort of *invitation to embodied action* (action actually carried out in the game world or simulated in your mind). And the nature of that invitation changes as you experience new situations and engage in new actions in the virtual world of the game" (83). This particular sense of embodiment is exclusive to multimodal texts; the

experience of acting as a virtual character with a body and manipulating virtual objects is not something that can be derived from reading alphabetic text on a page. Additionally, the interactive features of digital games mean that they recruit embodied action in a way that other multimodal texts, such as online blogs, films, and slide presentations, do not. One implication to take away from this is that games introduce new *variables* to consider when we talk about modality and how "multimodal texts" are designed, experienced, and interpreted. Another implication is that digital games need to be accounted for on the composition side of the slash as well, especially if we intend to teach "multimodal composition" or include digital texts and environments as centerpieces of our composition pedagogies. This is not to say that all composition courses are categorically suffering without the inclusion of digital game design work, but rather to emphasize that multimodal composition is more than the integration of static visual or audio elements into a written text.

To outline another reason that digital games are clamoring for our attention, we can look at the area of "new literacy" studies, of which digital gaming can be considered a major part. Gee defines New Literacy Studies as "a body of work that argues that reading and writing should be viewed not only as mental achievements going on inside people's heads, but also as social and cultural practices with economic, historical, and political implications" (9). A few examples of new literacies include "video gaming, fan fiction writing, weblogging, using websites to participate in affinity practices, and social practices involving mobile computing" (Lankshear and Knobel 1). Lankshear and Knobel argue that new literacies are constituted by both new "technical stuff" and new "ethos stuff," which is a topic I take up in more detail in Chapter 2. The larger implication of

digital gaming as a new literacy is that players not only "play the game" but also participate in a constellation of literacy practices that mediate gameplay and assist players in carrying out their objectives. For example, players of *World of Warcraft* and other massively multiplayer online games produce written documentation about the game and are active readers and writers of various genres that, taken together, help define and direct community activity. In Constance Steinkuehler's study of literacy practices in *Lineage*, a massively multiplayer online game, she identifies some of these reading and writing activities as: "the development and maintenance of game-related fan sites and blogs; discussion and debate of game-related issues on threaded discussion boards; the creation and distribution of fan fictions, fan art, annotated game screenshots and cartoons; and deliberation via game-specific chat rooms, instant messaging, in-character emails, and even Voice over Internet Protocol (VoIP) forums" (302-303). In an attempt to pin down and study digital gaming literacies, then, it is important to keep in mind how many other literacy events and genres help to mediate gaming activity.

These kinds of new literacy practices have parallels to other emerging areas of focus in rhetoric/composition, such as remix culture and the role of remix in student composition. Lev Manovich, in his article "Models of Authorship in New Media," notes that the term "remix" has taken a broader definition since its origins in musical re-tracking and re-working. Manovich writes, "in the last few years people started to apply the term 'remix' to other media: visual productions, software, literary texts" (6). Of course, remix as a new literacy practice is not devoid of ethical and ideological implications; as Manovich notes, "we are left with an interesting paradox: while in the realm of commercial music remixing is officially accepted, in other cultural areas it is

seen as violating the copyright and therefore as stealing" (6). On the other hand, the institutions that control intellectual property rights can also decide to collaborate with users and open restrictions on, if not encourage, user-generated content. As Manovich discusses, gaming has been a particularly important site for this kind of collaboration. Game modding and the production of user-generated content for player communities represent just a few examples of how business/technology institutions and players involve themselves in complex rhetorical and literate interactions.

Framing Terms, Framing the Text

These perspectives on gaming—games as a multimodal text and gaming as a new literacy—represent a couple of the reasons that rhetoricians should start paying more attention to digital games. Before I take on the deeper implications of games for rhetorical studies, however, I would like to set the groundwork for the terminology used in this thesis, as well as provide a roadmap for the major topics undertaken by the thesis. First, I generally use the terms "digital games" and "digital gaming" rather than "video" or "computer" games. Although there is no universal pattern of usage, video games are sometimes associated *only* with console games (e.g., games played on the various PlayStation platforms, Nintendo Wii, Xbox 360, and so on). Likewise, computer games are sometimes associated *only* with games played on a personal computer. "Digital games" is intended as a more inclusive term, one that includes games for both consoles and personal computers and could even be expanded to include games played on arcade machines or via other technological means (e.g., computer emulation programs or mobile phone-based gaming). My usage of "serious" games, on the other hand, is one of the primary subjects of this thesis and represents a point of contestation and inquiry. To

provide a stand-in definition that at least offers a basic sense of orientation, I turn to David Michael and Sande Chen's definition of a serious game: "a serious game is a game in which education (in its various forms) is the primary goal, rather than entertainment" (17).

Now that a bit of semantic groundwork has been established, I provide brief overviews of what is to come in the following three chapters. Chapter 2 starts with the problem of digital game studies as a discipline; where and how should we locate scholarly work on digital games, and as a related question, where do we go about *looking* for it? In response to this problem, I trace the literature on digital games and serious games through three disciplinary frameworks to assess what the juxtaposition among these collections of literature might reveal. The three disciplinary threads that I trace in relation to digital gaming are rhetorical studies, literacy studies, and communication. After the review of all three disciplinary threads, I discuss the implications of this cross-disciplinary reading and where it gets us in terms of "paying attention" to gaming.

Chapter 3 introduces a more focused idea drawn from rhetorical studies, that of genre, to examine the question of why rhetoric should pay attention to digital games, and serious games in particular. I first discuss my rationale for bringing in genre theory as the main focus for an inquiry into rhetoric and serious games. The next part of the chapter is divided into two main segments, "Digital Game Genres" and "Genre Approaches from Rhetorical Theory." Each segment contains an overview of how the issue of genre has been treated in the respective domains, as well as a critical analysis of the "gaps" present in those genre discussions. The chapter concludes with a move toward synthesis,

suggesting what happens when game genre approaches are put together with works on genre theory.

Chapter 4 represents a shift from a more theoretical discussion to a consideration of what Chapters 2 and 3 suggest in terms of classroom pedagogy, research projects and questions, and implications for rhetoric/composition as a field. The chapter presents two pedagogical scenes (a first-composition course and an upper-level undergraduate course in new media or digital rhetoric) and outlines some pedagogical strategies for engaging the intersection between serious games and genre. Next, I articulate some specific research questions and scenarios that might be used to extend the work done in this thesis. Finally, the chapter concludes with a return to the call to "pay attention" and situates gaming and genre work within the broader scope of rhetoric/composition as a field.

Chapter 2: Literature Review

The following review and discussion of the scholarly work that has been done in and around digital gaming is relevant here for a couple of reasons. One of the usual functions of a literature review is to identify the historical and contemporary context (often carrying the sense of a *disciplinary* context) in which one's own work is about to be placed. Treated this way, what the literature review identifies can be a scholarly gap that serves as the entrance for a "new" argument. Another common function is to set up the background of a particular disciplinary thread that will be extended, tweaked, complicated, or somehow renegotiated with the introduction of the author's work.

My purposes in carrying out this particular literature review are a bit different, although I acknowledge the value of the methods mentioned above and will even be carrying out some of that work at the same time. What I'm trying to accomplish here is more akin to Victor Villanueva's "cross-talk" as constructed in *Cross-Talk in Comp Theory*: placing conversations and theories in relation to each other with the goal of seeing what everyone's been talking about and how they've been talking about it. In doing so, this review is meant to illustrate the ways in which fields such as rhetoric and composition, communication, digital media, and others can benefit and learn from what has been taking place outside their respective areas. One of the major issues at stake is visibility, so by joining these threads together in the same place and time, we can start to identify some of the areas of overlap that have yet to be made explicit, as well as some of the disconnections that would be useful to address. Beyond making these various conversations visible, I will also contextualize their relationship by articulating how each thread positions and responds to the topic of digital gaming (with particular attention paid

to serious games). In terms of purpose, then, I am shaping a critical, cross-disciplinary account of serious gaming with the intent of tracing moments of alignment and disconnection, visibility and invisibility, and the theoretical and methodological approaches that underlie these histories. This is what I view as the implicit "argument" of the chapter; rather than a descriptive summary of a group of related texts, I am more interested in discovering where (and why) we might have expected to find clear connections but instead find isolated conversations.

With this objective in mind, the literature review is guided by three main threads. These threads are "disciplinary" in the sense that they trace conversations that cross a particular scholarly area and to a certain extent share common methodologies and assumptions. However, the threads are *not* "disciplinary" in terms of limiting the works and authors under consideration to those that self-identify as existing within a specific discipline. This kind of strategy would be problematic because of the definitional slippage between fields of scholarly work. Under "rhetoric," for example, would this include scholars in rhetoric and composition only? Scholars in English or communication who study rhetoric? What about scholars who draw from "rhetorical" texts, ideas, and theories but do not profess to study rhetoric?

The other problem that emerges is that the study of digital games as a cultural form is such a new phenomenon that there are no pre-existing, clearly defined disciplinary boundaries or points of focus that we can use to understand what game studies represents. As Espen Aarseth argues, game studies is "a new academic field focused on the aesthetics, cultures and technologies of computer games." In addition, Aarseth makes a move to argue for the autonomy of game studies, noting that it has been

conceptualized as "not just as *part* of media studies, or digital culture studies, or a freaky corner of computer science, or as educational technology, but as an autonomous discipline of teaching and research, with an agenda not subjected to the rules of a condescending (or hostile) established academic field." With this disciplinary tension in mind (a tension not only of methods/subjects but also of politics and legitimacy), the literature that addresses digital gaming cannot be taken for granted as belonging to a certain disciplinary space.

In response to these problems, I take each of the disciplinary terms used in this review to mean areas where particular theories, methods, and ways of thinking are at work, rather than focusing on academic disciplines in their institutional or programmatic contexts. In other words, I am looking for places where people have *applied* disciplinary concepts, even if these works are not part of a "mainstream" disciplinary discourse. The three main threads that I will trace are as follows: rhetorical studies, literacy studies, and communication. Before delving into the literature of each area, I offer a brief introduction that frames its relationship with digital gaming and serious gaming and discusses the purpose of selecting each particular group of texts. The chapter concludes with a synthesis of the three threads and outlines some possible implications of putting these threads in direct conversation with each other.

Rhetorical Studies

Having finished my cautionary tale on the woes of framing literature reviews through the lens of a particular discipline, I'm now ready, ironically, to acknowledge my own disciplinary biases and interests. A primary purpose of the work I'm undertaking in this thesis is to argue for why rhetoric (as a discipline) should pay attention to digital

gaming, and more specifically, serious games. It is with this motive that I have selected the three threads running through this review, but at the same time, I am attempting to carry through a critical and self-aware conception of what counts as rhetoric and what counts as scholarly work going by the name of literacy studies or communication. Because I am addressing rhetoric scholars as a primary audience, I have decided to start with rhetorical studies and branch off into related fields that can both inform and interrogate the work that rhetoric scholars are doing and suggest new areas of inquiry for rhetorical studies.

At a general level, rhetoric seems like a perfectly suitable, even ideal, topic to bring in for the study of serious games, especially for the kinds of serious games that are specifically designed for persuasive purposes. The most common working definition of a serious game, as seen in Michael and Chen's definition, is a game that does *not* have entertainment as the primary purpose. This shift in purpose, which is recognized by both designers and players in a conscious way, is the exact kind of situation that rhetoric is concerned with examining, as it involves a specific "move" that intersects with issues of audience and genre.

Of course, rhetoric can also be brought in as a way of assessing how serious games that claim to be designed for persuasion actually carry out that purpose. Serious games falling under this category would include games designed for political or social change, environmental awareness, advertising, and so on. Although approaching these games using a rhetorical framework would not *measure* the persuasive outcome in terms of audience effects, it would be useful in assessing what strategies of language, representation, and meaning are at work in persuasive games. Additionally, we can

consider subsets of rhetoric such as visual and digital rhetoric as especially relevant to the study of serious games because these artifacts rely on visual and digital aspects of composition as an essential component of meaning-making. Reading serious games rhetorically would also mean that games are placed within a larger system of texts, references, and circulation. Rather than existing as standalone persuasive artifacts, a rhetorical approach to serious games calls for a contextualization of serious games as existing within a broader system of discourse.

It should also be noted that rhetorical studies approaches have the potential to be applied to any kind of digital game (as a multimodal text that communicates meaning) and not just games that are explicitly "persuasive." These approaches are particularly valuable in unpacking the assumptions and values underlying representation in digital games, whether that representation is self-constructed (which remains a function of the game's affordances and limitations) or wholly imposed by the designers. For example, rhetorical readings of gender in *The Sims* or race and ethnicity in the *Grand Theft Auto* series are ways of addressing the persuasive, political, and ideological impact of digital games as a cultural form, even though these kinds of games are classified as designed for "entertainment" and not persuasion.[1]

Literature in Rhetorical Studies

There have been few major works that attempt to connect serious games with rhetorical studies, but one of the scholars actively working to bridge the two areas is Ian Bogost. Although "serious games" has become the de facto term for games that deal with

[1] A few examples of this kind of work include Mary Flanagan's "SIMple & Personal: Domestic Space & The Sims" and Samantha Blackmon's "Racing toward Representation: An Understanding of Racial Representation in Video Games" from *Gaming Lives in the Twenty-first Century.*

educational content areas, politics, social issues, and so forth, Bogost questions the value of this term in his book *Persuasive Games: The Expressive Power of Videogames* and proposes "persuasive games" as an alternative. Part of the reason he proposes this change in terminology is because calling these games "serious" confines the rhetorical impact of games while marking "entertainment" titles as frivolous or incapable of achieving legitimate meaning. As Bogost argues, "the concept of serious games as a counter movement apart from and against the commercial videogame industry eliminates a wide variety of games from persuasive speech. It is a foolish gesture that wrongly undermines the expressive power of videogames in general, and highly crafted, widely appealing commercial games in particular" (59). Bogost also notes that the term "serious" does not capture the full potential of games to challenge existing conditions and ideologies. He argues that serious games should not be defined as "in the service of governments, corporations, educational institutions, and their kindred but games that challenge such institutions, creating opportunities to question, change, or eliminate them" (58). Even if rhetoricians do not agree to adopt Bogost's new term over the existing "serious games," he presents an important reminder about the rhetorical status of video games, especially in their potential to critique institutions and enact social or cultural criticism.

