ABSTRACT

PLAYING/WRITING:
CONNECTING VIDEO GAMES, LEARNING, AND COMPOSITION

by Kevin Rutherford

This thesis examines the connection between video games and composition pedagogy. Video games are defined generally, and then specifically outlined in relation to writing classrooms. The remainder of the thesis outlines three distinct examples of ways composition pedagogy might connect with the interdisciplinary field of game studies. Chapter 2 outlines a heuristic of interrelated approaches – contextual, narrative, and procedural – to analyze video games as rhetorical objects. Chapter 3 introduces “serious games” as an enactment of the heuristic and as a type of video game that fits with composition’s goals of citizenship education. Chapter 4 discusses a class unit wherein students programmed/wrote text-based video games, arguing that writing and programming overlap and suggesting this overlap is a fruitful space to explore in writing classrooms.
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To Jen, for her patience

One teeth too less
Chapter 1
The Potential of Video Games

In 2007, the movie industry generated 27 billion of revenue at box offices (Nakashima, 2008). In the same year, DVD sales and rentals totaled 23.4 billion (Snider, 2008). In contrast, the video game industry made 41.9 billion worldwide, and based on estimates from PricewaterhouseCoopers, games will generate over 68 billion annually by 2012 (Caron, 2008). According the Entertainment Software Association’s (2010) *Essential Facts about the Computer and Video Game Industry 2010*, 67% of households in the US own a video game console, 25% of players are under the age of 18 (while 49% are between 18 and 49 years old), and 40% of game players are female.

Obviously, then, video games are a financially influential medium that reaches a wide and varied audience. What is perhaps more important, and what these statistics do not necessarily show, is that video games are also a powerfully expressive and persuasive medium, one just as worthy of academic attention as literature, music, film, Web pages, and public discourse. Games require a commitment of time, energy, and resources comparable in many cases and for many players to the commitment they give to subjects at school. When James Gee (2008) asked, “How do good game designers manage to get new players to learn their long, complex, and difficult games and not only learn them but pay to do so?” (p. 28), he was tapping into an important educational question, one that admits the value of games and their ability to engage players as learners. This engagement partially accounts for the popularity of the medium and should also encourage more academic attention to it.

My own experiences with games have been incredibly valuable to my education. Like many my age, my gaming experience began with the Nintendo Entertainment System (or NES), released to North America in 1985. The NES was the first home console released in the US after the North American video game crash of 1983, and my parents bought the system for reasons

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1 In essence, the crash of 1983 bankrupted or nearly bankrupted the industry overnight, due to a market glut of poorly designed, overpriced games – likely traceable to opportunism on the part of publishers and developers eager to earn a share of the profits in the new industry. The most famous of these failures is Atari’s *E.T.* (1983), for which the company paid $20 million for the license. Millions of *E.T.* cartridges now fill a landfill in New Mexico. (For
that, even now, are unknown to me (they had never expressed any interest in games before and they still find my interest in games somewhat puzzling). Whatever their reasons, I was immediately entranced by the experiences of playing games like Super Mario Bros. (1985), Metroid (1986), Castlevania (1987), and Shadowgate (1989). I was drawn into the stories