Bogost's main argument centers on the idea of procedural rhetoric, which he defines as "the art of persuasion through rule-based representations and interactions rather than the spoken word, writing, images, or moving pictures" (ix). Bogost suggests that this form of persuasion is unique to video games in that they are multimedia artifacts that rely on computational architecture to carry out their meaning (ix). To some extent, this argument is presented in opposition to visual or digital rhetorical frameworks that

might otherwise be applied to the study of games, as Bogost emphasizes that a new rhetorical perspective is needed to account for the unique persuasive function of digital games. For example, Bogost argues that digital rhetoric (for many scholars) focuses on "culturally modified versions of existing oral and written discourse" and "abstracts the computer as a consideration, focusing the text and image content a machine might host and the communities of practice in which that content is created and used" (25). For Bogost, understanding the persuasive capacities of digital gaming requires a full consideration of the procedural functions of computer-based artifacts and not simply a grafting of non-digital genres onto digital spaces.

Bogost also provides his own review of rhetoric history, dating back to the ancient Greek tradition but also covering recent arguments in visual and digital rhetoric. This review sets up a discussion of various rhetorical devices that are relevant to Bogost's constructions of "procedural rhetoric," including the Aristotelian enthymeme and Kenneth Burke's discussion of "human symbolic production" that extends beyond the study of verbal and written texts (19-21). Although Bogost's purpose is to the lay the groundwork for his procedural rhetoric argument, thus influencing the selectivity and treatment of his review, this section of Bogost's book serves as a valuable lens to read serious game studies *through* rhetoric.

Other works in rhetorical studies have argued for a "grammar" or a "rhetoric" of digital gaming while not specifically focusing on serious games. Ken McAllister's *Game Work: Language, Power, and Computer Game Culture* is one of the major efforts to outline this framework. McAllister puts forth five "general propositions" that emphasize the role of computer games as dialectical artifacts (31). What McAllister calls "rhetoric-

dialectical inquiry" would look at the relationship between "a particular computer game's rhetoric and the broader social antagonisms that rhetoric feeds and is fed by" (33). Given this larger rhetorical framework, what might rhetorical events in computer games actually look like? McAllister argues that such events are "constructed primarily out of: (a) developers' and marketers' idiosyncratic, homological, and inclusive ideologies, and (b) players' (or more generally, 'experiencers'') interactions with the systems put in place by the developers, which are influenced by their own idiosyncratic, homological, and inclusive ideologies" (31-32). Additionally, McAllister notes that, taken as dialectics, these events are "always connected to other rhetorical events and struggles that are not game-related" (32). Thus, while Bogost shifts his rhetorical focus to account for the computational nature of digital games, McAllister places digital games within a broader system of cultural argumentation and meaning-making.

A similar construction of a "grammar" and "rhetoric" of digital gaming has been proposed by Nathan Garrelts in his dissertation *The Official Strategy Guide for Video Game Studies: A Grammar and Rhetoric of Video Games*. Garrelts' version of a video game rhetoric consists of "regulating configurations, embedded narratives, and social systems," which he refers to collectively as "orienting systems" (116). Garrelts goes on to argue that "if present in a video game, these orienting systems are pervasive and require gamers to define their player-controlled agents within the world of the video game in relationship to these systems" (116). Garrelts' focus on rhetorical address, identification (via Burke), and agency emphasizes a third axis, the *player's* co-construction and negotiation of rhetorical meaning, which can be placed in relation to games as a

computational, expressive artifact and the larger rhetorical and dialectical systems in which games are situated.

Beyond the specific efforts to establish rhetorical models for digital gaming, there are also theories of visual and digital rhetoric that can inform the ways in which we examine games as multimodal texts. As Bogost's framing of digital rhetoric illustrates, however, the role of digital rhetoric theory, or what digital rhetoric theory "should be," is not easily definable. Elizabeth Losh claims that in the "standard model of digital rhetoric, literary theory is applied to technological phenomena without considering how technological theories could conversely elucidate new media texts" (qtd. in Bogost 28). However, Lev Manovich, in *The Language of New Media*, is skeptical about the value of pursuing a "new rhetoric of hypermedia," a claim that stands in opposition to scholars such as Losh and George P. Landow. Manovich argues that "the sheer existence and popularity of hyperlinking exemplifies the continuing decline of the field of rhetoric in the modern era" (qtd. in Bogost 26).

There are also interpretations between these two ends, such as James Zappen's claim that the affordances and constraints of new media "support and enable the transformation of the old rhetoric of persuasion into a new digital rhetoric that encourages self-expression, participation, and creative collaboration" (321). While Zappen views this rhetoric as simultaneously remediated ("transformed") off the old rhetoric and defined as "new," Bogost suggests that this definition uplifts the old rhetoric while giving only a cursory consideration to what "digital" actually means in terms of computation (25). With these tensions in play, the question becomes whether to "apply" existing digital rhetoric theory to games, craft new iterations of digital rhetoric theory to

account for games, or move in a different direction (such as Bogost's procedural rhetoric, which is founded on but presented as an alternative to digital rhetoric as it is traditionally defined). The question gets trickier when we consider the literature on digital visual rhetorics, such as Anne Wysocki's "The Multiple Media of Texts: How Onscreen and Paper Texts Incorporate Words, Images, and Other Media." Wysocki's work suggests a range of questions for considering how visual materials and forms of representation establish relationships across texts or within multiple "screens" of the same text. These questions are critical if we are to assess the interplay between images, symbols, icons, texts, and other modes within digital games and interactive media.

Literacy Studies

Although it is not at all uncommon to find literacy and rhetoric being discussed in relation to each other[2] (especially for scholars who identify as rhetoricians *and* compositionists), there is enough of a distinction between the two domains that they aren't always joined together in the same place. To account for this distinction, I am mapping out the work that specifically addresses theories and/or practices of literacy (in the context of digital gaming) before making the shift to look at the literacy and rhetoric threads in relation to each other.

Framing a literature review around digital gaming (or serious games) as a literacy practice seems to require a variety of assumptions about how literacy "works" or how it should be defined in the first place. A major part of the background work going on here is the negotiation of literacy as a term, including arguments that respond to the definition of

[2] Carolyn Handa's introduction to *Computers and Composition* 18.1 and 18.2, and those two special issues taken together, provide an illustration of how literacy and rhetoric (in this case, a focus on *digital* literacy and rhetoric) can be treated dialogically.

"traditional" literacy and claims that focus on the development of "new," "multiple," "digital," or "multimodal" literacies (to name a few). At first glance, treating digital gaming as a literacy practice *must* represent a challenge to the conventional idea of literacy, which might be presented as "the ability to read and write." To what extent this definition implies print-based, alphabetic text as the only thing counting as literacy has been a major question taken up by literacy scholars (e.g., Gee; Lankshear and Knobel; Barton and Hamilton; Street). However, even in limiting the scope to this conventional treatment of literacy, there are certainly practices of reading and writing print-based text at work in digital gameplay, which suggests that digital games do not need to stand in direct opposition to this treatment of literacy. Following the work on new literacies and multimodality, however, also calls for literacy scholars to examine practices of print-based reading and writing alongside other modes of visual and digital production.

Looking at digital games from the perspective of literacy studies has the potential to identify the processes of interpretation and production that influence both the design of games and how they are experienced by players. From the designer's side, for example, literacy studies can help to define what technological literacies are called upon in game design (e.g., computer programming skills, digital video or image editing, etc.) as well as the conceptual "design" literacies that are a part of game design (e.g., creating a narrative space, designing rule systems, etc.). From the player's side, literacy studies is valuable in mapping out the kinds of "textual" practices that game players are involved in, such as how they understand interfaces and symbols within a virtual environment. Another useful frame that can be derived from literacy studies is an examination of how both

"traditional" practices of text-based reading and writing as well as digital forms of writing intersect with and contribute to the actual activity of digital gameplay.

Literature in Literacy Studies

James Paul Gee, in his book *What Video Games Have to Teach Us about Learning and Literacy*, frames the argument for digital gaming as a literacy practice but also recognizes that this requires an expanded definition of the term literacy itself. He notes, "when people learn to play video games, they are learning a new *literacy*. Of course, this is not how the word 'literacy' is normally used. Traditionally, literacy is the ability to read and write. So why should we think of literacy more broadly?" (17). Gee offers two reasons for this shift in conceptualizing literacy, the first being that "language is not the only important communicational system. Images, symbols, graphs, diagrams, artifacts, and many other visual symbols are significant, more so today than ever" (17). This first reason is bound up not only in the proliferation of visual materials, but in more specifically recognizing them as communicative *symbols* or meaning-making devices. Gee's second reason is that "words and images are very often juxtaposed and integrated" (17). In multimodal texts, then, visual material does not simply supplement the meaning of the textual material, but the different modes at play construct meanings in relation to each other that they would not communicate taken separately.

So how exactly does this discussion of multimodal literacy apply to digital games? Gee argues, in addition, that "multimodality goes far beyond images and words to include sounds, music, movement, and bodily sensations. Video gaming, as we will see throughout this book, is a multimodal literacy *par excellence*" (18). The last piece to Gee's theory of literacy is the social dimension of literacy practices, in which not just

reading and writing happen, but also "ways of doing things, thinking about things, valuing things, and interacting with other people" (Gee 18). Combining all of these points that expand the traditional notion of literacy, Gee articulates his concept of "semiotic domains," which refers to "any set of practices that recruits one or more modalities (e.g., oral or written language, images, equations, symbols, sounds, gestures, graphs, artifacts, etc.) to communicate distinctive types of meanings" (19). By applying this frame to digital games as a literacy practice, one could examine the kinds of meanings generated by games as an entire activity or look more specifically into specific game genres (including particular kinds of serious games).

Semiotic domains, according to Gee, operate with what he calls an internal and an external design grammar. The internal design grammar refers to "the principles and patterns in terms of which one can recognize what is and what is not acceptable or typical content in a semiotic domain," while the external design grammar consists of "the principles and patterns in terms of which one can recognize what is and what is not an acceptable or typical social practice and identity in regard to the affinity group associated with a semiotic domain" (28-29). I bring up Gee's discussion of design grammar here because the concept holds some interesting parallels with Bogost's discussion of "procedural literacy," and, taken together, they might suggest some ways in which literacy and rhetoric can be studied in relation to each other within the context of serious games. Bogost claims, about procedural literacy, that "the procedurally literate subject is one who recognizes both the specific nature of a material concept *and* the abstract rules that underwrite that concept" (257). The connection with Bogost's procedural rhetoric comes in the sense that "procedural rhetoric is a type of procedural literacy that advances

and challenges the logics that underlie behavior, and how such logics work. Procedural literacy entails the ability to read and write procedural rhetorics—to craft and understand arguments mounted through unit operations represented in code" (Bogost 258). If Bogost's model is a way of decoding the forms of rhetoric and literacy that are at stake in designing or playing serious games (as texts/artifacts), Gee's external design grammar suggests that we can connect those practices to the larger social situation and the construction of identity.

The social and cultural dimensions of literacy in relation to gaming are extended by Cynthia Selfe, Anne Mareck, and Josh Gardiner in *Gaming Lives in the Twenty-First Century: Literate Connections*. They argue that the personal values at stake within gaming as a literacy practice "have to do with the formation of a commitment to personally selected, cross-cultural literacy communities, the ability to enact personal choice and political agency through and with literacy practices, and the opportunity to shape identity within literate environments" (23). Part of the reason that the authors connect these functions of literacy with personal values is that their study of literacy emerges from a particular case study of a video gamer (a thirteen-year-old named Josh) (Selfe, Mareck, and Gardiner 23). In their case study of Josh's gaming experience, they argue that "gaming also provided Josh a very real exigence for using language and other semiotic systems to communicate and collaborate with individuals and groups outside the immediate circle of people he interacted with" (25). This point about the social, collaborative work that Josh engaged in while gaming ties into Gee's concept of semiotic domains. Josh also developed other "cultural and linguistic literacies," including second-language learning in French and Dutch (Selfe, Mareck, and Gardiner 25). In this sense,

gaming can serve as a "motivational" context for the development of literacies such as foreign language learning, which is encouraged even in traditional literacy instruction settings.

Drawing on Gee's discussion of multimodality, Selfe, Mareck, and Gardiner note that gaming literacies among groups of players are derived "not only from alphabetic exchanges they carry on, but also from their interpersonal interactions; from the images, sounds, gestures, symbols, and movements; from their shared use of specialized knowledge, terms, processes, strategies, and approaches; and from their common set of literacy values" (28-29). The literacy dimensions that can be pulled out of this analysis as supplementing Gee's "semiotic domains" are the use of things like "strategies" and "processes" (as distinct from "modes" of communication) as well as the set of personal values ascribed to any or all of the literacy practices in question. As a concluding point, the authors note that "we can understand literacy as a set of practices and values *only* when we properly situate these elements in a particular historical period, cultural milieu, or cluster of material conditions" (Selfe, Mareck, and Gardiner 32). In terms of evaluating digital gaming as a literacy, then, it is not enough to look at only the player in relation to the "text" of the game; the materiality of the gaming situation and the historical and technological conditions that influence individual "events" of play must be taken into consideration.

Colin Lankshear and Michele Knobel, in their book *A New Literacies Sampler*, make the argument that digital gaming represents one of many "new literacy" practices, some other examples of which include "fan fiction writing, weblogging, using websites to participate in affinity practices, and social practices involving mobile computing" (1).

Echoing the points made by Selfe, Mareck, and Gardiner, they claim that approaching new literacy studies from a sociocultural perspective is one of the most productive ways to think about these emerging forms of literacy. For Lankshear and Knobel, the sociocultural perspective on literacy "means that reading and writing can only be understood in the contexts of social, cultural, political, economic, historical practices to which they are integral, of which they are a part" (1). Given this way of looking at literacy, what is it that makes new literacies "new"? Lankshear and Knobel distinguish between two types of new literacies, "paradigm cases" and "peripheral cases" (7). Paradigm cases, they argue, "have *both* new 'technical stuff' (digitality) and new 'ethos stuff,'" while peripheral cases "have new 'ethos stuff' but not new 'technical stuff'" (7). The new technical stuff incorporates any number of meaning-making modes that are enabled by digital technologies; as Lankshear and Knobel put it, these modes "represent a quantum shift beyond typographic means of text production as well as beyond analogue forms of sound and image production" (8-9). The new ethos stuff that Lankshear and Knobel argue for refers to how "new literacies are more 'participatory,' 'collaborative,' and 'distributed' in nature than conventional literacies. That is, they are less 'published,' 'individuated,' and 'author-centric' than conventional literacies. They are also less 'expert-dominated' than conventional literacies" (9). As an example of this new ethos stuff in practice, Lankshear and Knobel discuss the practice of game modding, which "may expand a level by adding new skills or qualities to the game, or create an entirely new level for players to complete that adds a layer of difficulty or complexity to the game" (14). In terms of ethos, game modding challenges the dominant paradigm of

single-authorship as design and allows for a distributed player community to generate their own content by using a particular technological toolkit.

One way to demonstrate the new ethos stuff of digital gaming is to look at the variety of composing practices that gamers are involved in when they play online games, which is exactly what Constance Steinkuehler does in her article "Massively Multiplayer Online Gaming as a Constellation of Literacy Practices." Steinkuehler argues that massively multiplayer online games are the site of a range of literacy practices, which "count" as literacy even under a more restricted or traditional definition of literacy. Steinkuehler frames this argument by asking, "Are video games (MMOGs, in particular) in competition with text literacy? My goal here is to make the stronger argument that, even with a narrowed definition of what literacy is and means, MMOGs are indeed a constellation of literacy practices" (301). Within this self-imposed literacy frame, Steinkuehler points out that there are a number of in-game practices of reading and writing that players participate in. For example, in the online game *Lineage*, players regularly engage in "the titling of avatars, letter writing, 'orally' delivered narratives and poetry, formal conventions for holding meetings, rituals, the coordination of joint expeditions, social sports, and instructional practices" (Steinkuehler 302). Beyond these in-game literacy practices, players engage in other literacies that are outside the game itself but are directly related to the purposes and social objectives of the game. These literacy practices include "the development and maintenance of game-related fan sites and blogs; discussion and debate of game-related issues on threaded discussion boards; the creation and distribution of fan fictions, fan art, annotated game screenshots and cartoons; and deliberation via game-specific chat rooms, instant messaging, in-character

emails, and even Voice over Internet Protocol (VoIP) forums" (Steinkuehler 302-303). Many of these literacy practices directly draw upon the new technological stuff that Lankshear and Knobel discuss, and they also represent a shift in ethos. Player-generated content and collaboration become the primary domain of literacy in this gaming context, rather than a single-authored text that offers no possibility of response (or offers an asymmetrical and limited opportunity for response).

Communication

As with rhetoric and literacy, it is not easy to frame a coherent and comprehensive thread around "communication," given that communication as a field is interdisciplinary and draws across a variety of theories and methodologies. For example, communication may include interpersonal, intercultural, and organizational communication, the design of mediated information and information systems, and social-scientific studies of media messages, to name just a few of the possible approaches. New media is an especially relevant piece of communication research to bring in for the consideration of digital games, as digital games are an emerging, new communication medium. The structural features of digital games leverage new technologies; for instance, the term "interactive" has emerged as a popular way to describe the affordances of games in relation to other mass media forms.

Communication is a valuable research thread to look at in the context of serious games because it can help to identify how well serious games are enacting their purposes. For example, in games for health, communication studies can measure players' attitudes toward their ability to take care of themselves (self-efficacy) and can also, in some cases, measure the health-related behavioral outcomes of serious game players to see if the

game improves actual practices of self-care. Studying the impact of "persuasive games" draws upon communication studies of attitude change and persuasion. The study of computers as a persuasive medium is sometimes referred to as "captology" (http://captology.stanford.edu). Where communication media and messages evoke social change either as an intended or incidental effect, looking at research in this domain can be very informative for both the design and analysis of serious games.

Literature in Communication

A couple of the primary areas of communication studies that can be tied to serious games are theoretical approaches to learning and persuasion. Albert Bandura argues, in "Social Cognitive Theory for Personal and Social Change by Enabling Media," that there are "two basic modes of learning. People learn through the direct experience of rewarding and punishing effects of actions, and through the power of social modeling" (77). Using both modes of learning, Bandura develops a series of theoretical strategies for developing self-efficacy. For Bandura, self-efficacy is an important concept because "among the mechanisms of self-influence, none is more central or pervasive than beliefs in one's efficacy to exercise control over one's functioning and events that affect one's life. This core belief system is the foundation of human motivation and accomplishments" (78-79). Bandura proposes four ways to develop self-efficacy: "(1) through mastery experiences, (2) social modeling, (3) social persuasion, and (4) construal of physical and emotional states" (79). Additionally, he argues that "the most effective way of instilling a strong sense of efficacy is through mastery experiences" (79). For serious game studies, this is important because most games are designed to give players a "mastery experience" over

the game through the scaffolding of learning objectives, feedback and evaluation, and systems of trial and error.

Returning to the example of games for health, effective self-care practices can be promoted through behavioral rehearsal in a serious game, which allows the player to have mastery experiences. This will increase the player's self-efficacy and lead to the attitude and behavior changes that will result in better health outcomes. For example, in her commentary on designing the RightWay Café game, Wei Peng notes that "a successful enactive experience (mastery experience) of diet and weight management in the game can increase their [the players'] self-efficacy of managing their meals and weight in real life" (6). In their discussion of a serious game for diabetes self-care, Stephen Brown and his colleagues point to behavioral rehearsal as an effective means of facilitating attitude and behavior changes for better self-care practices: "Social cognitive theory and related research studies demonstrate that opportunities for rehearsal of skills, and vicariously seeing role models engaging successfully in those skills, lead to improvements in behavioral outcomes" (83). Brown et al. also connect this with the process of enactive learning, or "learning by doing" (83).

Bandura also points to the use of popular culture as a way to provide social modeling that "reaches" and is made meaningful to younger audiences; popular entertainment genres can be leveraged to address themes such as "substance abuse, violence, teen sexuality, and gender equality" (95). To what extent games are a "good" medium to address these issues has obviously not been resolved, but the issues of familiarity and accessibility in relation to audience are critical if serious games intend to achieve what they have identified as their primary purpose.

In terms of persuasion theory, Kelton Rhoads and Robert Cialdini discuss six major "principles of influence" that apply to human responding but can more specifically be applied to examine the rhetorical strategies of media such as serious games. Rhoads and Cialdini claim that these are "universal principles" in the sense that they "should undergird successful persuasive attempts wherever they are applied" (513). These principles are "reciprocity, consistency, social validation, friendship/liking, authority, and scarcity" (Rhoads and Cialdini 514). Although not all of these principles are relevant for serious games as a particular mode of communication, these persuasion principles can be applied to how serious games work "procedurally," as Bogost would claim. For example, Rhoads and Cialdini claim that the appeal to authority works as a persuasion technique because "when feeling overwhelmed by a complicated and consequential choice, most individuals still want a fully considered, point-by-point analysis of it—an analysis they might not be able to achieve except, ironically enough, through a shortcut—reliance on an expert" (522-23). This persuasion strategy, among others, can be applied as a heuristic for the analysis of serious games. Authority might be particularly relevant to consider for serious games designed to support political candidates or ones that call for political action from the player, such as *Darfur is Dying*. [3]

Other research on persuasion examines, more specifically, the use of computer technologies as a tool of persuasion. In "Interactive Technology and Persuasion," B.J. Fogg, Elissa Lee, and Jonathan Marshall claim that "a 'persuasive technology' is any type of computing system, device, or application that was designed to change a person's

[3] *Darfur is Dying* draws upon a network of institutional associations to help situate the game's purpose and call players to action, including the Save Darfur Coalition (http://www.savedarfur.org) and the International Crisis Group (http://www.crisisgroup.org). These "authoritative" connections work toward the image of the game as part of a larger global effort led by real-world institutions, rather than as a standalone game with no immediate avenue for players to participate in issues of global conflict and activism.

attitudes or behavior in a predetermined way" (766). This area of work, sometimes called "captology," takes a designer-centric view of persuasion by limiting the definition to persuasion that has been *intended* to take place by the designers of the technology. Fogg, Lee, and Marshall argue that "a computer qualifies as a persuasive technology when the people who create the product do so with an intent to change attitudes or behaviors in a predetermined way" (766). Bogost makes a distinction between this form of persuasive technology and the procedural rhetoric that is employed by persuasive games. In his discussion of Fogg's "captology", Bogost claims that "Fogg does not appear to explicitly correlate captological persuasion with institutional ideologies. However, further interrogation shows that captology is not fundamentally concerned with altering the user's fundamental conception of how real-world processes work. Rather, it is primarily intended to craft new technological constraints that impose conceptual or behavioral change in users" (59-60). In this sense, Bogost views captology as lacking a critical perspective on design: "all of Fogg's techniques use technology to alter actions or beliefs without engaging users in a discourse about the behavior itself or the logics that would recommend such actions or beliefs" (60-61). In applying both of these perspectives to serious game design and analysis, then, we can consider persuasion both in terms of the psychological or structural techniques employed by game designers as well as the dialectical process of play.

Digital games are often described as "interactive" forms of media, but it is not usually clear what is meant by interactivity and what kinds of characteristics make something interactive, which is another problem that the communication literature has worked to address. Carrie Heeter notes that "interactivity is an overused, underdefined

concept" and presents some common senses in which the word "interaction" is used: "Everything a human does to or with another human can be called an interaction. Human interactions that use media are mediated human interactions. Everything a human does to or with a computer is a human-computer interaction" ("Interactivity in the Context of Designed Experiences"). Heeter also presents six dimensions of interactivity as a movement toward establishing a more defined concept of interactivity. These six dimensions are "complexity of choice available, effort users must exert, responsiveness to the user, monitoring information use, ease of adding information, and facilitation of interpersonal communication" ("Implications of New Interactive Technologies," 221-225). Bogost takes up the problem of the underdefined concept of interactivity by applying Janet Murray's discussion of interactivity to his theory of procedural rhetoric. Murray notes that interactivity, as applied to the computer, means the creation of "an environment that is both procedural and participatory" (qtd. in Bogost 42). For Murray, "participatory" interactions are defined by the user's agency, so the environment has to be one that is "meaningfully responsive to user input," which aligns most closely with the third dimension of interactivity ("responsiveness to the user") outlined by Heeter (Bogost 42). Extending Murray's discussion of interactivity, Bogost argues that serious games and other procedural representations "do not necessarily demand sophisticated interactivity" but asks if the procedural rhetorics of serious games might be more effective with sophisticated rather than limited interactivity (Bogost 42). Bogost claims that "sophisticated interactivity means greater responsiveness, tighter symbolic coupling between user actions and procedural representations" (42). With this claim, Bogost attempts to tie rhetorical production in serious gaming together with a model of

interactivity, with the implication that more user responsiveness leads to a more effectively delivered procedural rhetoric.

Matthew Lombard and Theresa Ditton also make the connection between interactivity and "presence," which they define as the "illusion that a mediated experience is not mediated." Heeter puts forth a revised definition of presence as "the sensation of being spatially and temporally located within a mediated experience" ("Interactivity in the Context of Designed Experiences"). In Lombard and Ditton's discussion of presence, they propose that interactivity is one of the "form variables" that influence the perception of presence. One of the implications of this relationship between interactivity and presence for serious games is that the *persuasiveness* of a mediated experience has been linked to the establishment of presence. Lombard and Ditton qualify this claim by noting that "more research is needed of course, but the possibility that under some circumstances presence can enhance the persuasiveness of media content is provocative."

Another move toward defining exactly how the player interacts with digital games has been presented as the analysis of play styles, and for serious games, this discussion has been placed in the context of how players learn in relation to their play styles. As Heeter argues, "Because educational games have learning as well as entertainment goals, learning game player types need to incorporate player-learner characteristics such as learning styles, abilities, and achievement orientation" ("Play Styles and Learning"). Following a review of play styles from entertainment and educational game-player studies, Heeter presents the play styles developed in an educational game study with Brian Winn, which are defined along the categories of Achiever, Explorer, Careless, and

Lost ("Play Styles and Learning"). The relationship between play styles and learning means that the effectiveness of serious games as learning tools rests on the affordances of the game design in relation to how the player plays the game. Heeter notes that "when learning game affordances (possible ways of playing and learning) match the preferred learning style of the player, there may be a stronger learning outcome or at least a more pleasant, easier learning process" ("Play Styles and Learning"). Thus, in the arguments presented by both Heeter and Lombard and Ditton, the interactivity of the game is not a neutral site of player-computer interaction; rather, it holds implications for the "serious" purposes at work in the process of play.

In addition to general theories of learning, persuasion, and interactivity, research in communication also combines these theories with an analysis of the features of digital games as a medium; this research attempts to identify, for example, what structural features of digital gameplay can be used to achieve targeted learning outcomes. In his application of situated cognition to the design of video games, Richard Van Eck argues that games are effective "because the learning takes place within a meaningful (to the game) context; what you must learn is directly related to the environment in which you learn it, and is thus not only relevant but applied and practiced within that context" (18). James Paul Gee, in *Good Video Games + Good Learning*, makes a similar point: "for humans, effective learning is more like running a simulation that it is about forming abstract generalizations cut off from experiential realities" (25). In well-designed digital games, the goals of the game motivate the player to learn both the "content" of the game and what Gee calls "affordances," or what actions the player can perform given the relationship between the player's skills and the game environment (25). As a rule-based

system, digital games are particularly effective at showing the player the outcomes of interactions between many different variables and constraints; this cause-and-effect relationship is placed within a concrete and experiential context. In Van Eck's discussion of situated cognition, he also notes that "(almost) no learning takes place out of the context of the game, no learning is unrelated to what is currently going on in the game, and no learning advances you through the game unless it is demonstrated" (27). This discussion of cause-and-effect as a learning strategy is very close to the cause-and-effect relationships that Bogost describes in terms of persuasion.

Digital games can also be designed to take advantage of the "flow state," a term developed by psychologist Mihaly Csikszentmihalyi. Wei Peng and Kwan-Min Lee, in a review of the social and psychological effects of computer games, note that "flow is the state of optimal experience whereby a person is so engaged in an activity that self-consciousness disappears, time becomes distorted, and the person engages in complex, goal-oriented activities not for external reward, but simply for the exhilaration of doing" (24). John Kirriemuir and Angela McFarlane outline the conditions, as presented by Thomas Malone, that will make a person more likely to enter the flow state (Kirriemuir and McFarlane 22). Among these, several are particularly well-afforded by using a digital game, such as the ability to "increase or decrease the level of challenges faced," the presence of "clear criteria for performance," and receiving "concrete feedback" that assesses performance in relation to these criteria (Kirriemuir and McFarlane 22). For serious games designed to supplement or be used in coordination with school-based instruction, this discussion of the flow state holds especially valuable implications for learning and student motivation.

Literature Review Implications

The three areas of literature in rhetorical studies, literacy studies, and communication reviewed here point to the interdisciplinary (and even contested) nature of contemporary game studies. In each of these disciplinary areas, there have been attempts to both apply existing theories and methods to the study of games and build new ways of looking at games "from the ground up." This latter approach echoes Espen Aarseth's call for game studies as a new and distinct field of its own, not just a collection of work from scholars, still housed within their own areas, that have taken a more active interest in games. Regardless of the problem of disciplinary politics, we see both approaches at work here as the affordances and limitations of the "old" perspectives are examined in new ways as scholars turn to digital gaming and interactive media.

Even as it seems tempting to unify the three literature threads and move toward a synthesis, one of the first objectives is to see how the threads *dis*align and what kinds of questions can be pulled out of the various gaps in the literature. For instance, the work on literacy studies covers a number of gaming contexts, including offline and online digital gameplay and nondigital forms such as paper-based roleplaying games (e.g., Hammer; Fleischer, Wright, and Barnes). This scholarship also operates with a range of definitions about what literacy is and how it works, including more traditional definitions focused on the reading and writing of alphabetic texts and multimodal literacies incorporating several modes of communication in a single multimedia artifact. However, very little of the work in literacy studies focuses on serious games in particular; most of it draws upon analyses of mass-market entertainment games. Some of the major questions to pose in response could be: What literacy practices are involved in serious games? Are there any

literacy practices at work in serious games that are not as visible or as valued in entertainment games, or vice versa? How do attempts to build a literacy framework for looking at serious games (such as Bogost's procedural literacy) stand alongside other literacy approaches, and how can we use them in conjunction?

Another area of inquiry to raise would be how the rhetorical studies and communication threads would be shifted by a more explicit focus on the social elements of play rather than an interaction between a (single) player and the game. Although there are certainly social interactions and social systems under consideration within both threads, there is less discussion of massively multiplayer online games, for instance. By contrast, the literacy studies thread is marked with discussions of massively multiplayer gaming activities, as well as discussion of the material and sociocultural forces that shape individual literacy events. In this sense, the question is more one of focus: what would it mean to take online (social) play or the technological and material conditions of gameplay as a primary means of framing more of this work?

The objective of placing these literature threads in relation to each other is to find out why rhetoric should "pay attention" to digital gaming, and subsequently, to outline what strategies might be used to address the inevitable questions and problems that arise from the juxtaposition of these two areas. One of the possible moves, then, would be to propose a framework that synthesizes all three perspectives, or at the least, takes them all into consideration. In this review, I have hinted at some ways in which this could happen—for example, using Gee's discussion of design grammar alongside Bogost's work on procedural rhetoric and procedural literacy as a means of critiquing serious games. In several works, scholars suggest expanding the scope of inquiry or looking at

new texts and systems, such as Selfe, Mareck, and Gardiner's arguments about history and materiality and Steinkuehler's work on literacy practices in the online game *Lineage*. In looking at why rhetoric should pay attention to serious games, though, the argument presented must be one that situates gaming within rhetoric (as a discipline) and makes it meaningful in the context of what rhetoric scholars are interested in. In Chapter 3, I argue for a strategy that situates serious games within the territory of rhetoric but also incorporates the thematic issues that have emerged from this reading of literacy studies and communication as they intersect with digital gaming.

Chapter 3: Serious Games and Genre

With an overview of the literature from rhetorical studies, literacy studies, and communications—as each field intersects with serious games—now in place, the problem becomes how to use the various questions and themes brought up by these scholars to construct ways of looking at serious games rhetorically. But this is not the only task; the objective is to situate serious game studies within rhetoric, making an argument for why serious gaming should be a more visible, and more valued, subject of inquiry for rhetoricians. With these goals in mind, the larger question I would like to pose here is: how can we revise (or alternately, renegotiate or reinterpret) existing ideas and frameworks in rhetoric to accommodate serious games as a site of rhetorical production?

As the literature review suggests, there are many possible ways of approaching this question and many strategies for generating research ideas out of the juxtaposition of serious game work in multiple disciplines. The area that I intend to examine in response to the question above is that of genre. Genre is only one domain of work within rhetorical studies, but I have selected it to assess how the above question can be narrowed down and operationalized for a particular case study that attempts to interrogate one branch of rhetorical theory in relation to serious games.

In this chapter, I will address the relationship between genre and serious games by first outlining my rationale for selecting genre theory as the basis for this inquiry into rhetorical theory and serious games. I will then review existing theories or models of genre that have been developed specifically for digital games, with particular attention given to serious games. Following this thematic overview, I discuss the "gaps" in the collection of game genre models that have been reviewed; here, I evaluate particular

areas of emphasis (or lack of emphasis) and suggest further questions, possibilities, and problems that arise when we look at game genre discussions in a comparative sense. I then apply the same process of thematic overview and a critique of the "gaps" to genre treatments that have been developed within rhetorical studies. I conclude the chapter with a move toward synthesis, suggesting what happens (or what *can* happen) when we put digital gaming discussions of genre together with what rhetorical theory has to say about genre.

Why Genre Theory?

Looking at genre in relation to serious games opens up an opportunity to consider how existing rhetorical theory is set up to handle, for example, the design and "content" of serious games, the player's gameplay experience, and the systems of texts that surround serious games. More specifically, though, I would like to discuss three reasons for bringing in genre as the main focus for this inquiry into rhetoric and serious games.

First, genre is used as a mode of classification to distinguish "serious" games from their non-serious counterparts, which usually refers to games for entertainment. At one level, this distinction marked by an assumption of purpose, namely that the designers of serious games must be trying to *do* something serious, such as educate, improve health, raise awareness of social issues, and so on. At the same time, because of the definition-through-negation, this distinction marks not only mass-market, commercial games, but also any "entertainment" mass media product, as incapable of achieving "serious" outcomes. Beyond this attribution of purpose, though, serious games are defined as their own genre within the digital game universe, and the term "serious game" is sometimes treated as having multiple sub-genres. For example, the Wikipedia entry on

digital game genres contains a section on video games classified "by purpose," which includes adult, advergame, casual, Christian, educational, exergame, and serious games ("Video Game Genres"). This genre classification is again set up as a binary, treating serious games as different in purpose rather than through their structural gameplay features, which is how entertainment games are typically classified. By interrogating how this genre distinction is made, we can achieve a critical understanding of how serious games are distinguished in terms of audience and purpose, as well as how their "content" or typified features are made meaningful in terms of gaming as a rhetorical situation. As hinted at above, genre is also an important issue because it intersects with how digital games are valued and even influences where and how digital games are used institutionally. For instance, the term "edutainment," once a popular genre descriptor for educational games, has been so stigmatized that many serious game developers are careful to avoid any association with this term (Bergeron 26-27). More broadly, this discussion points to the use of genre for interrogating modes and criteria of *classification*, the implications of which can be connected to questions of purpose, audience, and the construction of value.

The second reason for using genre as a focal point is that genre theory is already an established concept within rhetorical studies. Of course, genre theory is not something that exists as a "finalized" idea, but it is nonetheless familiar to rhetoric scholars and is applied as a common framework for the rhetorical critique of texts and their concomitant activities. The implications of this are that serious games can be included in genre-based critiques that include other textual forms and other practices of "reading" and "writing"; in other words, this approach situates serious games within a tradition of genre studies

and is intended to extend that tradition. Because genre theory is used as the lens for giving "attention" to serious games, the result is an examination of and a series of possible revisions for existing rhetorical theory rather than a "new" approach that is presented as an oppositional alternative.

Finally, working with genre suggests some ways in which this study can serve a practical or functional purpose for looking at serious games; the intent is to produce a heuristic or a possible set of tools that can be applied to serious games in scholarly work. For example, developing a genre-based approach to serious games can generate a strategy for the analysis and critique of individual serious games. Such an approach could be used in scholarly work on digital games, or it could be incorporated as a pedagogical tool for examining serious games as a rhetorical artifact in the classroom. Since genre is a major theme in first-year composition courses, for instance, serious games could be more readily integrated in such courses with a genre framework in place, and serious games could also be used in courses on multimedia writing and digital rhetoric.

Digital Games and Genre

Overview of Game Genre Approaches

The first part of this "Digital Games and Genre" section surveys genre systems that have been developed specifically for digital games, including both mass-market entertainment games and serious games. While these treatments of genre are not necessarily referred to or labeled as "theories," I will be considering how they line up with other ways of thinking about genre from a theoretical perspective.

Multiple systems for game genres have been developed, and how these systems have been constructed varies in terms of audience and purpose. One way of looking at

game genres is to consider the "popular" genre system that is used to label mass-market entertainment games. This genre system is "popular" in the sense that it is used by game publishers and the mainstream gaming press (e.g., *Gamespot* (http://www.gamespot.com) and *IGN* (http://www.ign.com/)) to describe games, and players use this language to interpret the characteristics of individual games and understand what "kind" of game they will be purchasing. Other ways of thinking about game genres come from game designers who propose an extension or revision of the "popular" genre set (e.g., Chris Bateman and Richard Boon in *21st Century Game Design*). Academics in various disciplines have also taken up the question of game genres; a few notable examples include Mark J.P. Wolf's genre chapter in *The Medium of the Video Game* and Thomas H. Apperley's article "Genre and Game Studies: Toward a Critical Approach to Video Game Genres." Although all of these game genre approaches share the objective of characterizing digital games and making meaningful distinctions among the many digital games that exist, they differ somewhat in purpose. For game developers, publishers, and marketers, genre can be used as a buzzword to attract gamers to their product. For academics, however, one objective might be to consider how the issue of genre fits into digital games as extended from a tradition of print-based writing (including literature), film, and other forms of cultural production.

Wikipedia's entry on video game genres provides one window into how the "popular" view of game genres has been constructed by gamers at large. The introduction to the article states that video games are "categorized into genres based on their gameplay interaction." ("Video Game Genres"). In other words, this genre system attempts to identify a set of *formal features* that characterize different games, which depend upon the

player's engagement to realize a particular type of interaction. However, games cannot be entirely made distinct in this way, as "it is important to think of each individual game as belonging to several genres at once" ("Video Game Genres").

With this philosophy in mind, the Wikipedia article attempts to employ gameplay interaction as a framework for genre categorization. For example, platform video games are described as follows: "games in which the gameplay involves traveling between platforms by jumping (very occasionally other means are substituted for jumping, like swinging or bouncing, but these are considered variations on the same mechanic). Other traditional elements include running and climbing ladders and ledges. Platformers frequently borrow elements from other genres like fighting and shooting (such as the *Castlevania* series, which incorporates role-playing)" ("Video Game Genres"). Action-adventure games are defined by their focus on "exploration" and "usually involve item gathering, simple puzzle solving, and combat" ("Video Game Genres"). Gameplay, in the sense of how these genres have been determined, refers to the mechanics or the structure that the player encounters within a particular designed environment. These definitions recognize a significant amount of slippage in how strongly the genre boundaries should hold; for example, the platform genre definition cites the "borrowing" of mechanics from other genres. The action-adventure genre is itself a hybrid of "action" and "adventure," which also exist as their own independent genres. However, the separation of these categories implies that there are still gameplay differences or patterns significant enough to maintain a genre system.

Serious Game Genres

In addition to the genre systems for mass-market entertainment games, we can look at more specific attempts to establish genre categories for *serious* games. The Wikipedia game genre article also includes a discussion of serious game genres, which it identifies as a list of "video game genres by purpose" ("Video Game Genres"). On the face of it, this seems like a curious move to make; why would these games be treated "by purpose" and not according to their gameplay structures or how they engage the player in "procedural" forms of interaction? For entertainment games, this might be the equivalent of calling survival horror games "games for horror" and real-time strategy games "games for world domination." However, the attempt here is to match up games with a "real-world" purpose that they designed to carry out. For example, advergames are video games designed to "advertise a product, organization, or viewpoint" ("Advergaming"). Educational games "attempt to teach the user using the game as a vehicle," and sub-genres of educational games include games for specific areas of academic instruction, such as geometry or biology ("Video Game Genres"). The genre of casual games is included under the discussion of genres "by purpose," which are defined as having "very simple rules or play techniques, a very low degree of strategy, making them easy to learn and play as a pastime" ("Video Game Genres").

Another way of thinking about serious game genres has been developed by Bryan Bergeron, who presents a framework for serious game genre categories in Chapter 2 of his book *Developing Serious Games*. Bergeron's audience, however, is not primarily a "popular" one that would engage the average gamer, as his book is geared toward instructing game developers and related professionals about the serious game world. Most of the book's other chapters address serious game development issues such as

technology platforms, standards and programming practices, and business management strategies. As a result, Bergeron's way of thinking about serious game genres represents the values and practices of a game designer rather than those of players.

Bergeron divides serious games into "five primary categories and two secondary categories" (26). The primary categories include "games with an agenda; news games; political games; realistic games; and core competency games," while the secondary categories include "repurposed COTS [commercial off-the-shelf] games and modifications (mods)" (26). Bergeron notes that the secondary categories are forms of game technology rather than typifications of serious game content, but they are included because they hold special potential "as a means of acquiring and developing serious games" (26). In response to "educational" games, Bergeron avoids this label as a major category, claiming that "because games in the five primary categories can be considered a variation of educational games, that term isn't used as a separate category. Another reason to avoid the label *educational game* or *edutainment* is that the genre has a bad reputation among educators" (26-27). By making this move, Bergeron suggests that game genres have particular values associated with them that need to be taken into consideration, especially for serious games attempting to achieve a specific rhetorical objective. Rather than try to reclaim the credibility of "educational" games, though, Bergeron dismisses the term altogether.

Bergeron does qualify his genre framework by claiming that, within his "games with an agenda" category, there are "no hard and fast rules on the subdivisions" (27). However, he notes that he would consider the main subdivisions to be "activism, advergames, business games, exergaming, health and medicine games, news games, and

political games" (27).[4] Bergeron relies on the interpretation of the game designer's intent to make distinctions *between* serious game subgenres as well. For example, Bergeron distinguishes political games from other subgenres by claiming that "as defined here, political games are different from news games or ordinary military games in that the developer's intent to generate controversy seems to override other considerations" (49). The mode of genre classification used here is almost entirely outside both the structural features of gameplay and the appearance of representational content or themes; for political games, Bergeron argues that it is necessary to "read" to what extent the game developers considered it to be controversial. In fact, he suggests that players could read some of these games as "propaganda," depending on the "perspective of the player" (48-49). Although this genre system makes references to the player's subjective position of "reading" or interpreting the genre, the main criteria for classification still remains what the game developers *intended* the game to mean and do.

Identifying the Gaps

The major genre "divide" noted above is the distinction between classifying games via gameplay structures (as is primarily applied to mass-market entertainment games) and classifying games via "purpose" (as is primarily applied to serious games). However, even though gameplay has been claimed as the main criteria for developing entertainment game genres, game studies scholars such as Thomas H. Apperley have troubled the idea that gameplay is the only consideration at work. In the Wikipedia article on game genres, which sets out to identify distinct gameplay structures that can be used to classify games, the genre definitions also rely on what Apperley calls

[4] The latter two categories (news games and political games) overlap with Bergeron's presentation of the initial "five primary categories" (cf. Bergeron 26).

"representational" characteristics, which refer to the "visual aesthetics" of games (7). For example, games in the survival horror genre "focus on fear and attempt to scare the player via traditional horror fiction elements such as atmospherics, death, the undead, blood and gore" ("Video Game Genres"). Part of the genre definition here relies not on *how* players interact with a survival horror game—i.e., the game mechanics—but the appearance of representational themes brought over from a particular literary/filmic genre. For survival horror, the (visual) content or theme of the game is what "counts" over its structure and gameplay, even though there are also characteristic gameplay elements such as the "low quantity of ammunition or number of breakable melee weapons" ("Video Game Genres"). Thus, the gameplay criterion appears to not be the only consideration at work in genre building, despite the statement leading off the Wikipedia article, as these genre classifications also rely on visual representation to make distinctions between games. For serious games, then, we might draw a parallel claim that visual rhetorics and strategies of representation are critical to consider for the construction of serious game genres. Such a consideration would encourage increased attention, for example, to forms of critique and parody that rely on visual representation, such as the egomaniacal McDonald's executives in Molleindustria's *The McDonald's Video Game* or the Kinko's employees bored witless in Persuasive Games' *Disaffected!*

Likewise, there are some ways of problematizing the other half of the genre "divide" mentioned above, namely that of serious games being classified according to purpose. Even though a primary purpose "other than entertainment" seems to be the favored method for distinguishing entertainment games from serious games, this binary contradicts itself and falls apart in the serious games section of the Wikipedia article on

game genres. This article classifies *casual* games under the list of games "by purpose," even though casual games share the objectives of other mass-market entertainment games. In other words, casual games are made for entertainment, but the difference is that they are designed for easy access and short play sessions.

As a related problem in the Wikipedia game genre article, serious games are not used as an umbrella term for all games classified "by purpose," but rather as a separate genre distinguished from advergames, educational games, and so on. Serious games, in the Wikipedia game genre entry, are defined as games "intended to educate or train the player" ("Video Game Genres"). Thus, the distinction between serious games and *educational* games has been blurred, in that serious games include educational objectives but somehow extend beyond the mode of strictly "educational" academic instruction and are not as strongly associated with school-based learning. Because the basis for this classification has not been made clear, the genre treatment of serious games as an identification of purpose remains problematic.

Another critique that can be raised with respect to serious game genres is that the identification of purpose used as a basis of classification is that of the *designers'* purpose and not the player's purpose; in this sense the possible rhetorical action of serious games is delimited to the game developers' intentions. As an example of this theme, Bryan Bergeron's "primary categories" of serious game genres are defined mostly through the intentionality of the game developers and not through gameplay features or "representational" content. Bergeron leads off his serious game genre discussion by defining games with an agenda, which refers to games "developed to influence opinion, share knowledge, or simply to make a point" (27). He also claims that this agenda is one

that is primarily "owned" by the developer, arguing that "as in a well-crafted novel or movie, the agenda of the developer behind this type of serious game might not be obvious to the untrained observer" (27). Although this claim gives credit to the subtlety and complexity with which serious games can be crafted, it also places a strange burden on the player to find the developer's meaning "hidden" inside the game. It also delimits the *agency* of the player to searching for a linear, singular, and predetermined agenda; nowhere in this definition do we come across the "procedural" rhetoric described by Bogost that allow players to experiment with cause-and-effect systems and learn from the interplay between forces.

After setting up his framework for serious game "categories," Bergeron does work through a number of serious games as individual examples. However, his discussion of these examples, for the most part, does not extend beyond his interpretation of the designer's purpose and a summary of the basic concept of the game. For instance, Bergeron cites the game *Steer Madness* as an example of an activism game. Activism games, Bergeron argues, "actively promote an opinion and attempt to increase public awareness in areas from vegetarianism to global warming" (27). In his discussion of *Steer Madness*, Bergeron presents a description of how the genre aligns with mass-market entertainment game genres ("3D action-adventure game"), information related to the game developer ("developed by Vancouver-based Veggie Games"), and the basic game narrative ("Bryce the Steer [...] narrowly escapes the slaughterhouse and goes on a mission to save his animal friends") (27). Bergeron then describes the purpose of *Steer Madness* as follows: "The game supports vegetarianism and environmentalism while vilifying slaughterhouses and those involved in the meat trade" (27). Bergeron's

discussion of *Steer Madness* does not engage in a description of how the player engages with the game's mechanics or rule systems, nor does it attempt to analyze how the player might be persuaded about the respective values associated with vegetarianism and the meat trade. Instead, the game's purpose, and its resulting genre classification, is determined by an interpretation of what the designers intended as their "agenda" for the game. Additionally, how this purpose is carried out is an ambiguous matter; Bergeron claims that the game "supports" certain practices while "vilifying" others, but there is no clear strategy that he presents to examine how those persuasive outcomes happen when the player encounters the game. As suggested in the main approach to entertainment game genres, identifying the structures of gameplay at work in serious games and applying the "procedural" rhetoric developed by Bogost represent a couple of ways in which serious game genres can be complicated beyond a description of the designers' purpose.

Genre Approaches from Rhetorical Theory

The next section transitions from digital game genres to cover approaches to genre that have been developed within rhetorical theory. Although I will discuss multiple approaches to genre in this section, I do not intend to provide a comprehensive review of genre theory. Rather, the purpose of this section is to discuss a selection of existing genre approaches that might be productively applied, drawn upon, or critiqued in response to the question of serious games and genre.

Overview of Genre Approaches from Rhetorical Theory

One branch of the literature that might be informative for interrogating serious game genres is the work that examines the broader relationship between *digital texts* and

genre. In their article "IText: Future Directions for Research on the Relationship Between Information Technology and Writing," Cheryl Geisler and the IText Working Group outline a project that researches "information technologies with texts at their core—the blend of IT and texts that we call ITexts," a form that they describe as "a relatively recent development" (270). Their collective goals in the project are to "explore fundamental theoretical issues of text in new ways" and "participate with other information researchers in shaping the evolution of future IText technologies in directions consistent with social values, human needs and capacities, and our best knowledge" (270).

Having established this definition that locates the development of ITexts and the objectives of their IText project, Geisler and her colleagues address the issue of genre in relation to ITexts. In their review of genre theory, the authors bring in Carolyn Miller's definition of genre as a foundation; they claim that "in rhetorical terms, genres are typified responses to typified situations, providing typified motives and forms of realization" (277). They also articulate how genres structure the ways in which audiences respond to and interpret texts, arguing that "genres help give shape to situations and people's actions, helping orient writers to their communicative needs and opportunities and providing audiences with means of making sense of the texts they receive" (277). In terms of the relationship between genre theory and digital texts, Geisler and her colleagues claim that "understanding of genre is crucial to moving activities and social networks into electronic environments. The use of prior forms for early recognizability needs to be balanced with innovation that restructures communicative forms, social relations, and activity" (277). In considering this claim for serious games, one of the major issues is the "communicative form" that digital gaming represents.

Geisler and the IText group also discuss the relationship between genre and social norms, claiming that digital genres "reflect both the capabilities of the technology and the evolving norms for communicative purposes and forms" (293). However, this is not an easy relationship to pin down and research, as "genre norms are a moving target, requiring ongoing study as the changes triggered by evolving new technology continue" (Geisler et al. 293). Some of the questions that are raised by foregrounding and studying this relationship include: "Who participates in such new IText-mediated communities? How do communication norms affect participation (gender and other dimensions of diversity may play a role here)? How do newly formed communities without previous norms develop norms?" (Geisler et al. 294).

Continuing along the line of genre, activity, and social norms, Aviva Freedman has made the argument that "the notion of genre has in fact been reinterpreted and redefined" in the last ten to fifteen years (1-2). Considering that her statement was made in 1996 and that the IText group research outline was published in 2001, we have an even more complex genre landscape now, in 2008, to consider in the context of genre theory's historical development. Freedman claims that this reinterpretation has been framed "so that rather than focusing on formal and textual regularities, (genres as text-types), genre scholars focus on the ACT, the action or the activity that is undertaken through the genre. The textual regularities are seen to be correlates or traces of the social action that takes place" (2). Interestingly, the same tension between genre interpretations appears in the discussion of game genres above; game genres are described, along one axis, according to "textual regularities" (the structure of gameplay), but Bergeron and others who have

defined serious game genres point to various forms of social action (such as creating political controversy) as the main criterion.

Freedman also describes genre as engaging in "interplay and interaction," which suggests that serious games might be especially worthwhile to engage at the level of genre (4). In her discussion of Carolyn Miller's article "Genre as Social Action," Freedman notes that "one of the important notions highlighted in this work is that genres not only respond to specific contexts but also reshape those contexts in the process of responding to them" (4).

In synthesizing the arguments of Freedman and Geisler et al., we arrive at the position that genres should not be treated as discrete, separated texts but as a component within a larger system of texts and interactions. In an attempt to articulate what this "larger system" represents and does, Clay Spinuzzi and Mark Zachry have developed the "genre ecology" framework to negotiate the relationships between genres and how people use them. They claim that a genre ecology "includes an interrelated group of genres (artifact types and the interpretive habits that have developed around them) used jointly to mediate the activities that allow people to accomplish complex objectives. In genre ecologies, multiple genres and constituent subtasks co-exist in a lively interplay as people grapple with information technologies" (172). Although Spinuzzi and Zachry have developed the genre ecology framework for thinking about computer documentation as an open rather than closed system, this way of thinking about genre can also be considered for the "activity" of serious gaming.

Additionally, Spinuzzi and Zachry's review of genre studies points to the same reinterpretation of genre theory that Freedman argues for. In citing four works on genre

published between 1988 and 1995, Spinuzzi and Zachry note that "recent genre studies have illustrated that genres are stable only within temporal limits and that the exact form and function of future instantiations of a genre cannot be accurately predicted. Genres are not static forms; they are dynamic, organic, and messy" (172-173). To account for the messiness of genres, Spinuzzi and Zachry argue that the genre ecology framework "must account for how official and unofficial documentation genres are animated by and connected through contingency; how the documentation's functionality is consequently decentralized, distributed across the ecology; and how ecologies of genres achieve relative stability despite their contingent, decentralized nature" (173). In previous work on the "activity system" of online gaming in *World of Warcraft*, I have traced how players use (and themselves compose) distributed genre ecologies to mediate the activity of grouping, which I argue is a "localized form of social networking" (16). This genre ecology is one example of the decentralization that Spinuzzi and Zachry refer to, which they define as "the distribution of usability, design, and intention across the ecology of genres" (174). For players who have the objective of finding the "right" group to play in, they draw not only upon the game's user interface, but also decentralized genres such as written FAQs and message board threads.

Extending the genre ecology framework presented by Spinuzzi and Zachry, David Christensen, Jason Cootey, and Ryan Moeller make a connection between play theory and the conceptualization of genre. They argue that "play theory provides a powerful heuristic for conceptualizing social structures, as well as the role genres play within them. We posit that play theory provides a dimensional perspective, granting further understanding into social structures that explain which genres play a mediational

influence within specific contexts and scenarios" (1). Building on this relationship, the authors present the concept of a genre field, which functions as a "transformative locale" (2). More specifically, a particular genre within a genre field not only "adapts to varying social structures" but also "can be seen as an agent, mediating some degree of transformation, activity, or change within itself as well as human agents within that transformative locale" (Christensen, Cootey, and Moeller 2). The framework developed by Christensen, Cootey, and Moeller contains three elements that comprise the "grammar" of genre fields: player-agents and genre-agents, genre field, and play scenarios (2). Regarding the first term, the authors claim that "focusing on human agents as much as the genres within a genre field, identifying the players in a field, and understanding the 'stakes' of participation allows us to better understand the nature of transactions within various genres" (2). The second grammatical element, genre field, "denotes the entire spectrum of space surrounding a genre artifact or artifacts" and " includes the agents, influences, social structures, and constraints that are productive of genres and the relationships influenced by genre" (2). Finally, play scenarios are situations that "employ some or all of the genres normally present within the genre field" (3). As an example of how genres adapt and transform within particular play scenarios, Christensen, Cootey, and Moeller point to "the shifting roles of the referee with the invention of the nearly instantaneous video replay in football or the photo finish in track and racing" (3).

Identifying the Gaps

With the assumption that my objective is to search for the intersection of serious games and work on genre, the most immediately apparent gap in the rhetorical theory

discussion of genre is the lack of reference to digital games, and serious games in particular, *as genres*. The closest that genre theory gets to this inclusion is Geisler et al.'s formulation of "ITexts" and Christensen, Cootey, and Moeller's case studies on game design documents, which are closely tied to the game but cannot functionally be equated with the game itself. One objection to raise in response to this might be that genre theory's role isn't to account for and document examples of all text-types; genre theory functions as a theoretical frame for understanding the activity of texts and agents.

However, I would argue that the omission of digital games represents more than a lack of visibility of games as "example" genres. If genre theory is to account for all of the functional and agentive features that it suggests—Freedman's "interplay and interaction," for instance—then the interactive, computational play spaces of digital games (and related forms such as virtual worlds) need to be considered alongside other digital and non-digital genres. This development would be especially valuable for serious games, as genre theory could foreground the relationship between procedural forms of game interactivity and the social action carried out in the process of gameplay.

Bringing in digital games and other interactive media as subjects within the scope of genre theory would also allow for an interrogation of concepts such as "relative stability" and "contingency" in Spinuzzi and Zachry's discussion of genre ecologies. Contingency, for example, would not only depend on the gaming situation (such as when and how players draw upon outside genres such as written FAQs), but also be influenced by individual gameplay styles and learning styles. Because the style of gameplay changes the "experience" of the genre every time players interact with a digital game, the idea of contingency could be articulated as something that reshapes and restructures individual

genre artifacts through each instance of use. The notion of relative stability could also be examined using digital games as a foundation. For example, what does "relative stability" mean when individual gameplay decisions alter the sequence and content of the text at every moment? What forms of the genre can we say remain stable during this process?

Another gap in this discussion of genre theory is the "when" of genre use. Genre theory does not provide a method of tracing, for instance, when players draw upon distributed genres outside the game to mediate gameplay activity. Some of this may be reflected in what players self-report in the textual content of these genres (for example, if players post a request to a message board claiming that they've been frustrated for hours about something), but genre theory itself does not offer a heuristic for assessing this temporal aspect.

Synthesizing Game Genres and Genre Theory

Overview

The following section is intended to bring together the discussions of digital game and serious game genres with the genre theory literature discussed from rhetorical studies. Looking thematically at the intersections between these two areas, I identify some of the possibilities and implications of this work for thinking about serious games in terms of genre. Thus, my goal here is not to prescribe a particular way of approaching serious game genres, but to outline how that discussion might be framed and applied in various rhetorical contexts.

Openings and Possibilities

One way to think about serious game genres is to return to Geisler et al.'s discussion of ITexts and genre. Although serious games are not explicitly discussed as an

IText, analyzing serious games using the same kind of framework would allow researchers to pay more consistent attention to the "cultural, cognitive, and material arrangements" that comprise serious game design, gameplay, and reception (Geisler et al. 270). Applying the IText article to serious gaming would also raise the question of to what extent, and how, serious games function as a "text." Additionally, the IText research project calls for artifacts such as serious games to be located within a *constellation* of texts and interactions, such that the game itself is not the only "text" that carries out the purpose(s) associated with the game. This claim is suggestive of similar approaches to studying literacy in online gaming spaces (and more generally, studying digital literacy practices), such as Constance Steinkuehler's analysis of the constellation of literacy practices at work in the massively multiplayer online game *Lineage* (301-302).

Geisler and her colleagues also point to the "use of prior forms" in ITexts, which help direct the process of orientation and genre reception. In other words, readers encounter a tension between familiar genre characteristics and the innovation of digital genres (277). Because of the interactive nature of digital gameplay, the issue of reception becomes complicated; players do "receive" a system with particular affordances and constraints, but they also co-construct the text through their choices during gameplay, thus resulting in a different text every time the game is played. However, the "use of prior forms" also figures into the construction of serious game genres. For example, some educational games (such as *Dimension M*, a serious game for algebra and geometry instruction) rely upon assessment forms such as the multiple-choice quiz for "testing" what players have learned from earlier gameplay. How these "other" genres are

embedded in and how they influence the activity of serious gaming, then, also presents itself as an important question to consider.

Likewise, the discussion of genre norms from the IText article raises questions for serious gaming as well. Player communities can be defined in the context of multiplayer online gaming over distributed networks, groups of players who gather in collaborative online writing spaces such as message boards, blogs, or wikis, and/or players who share the same physical space (e.g., a classroom). In turn, these definitions of "player community" shape what genre norms will be in play, what genre forms get valued/devalued, and by whom. The same questions about genre and social norms could also be applied to serious game *designers* as a means of assessing how community norms influence what genre expectations are made explicit as serious games are developed.

Freedman's discussion of interplay and interaction, as well as her review of Carolyn Miller's work on genre as (transformative) social action, bring up a few interesting problems in the context of serious games. For serious games, this "interplay" statement raises the question of genre interplay at two levels: the level of the player's agency and interactivity *in response to* the genre and the level of the genre's response (to a situation) beyond the scope of a single player. Regarding the latter level of genre interplay, Freedman also argues that "by learning the genres of a particular community we understand then what in fact are the social interpretations of reality of that community" (6). The "social interpretation of reality" here seems especially crucial for understanding persuasive games that respond to, raise awareness of, or critique a particular social problem. For example, one issue would be how genre conventions are employed in serious games to frame and make reference to a specific notion of "reality."

The genre ecology framework, as presented by Spinuzzi and Zachry, suggests that we should more actively look to related genres that contribute to the activity of serious gaming. One place to start might be the online spaces where serious games are "framed" before the player even starts playing. For example, in Molleindustria's *The McDonald's Video Game*, the website hosting the game closely mimics the official McDonald's U.S. website. In addition to acting as a space for documentation and information *about* the game, the website co-constructs the persuasive message (through visual and textual strategies of parody and critique) that is developed more deeply during gameplay.

Furthermore, we might ask how Christensen, Cootey, and Moeller's discussion of *genre fields* can be connected to digital gaming, and serious games in particular. In their article, Christensen, Cootey, and Moeller discuss a case study of serious game design (in particular, the construction of a design document for a serious game concept) using this framework, but it has not yet been shifted over to look at the activity of serious game players. For example, the interplay among the three genre field elements (player-agents/genre-agents, the genre field, and play scenarios) could be applied as a framework to supplement analyses of player- or playing- "styles." This discussion could then be placed in the context of how genres influence or transform play styles, and working in the other direction, how play styles change the ways in which genres work procedurally.

Chapter 4: Rhetorical "Scenes" and Implications

In the last section of Chapter 3, I have suggested a number of "openings and possibilities" in response to the synthesis of game genre frameworks (dealing with both "entertainment" games and serious games) and work from rhetorical studies that deals with genre. Among other things, this particular juxtaposition of work opens up ways of thinking about serious gaming that extend beyond the game itself and situate the game within a larger rhetorical framework. What exactly to call this framework is not a task that I have undertaken here, but this idea has come up consistently in the notions of, for example, a "constellation" of gaming texts and literacy practices, a genre ecology, and a genre field. One of the implications here is not just that serious games are rhetorically situated, but that processes of learning and persuasion have already been engaged before the player even begins gameplay. In the case of the *McDonald's Video Game*, for instance, the player's reading of the rhetorical features of the game's website influences how he or she interprets the game's persuasive "message" and engages the game's procedural rhetorics. Serious games also raise interesting questions and problems for the idea of "genre interplay," much like the formal features of games call for a revision of how we think about multimodality in rhetoric/composition.

These are intriguing theoretical problems to consider and work with, but I would also like to consider some ways in which we can put these questions into practice. After all, if I am calling for rhetoricians to pay attention to serious gaming, it would only be appropriate to provide some avenues for tuning in. In this last chapter, my main objective is to shift from a theoretical discussion of the relationship between serious gaming and genre to suggest how these questions can be approached in more "pragmatic" contexts—

that is, how we might start applying and investigating them in our pedagogy and research. To this end, I have crafted three "scenes" that outline some strategies for rhetoric/composition scholars and teachers to integrate serious games and genre as themes into their work. The first two scenes focus on classroom pedagogy and the role of serious games and genre in the writing work that we ask students to produce: these two scenes illustrate strategies for first-year composition and an upper-level undergraduate course in new media or digital rhetoric. The third rhetorical scene focuses on research scenarios for scholars who are interested in taking up questions related to serious games and genre in their research. One of the possibilities I focus on more explicitly here is how to revise ways of thinking about serious game genres, using the theories reviewed here to move toward alternative genre paradigms. Following the construction of these three scenes, I outline some of the broader implications for rhetoric/composition as a field and wrap up the argument for paying attention to serious gaming.

Scene One: First-Year Composition

One of the primary purposes established in the first-year composition course is to equip students with the ability to not only write in and across a variety of genres, but to recognize how genres intersect with rhetorical issues of audience, purpose, ethos, and authorship, to name a few. This is the sense in which we ask students to compose and evaluate genre as social action, as Carolyn Miller has described. Miller notes that genre functions "more than as a formal entity; it becomes pragmatic, fully rhetorical, a point of contention between intention and effect, an aspect of social action" (153). The ability for students to reproduce a genre *structure* in terms of its textual features should not be our primary aim as composition instructors; rather, we should go beyond these textual

features to encourage a metacritical awareness of the affordances and limitations of genre as they intersect with the rhetorical issues outlined above. The Writing Program Administrators (WPA) Outcomes Statement is one place where we can see these purposes come together in a document that is meant to extend beyond individual institutions and serve as a guiding framework for first-year composition courses across the United States. The WPA Outcomes Statement describes outcomes related to genre that include the abilities for students to "write in several genres," "understand how genres shape reading and writing," and "develop knowledge of genre conventions ranging from structure and paragraphing to tone and mechanics." Furthermore, several of the outcomes described in this statement relate to the rhetorical contingencies of genre, such as students' abilities to "respond appropriately to different kinds of rhetorical situations," "respond to the needs of different audiences," and "use conventions of format and structure appropriate to the rhetorical situation." I foreground these outcomes here to emphasize that the kinds of writing work that students might do to investigate issues of serious gaming and genre are not defined by the *topic* of digital games or serious games; that is, students should not simply be asked to reproduce genres such as the research essay with a content focus on serious games. Rather, this intersection opens up new ways of thinking about genre, producing genres, and responding to rhetorical situations, which aligns with the larger purposes of first-year composition.

Genre and the Game Design Document

One of the ways that first-year composition teachers can engage with issues of serious gaming and genre is to work with the game design document as one of the writing projects undertaken in the course. Although game design documents are used for the

development of both mass-market entertainment games and serious games, the serious game version asks not just for a concrete game design plan but also the integration of specific learning or persuasive outcomes. As Bryan Bergeron notes, "serious game design documents are unique in that they not only define an entertaining setting and storyline, but they use characters, themes, and synthetic environments to impart specific knowledge, skills, and attitudes (KSAs) to players" (336). Also, as I explain in greater detail later in this section, the serious game design document does not ask for technical (as in computational or programming-related) specifications, but rather serves as a conceptual design plan. This particular genre affordance means that the design document is well suited as a means of defining and evaluating the larger rhetorical implications of serious game design from a composition perspective.

In terms of specific places to start looking at this genre, Bergeron's chapter on "Serious Game Design" in *Developing Serious Games* also functions well as a source to pull material for a first-year composition assignment, as Bergeron walks the reader through the construction of the serious game design document and explains the purpose and contents of the typified sections and sub-sections found in the genre. Brian Winn's article on the "Design, Play, and Experience" framework might serve as a complementary means to discuss and work within the serious game design document genre, as Winn's framework is less prescriptive and more open to adaptation.

As a genre, the serious game design document calls for writers to negotiate purpose and audience in explicit and implicit ways, which aligns with the first-year composition outcomes discussed above. For example, the entire game design document is situated within the larger purpose of persuading a particular audience to "buy into" the

game and invest its resources in the game's development. Bergeron notes that, within academia, serious game design documents are often included in grant proposals to outline the specific purposes, materials, and outcomes of academic game design projects (336). Outside of academia, too, this negotiation of purpose and audience is crucial to the construction of the design document. One strategy for framing the game design document's "social action" is to combine the document with an initial proposal that students compose. This strategy allows for students to assess the rhetorical situation that will influence how they write the design document; it also provides opportunities for low-stakes writing that scaffolds into the design document assignment and initial feedback from the instructor.

Beyond this initial framing of the rhetorical situation, the serious game design document itself calls for writers to identify and negotiate audience and purpose throughout the document. The design document typically begins with an overview outlining issues of audience and purpose, which Bergeron refers to as the "requirements specification" (339). For example, the requirements specification outlines the scope and major goals of the game development project, as well as a summary of "how knowledge, skills, and attitudes will be imparted to the player" (Bergeron 339). This section also includes a discussion of the rhetorical/social "challenge" that the game is intended to address. Bergeron notes that one example of such a rhetorical challenge a serious game could be suited for is "somehow enticing busy maintenance workers in a hospital to take twenty minutes out of their lunchtime every week to review biohazard disposal safety procedures" (340). In terms of audience, Bergeron recommends not just defining audience in the abstract but developing individual player profiles that describe who will

represent the primary and secondary audiences for the game. The demographic criteria that can be addressed in player profiles include "age, educational level, family size, geographic location, home ownership, income, marital status, nationality, religion, and sex" and can also include more situationally specific criteria such as the areas of emphasis in an undergraduate college education (Bergeron 340). Bergeron notes that this approach to audience is important in determining "the most appropriate game genre, style of play, deployment platform, and distribution media" for a particular serious game concept, which again calls attention to the contingent factors between genre and audience (340). Detailing these kinds of audience factors in the process of game design also responds to Selfe, Mareck, and Gardiner's claim that literacy practices and values should be situated within a "particular historical period, cultural milieu, or cluster of material conditions" (32). As students produce the serious game design document, then, they are not only conceptualizing a game design but responding to the material and cultural conditions within which gaming and other literacy practices are embedded. To account for these material and cultural conditions, student might start with questions related to how and where they envision the game being played. For example, in the hospital scenario presented by Bergeron, students can ask questions like "What kind of technology infrastructure currently exists in this hospital?" and "How do hospital employees currently receive information about biohazard disposal safety procedures?" In his version of the design document, Bergeron also outlines issues related to usability requirements and the game use environment that could be framed as initial questions for students. Usability requirement questions might address age, hearing or visual

impairment, and stress level, among other things, while use environment questions might focus on the hardware platform or environmental factors (Bergeron 341).

The serious game design document also represents an opportunity for students to practice forms of independent academic research. The role of research is especially important to note here. In the serious game design document, the focus is not on summarizing or interpreting research (which are, of course, both valuable skills in their own right), but on *integrating* research and using it to inform design decisions. As writers of the design document outline the knowledge, skills, and attitudes at stake in their game, they also must identify the "serious content" used as the foundation for the knowledge, skills, and attitudes selected (Bergeron 342). Bergeron notes that "typical sources of serious content include books and other printed material, validated online content, and domain experts" (342). In this way, a first-year composition project focusing on the serious game design document could easily be integrated with related research modules. For example, students could use research conducted through the library and Internet sources to inform their game design process, but they could also have the opportunity to do their own primary research through interviews with domain experts.

One task that the design document as a genre does *not* ask students to do, appropriately for a first-year composition class, is to detail the game's computational framework and provide samples of the game's programming code. Although the design document could include these elements for a computer science or telecommunication course, for instance, the design document as I am discussing it here is intended to provide a *conceptual* design framework rather than a *technical* one. On the other hand, the design document does represent a form of *technical writing*. The design document constitutes

technical writing in a few different senses: first, it asks students to take on the "language" of game design in explaining game mechanics, rule systems, avatar creation, and other game elements. In this sense, students engage the problem of "procedural rhetoric" in that they are presented with the task of defining how game mechanics and representations (themselves a function of game genres) intersect with the rhetorical purposes of their game. Second, the design document should, as Bergeron puts it, "provide enough detail for a development shop to create the game with little or no hand-holding" (336). This means that the design document needs to frame different pieces of the document for audiences with a range of backgrounds and technical skills; for example, art designers should be able to produce art assets based on the document, and sound designers should be able to produce sound effects and music. Finally, the design document calls for a shift in arrangement strategies, level of detail, and tone that aligns it with other "technical" genres of writing. For example, the design document relies heavily on hierarchies of information rather than a narrative arrangement, and information may be presented in bulleted lists, tables, visual mockups, and other forms rather than in discrete paragraphs. For these reasons, beyond serving as an introduction to technical writing in first-year composition, the design document could also be integrated as a part of stand-alone courses on technical writing.

Finally, the game design document can also be used as a point of critical reflection on the nature of genres and how they shape writing decisions. As students write the document, and after they have completed it, they can reflect on the affordances and limitations of the genre and the tension between open and closed genre features. In their article "Playing in Genre Fields: A Play Theory Perspective on Genre," David

Christensen, Jason Cootey, and Ryan Moeller identify some of the points of tension at work in the design document genre that could be foregrounded as pedagogical points of reflection for instructors who wish to use the design document. They note that a student team working on a design document (in collaboration with a team of researchers) operated under the assumption that the design document was "a fixed and rigid genre-agent that *should have* detailed every aspect of potential development" (6). The problem at work in this scenario was that the student design team did not "mediate the meaning of these [the game's] production elements and their roles in order to update the design document as implementation issues required alterations to the original game concept" (Christensen, Cootey, and Moeller 7). Eventually, the student team recognized this genre breakdown and revised their approach to the design document, realizing that not all game assets and mechanics could be accounted for in a strictly detailed way (7). Opening up this kind of metacritical discussion before students begin documenting the game's details would help students not only negotiate the genre more successfully, but also reflect on their roles and decisions as writers within a larger collaborative process.

Scene Two: New Media and Digital Rhetoric

Although the kinds of writing work I describe in this "scene" can be designed for the context of first-year composition, and vice versa, I would like to outline some possibilities for how the intersection between serious games and genre can be introduced in an upper-level undergraduate course in new media or digital rhetoric. The main difference here would be that the first-year composition work I have suggested is focused more on the design document as a genre, along with the attendant processes of independent research and critical reflection. Of course, the design document is not limited

to the planning of serious games; there are similar genres at work in other kinds of project development that can be included or substituted as well. For a course in new media or digital rhetoric, however, there is opportunity to dig more deeply into issues such as procedural rhetoric and to examine how these issues raised by serious games align with and depart from other "digital rhetorical" perspectives.

Approaches to Serious Game Rhetorical Analysis

There are as many ways to approach a rhetorical analysis of serious gaming as there are rhetorical theories themselves, but a rhetorical analysis project represents one method of unpacking the relationships between the learning/persuasive goals of the game, game genre procedures and mechanics, and issues of cultural representation. For serious games such as *The McDonald's Video Game* or Persuasive Games' *Disaffected!*, a rhetorical analysis project that emphasizes visual rhetoric and representation would help frame a discussion of how visual elements both within the game and in related, surrounding genres influence persuasion and ideology in new media. Rhetorical analysis projects could also be designed around a more specific framework, such as using Brian Winn's "Design, Play, and Experience" framework to identify how the game's rhetorical elements intersect with related domains like storytelling and user experience design. Finally, a rhetorical analysis project could argue for a particular pattern of social action happening within a specific game genre or could critique the taxonomic placement of games within a particular "genre category." This would contribute a deeper analysis of how genre is constituted by both gameplay and "representational" characteristics (Apperley 7), and it would also develop an understanding of how procedural rhetorics are framed within digital games across a variety of genres.

More broadly, the project ideas I am suggesting here represent a *comparative* pedagogical philosophy toward the study of genre and representation within digital rhetoric. If we limit a digital rhetorical analysis to a singular artifact, we gain the affordances of a classical "close reading" of a particular text, but lose the contingencies and interplay of genres that I would argue are crucial elements of digital rhetorical studies. The other limitation of a discrete rather than comparative approach is that it closes off the ways in which students can explore and critique issues of audience and purpose, which are at the heart of what instructors intend a rhetorical analysis project to "do." To take an example, consider a rhetorical analysis project in which a student plays and analyzes the *McDonald's Video Game* versus one in which a student combines this "game analysis" with a tracing of the genre ecology surrounding the game, including online discourse about the game and related texts that the game designers have cited as points of inspiration, such as Morgan Spurlock's documentary *Super Size Me.*

In the former case, the analysis of audience and purpose is limited to what can be "interpreted" within the experience of gameplay. Thus, the danger here is conflating the complexities of audience and purpose with the kind of labels that Bergeron ascribes to serious game categories, as surveyed in Chapter 3. In other words, it would be easy for students and instructors alike to fall into the habits of identifying what "the audience" and "the purpose" of the game are, as though these are stable characteristics of the rhetorical artifact that can be pulled out when it is analyzed as a discrete text. Taking a comparative approach would help open up a critical discussion of how audience and purpose are constructed across genres and types of media. An example comparative project might critique the procedural rhetorics of the *McDonald's Video Game* and its surrounding

genre ecology (including, for example, the game's website, blog discourse, and gamers' talk on message boards) in relation to the arguments made in *Super Size Me.* This would not only open up an analysis of how audience and purpose are engaged in these particular texts, but also move students toward a critical perspective on how audience and purpose might be constructed in serious games as compared to documentary film. This kind of rhetorical analysis project would require more scaffolding and course time, but it would be more likely to directly challenge students with handling the complexities of audience and purpose as they interlink across genres.

All of these pedagogical strategies are aimed at defining some ways to integrate the rhetorical and ideological dimensions of new media into a larger pedagogical framework, which is an area that needs to be more fully developed if we intend to situate the rhetorics of gaming and other kinds of new media writing. For instance, although the collected chapters in *Gaming Lives in the Twenty-First Century* point to some implications for composition teaching, the proportion of the book given over to pedagogy remains comparatively small. I intend for these rhetorical analysis approaches to be a starting point for more extended and sustained work on pedagogies dealing with the rhetorics of new media.

Shifting Across Genres

As another way of drawing out the implications for genre as social action, students could assess what happens when a single game concept is shifted across different game genres. In this sense, the rhetorical or persuasive purpose would remain the same (e.g, raise awareness about the environmental and socioeconomic harms of the McDonald's corporation), but the focus would be on how game genres are determinants

of the rhetorical "message." For example, what would happen if the *McDonald's Video Game* was a role-playing game? Or a deep economic simulation like *Virtual U*? What about a first-person shooter? Ideas from genre theory and digital rhetoric could be brought in to inform this work, such as the genre fields and play scenarios discussed by Christensen, Cootey, and Moeller and Bogost's formulation of procedural rhetoric.

For a course that focuses more on analysis than media production, this might take the form of shifting a game idea across multiple design documents to get at the idea of how genre figures into the rhetoric of serious gaming. This would not require completing extensive design documents each time, but revising the game mechanics of an existing document and composing a new genre statement for each iteration of the game would allow students to trace issues of audience and purpose over time as they intersect with different genre formulations. These genre revisions could also be accompanied by a reflective essay that pulls together significant themes and reflects on the entire design process. For a course that focuses on media production and design, students could follow a similar process by creating prototypes of the same game concept across different genres, which would allow students to attend to how genre choices shape the rhetorical implications of multimedia design. To help frame these different game prototypes, students could compose other multimedia texts such as websites or slide presentations that introduce the game concept and discuss choices about audience, purpose, and genre. Such a project would not only teach students skills related to multimedia design platforms such as Adobe Flash and Dreamweaver, but it would also maintain a critical approach to genre and design that would be carried throughout the semester.

Scene Three: Research Scenarios and Possibilities

Beyond the pedagogical implications of the intersection between serious games and genre, there are also implications of this work for how we might go about constructing a revised genre paradigm for serious games, one that starts to address some of the gaps I identified in Chapter 2. Although I have not attempted the ambitious project of building a "new" serious game genre framework out of the various strands addressed in this thesis, I would like to suggest some research moves that might lead us in that general direction. Some of the research questions that can be constructed to explore the relationship between serious games and genre include:

- How and why have the current genre models for serious games been developed over time?
- How does the interactivity of serious games figure into our discussion of serious game genres? What about the idea of play?
- What is the role of related texts/genres/actions that players draw upon in playing serious games? How do these forms of activity that mediate gameplay influence how we talk about and construct serious game genres?

In addition to this set of questions, there are broader questions that can be asked to investigate the relationship between serious gaming and rhetoric/composition as a field:

- How do we account for serious games as a multimodal text? What does "multimodality" mean in this case?
- If we assume that rhetorical meaning is *not* located only in game designers' intentions behind the game, how does rhetorical meaning get constructed through the process of play? What implications does this have for existing discussions on "producer" and "consumer" roles related to new media?

- How should we locate serious games in relation to other genres and forms of media production that engage with similar "serious" purposes, such as political blogging?

Of course, these questions are only examples, and there are many other productive angles to be taken up in response to these themes. In the next three paragraphs, I outline three specific research moves/projects that could be developed out of these questions on serious game and genre.

One possibility for thinking about serious game genres is to adapt Bogost's discussion of procedural rhetoric and procedural literacy to the construction of game genres. Although genre categories for mass-market entertainment games generally try to break down the logics and functions of gameplay[5], most treatments of serious game genres focus instead on the intentionality of the game designers. By considering the various forms of procedural rhetoric involved in serious games and how these forms of procedural rhetoric are structurally aligned and disaligned, Bogost's work can help us move toward a genre framework that accounts for the player's co-construction of rhetorical meaning.

In considering the implications of Bogost's work for game genres, I argue that one of the first questions to consider is the function of play styles and learning styles in the configuration of procedural rhetorics. While Bogost discusses the role of general player participation, he does not attempt to outline how different types of play styles might lead to different patterns of social action or persuasion. Along the same lines,

[5] The "Digital Games and Genre" section of Chapter 3 deals more extensively with how mass-market entertainment game genres have been developed and how that construction generally differs from serious games.

Bogost focuses on the possibility of the game *artifact* to critique social institutions, but does not fully consider how the player's strategy for engaging a serious game might range from complacent and casual to resistant and radical. I suggest turning to play styles and learning styles as a next move because a recognition of these player contingencies reveals the contingent and dynamic nature of game genres. Such a research move would also shift from a taxonomic, top-down approach to serious game genres toward a decentralized theory that recognizes the "relatively stable" (Bakhtin 78) and "stable-for-now" (Schryer 108) qualities of genre. Another implication of this research work is that it could produce more richly descriptive ideas of genre as a range of social outcomes or as a collection of "possibility spaces" (Sawyer and Smith) rather than a single label that stands in for the entire experience of playing a serious game.

The perspective on genre and play theory provided by Christensen, Cootey, and Moeller could also be developed into a genre framework for serious games that helps to address genre's shifting role in carrying out the social action of serious gaming. Christensen, Cootey, and Moeller note that "the meaning-making activities within genre fields are formed by the interplay between genres and their human agents. Consequently, genres function as agents, leading to the creation, reification, and transformation of the social structures that initially called them into being" (8). In response to this claim of genres as agents, one of the research questions to pull out for serious games would be how to locate the issue of agency within the activity of serious gaming. For instance, in Selfe and Hawisher's collection of case studies on digital gaming literacies, the theme of agency comes up as one of the primary motivating factors in gaming. In the chapter on "Dungeons, Dragons, and Discretion: A Gateway to Gaming, Technology, and Literacy,"

for example, the authors note one player who cites "his desire for a sense of effective agency—the ability to have control over some aspect of the world" as one of his major reasons for playing games (Fleischer, Wright, and Barnes 147). As "agency" and "control" are often paired with the interactivity of digital games as affordances of the medium, an investigation into how serious game players experience agency can contribute to our understanding of the role of the "player-agent." Likewise, we can explore how serious game *genres* might be involved the performing of "agency," which is suggested by Freedman's description of genre "interplay and interaction" (4).

To address the intersection between serious gaming and agency, one move I suggest here is expanding the kind of agency discussion that Fleischer, Wright, and Barnes focus on to include the forms of "real-world" social action at stake in serious gaming. Fleisher, Wright, and Barnes analyze how agency is a function of having control over the game world, of feeling that in-game actions will result in some meaningful and efficacious outcome. In this sense, agency is a kind of psychological or emotional pleasure that a system of gameplay affords an individual player, but agency is not represented as socially transformative in the way that Christensen, Cootey, and Moeller describe. As one example of how gaming agency might be reconfigured to account for these social actions, *Darfur is Dying* foregrounds agency in a way that connects the player's participation in the game world with several rhetorical exigencies for "taking action" to intervene in the Darfur crisis. For instance, the main interface of the refugee camp area in the game features a "Take Action" button that, in effect, temporarily removes the player from the game and directly links him or her to options for exercising agency in response to the real-world problems the game is responding to. Options include

"Send a Message to President Bush," "Ask Your Representative to Support the People of Darfur," and "Start a Divestment Movement on Your Campus," among others ("Darfur is Dying"). To fully account for agency in serious gaming experiences, then, we must extend the concept of agency as control over a game world and link it to the performance and perception of agency in other environments.

Another possible research frame to look at would be Spinuzzi and Zachry's formulation of the "genre ecology." Taking a genre ecology approach suggests that we look beyond the player's interaction with the game itself to frame the larger activity of serious gaming and examine how players draw upon distributed genres to mediate that activity. For a serious game, a sample genre ecology might include official game documentation, related online tutorials, wiki articles, blog entries and comments, FAQs or walkthroughs, and other genres. I also argue that more work in methodology is needed to account for how players use "outside" genres to mediate gaming activity, especially for serious games. A few places to start surveying existing methodologies for this purpose include usability studies approaches such as cognitive walkthrough, "cognitive ethnography" approaches that have been applied to online gaming (Steinkuehler), "genre tracing" in studies of professional writing (Spinuzzi), and iterative models of playtesting and prototyping used in game design (Winn). By testing out these various methodologies and methods, we can generate knowledge about how players negotiate gameplay in serious games and how they understand the persuasive/learning functions of games as they intersect with the typical goals of completing game objectives. Extending work on methodology in these directions has potential for both understanding the various

rhetorical configurations that players participate in and informing the design of assessment for serious games.

In discussing the implications of the genre ecology framework, Spinuzzi and Zachry also point to a set of three "heuristic tools" that we might consider applying toward further research in serious gaming, which are "exploratory questions, genre ecology diagrams, and organic engineering" (176). The latter two techniques would be valuable not only for understanding how players draw upon genres as they play, but also as a way to inform serious game design processes such as prototyping, playtesting, and user interface design. For instance, Spinuzzi and Zachry note that "genre ecology diagrams can help designers to lay out relationships, analyze the interplay among genres, and identify which genres are central or peripheral to the use of the technology. The diagrams thus can be a resource for replanning the ecology" (177-178). In terms of user interface design, we might use genre ecologies as a way of encouraging "user interfaces that include space (or spaces) that users can fill with their own ideas" (Spinuzzi and Zachry 179). Although individualized feedback and the logging/journaling of game information are common elements of user experience design, letting players document their own "ad hoc" information might help players synthesize and apply meaningful information as they advance through the game.

The Importance of Paying Attention: Implications for Rhetoric/Composition

As I outlined at the beginning of Chapter 1, my primary purposes throughout this thesis have been to argue for the need to pay stronger attention to serious games from the disciplinary perspective of rhetoric/composition, and to suggest some ways in which we can shape and direct that attention. In Chapter 3, I suggested that serious games represent

a productive site for engaging the issue of genre, which has been one of the central points of focus for rhetoric/composition as a field. However, this is only one branch among the many possible connections that we can make; I have identified some of the possibilities in my concluding discussions of Chapter 2 and Chapter 3, but there are certainly more implications to be pulled out and explored.

One implication I have been hinting at throughout my discussion of serious gaming and genre is the notion of gameplay *as composition* or *as authorship*. In this chapter, I have discussed the design document as a possible project in first-year composition and the pedagogical affordances of working with a serious game design document, but how we think of composition in games can go beyond the work done on the design and production side. Winn discusses the "player's story" as the resulting narrative that is constructed by individual sequences of gameplay choices, which differ from player to player and even differ for the same player across multiple sessions. In thinking about this from a rhetoric/composition perspective, the player's story represents not just a design consideration, but could also serve as a reflective commentary on what the player has "composed" during gameplay and how that material has been composed. The notion of gameplay as composition introduces some intriguing new angles to consider in what "counts" as writing or what "counts" as a literacy practice, and as seen in the literature review of literacy studies, this is one gap that needs to be filled as we plan new research directions.

Likewise, considering gameplay in serious games *as authorship* introduces new angles and problems to consider for the work on authorship in digital environments. For studies of authorship in digital environments such as wikis, the traces of collaborative

writing are often more transparent: version histories are archived so that earlier versions of a particular text can be comparatively viewed, and collaborative, decentralized groups of authors deliberate publicly on what revisions to make in "Talk" or "Discuss" pages. Although this is "messier" than the tradition of single-authored print texts, the notion of serious gameplay as authorship is messier still. Because digital games depend on player participation, is it always the case that the player is a co-author in some sense? Is a game "authored" if players cannot advance in the game due to difficulty? How do player-authored genres such as FAQs and message board threads participate in the authorship of a gaming experience? These are just a few of the questions that might be undertaken by rhetoric/composition scholars in response to this study of serious games and genre.

The approach I have taken to the literature review in Chapter 2 also suggests that rhetoric/composition scholars stand to benefit from drawing from other fields as we analyze new modes of writing and come up with new ways of theorizing about them. In the case of "persuasive games," it makes sense to draw not only from rhetorical theory but also theories of persuasion that have been developed in communication or advertising. The benefits of doing so lie not just in applying these theories "outside" of their original disciplinary contexts, but in interrogating their value and relevance in response to new situations. For the issue of authority as a persuasion technique, for instance, there are a whole host of questions raised when we consider the rhetorical construction of authority in serious gaming experiences as compared to "static," one-way modes of communication. Another example would be using theories of interactivity from communication to interrogate Bogost's formulation of procedural rhetoric. Although Bogost does some of this work himself, his theory depends heavily on the idea of

interactivity, which suggests that an expanded review of the literature on interactivity might help define an even richer idea of procedural rhetoric. The key takeaway for rhetoric/composition scholars is to remember that despite the various mythologies surrounding the field as less "bounded" than more traditional disciplines, the field has its limits like any other. We can thus benefit by reaching across disciplines to interrogate our own work and by critically *synthesizing* work across multiple disciplinary spaces as we explore new research questions.

In taking a broader perspective on rhetorical studies and serious games, another problem becomes how to locate the digital/visual/procedural rhetorics of serious games within larger systems of social and political discourse. For instance, "political" or "news" games that deal with global terrorism, such as Gonzalo Frasca's *September 12th*, not only *respond to* political discourse (e.g., major news media coverage, political blogging, representations in popular culture), but shape, participate in, and advance that discourse. *September 12th* is a game that the Wall Street Journal has labeled "one interesting example [...] of games' growing influence on contemporary art, politics, and culture" ("Newsgaming Home"). If we take this claim as true, that games are becoming more influential actors in the political and cultural landscape, then it is only a matter of time until we *must* start paying closer attention. In his discussion of procedural rhetoric in games on politics, advertising, and education, Ian Bogost echoes this call to pay attention. He writes, "together these three areas cover a broad swath of human social experience, areas that have become largely broken in contemporary culture, and areas I believe videogames can help restore, and not just in small part" (64). It is in this sense that serious gaming has pushed beyond the tradition of play in video games to establish itself

as an effector of critique and social change. However, this potential of serious games also depends on our recognition and our ability to keep up: indeed, when and how we start paying attention.

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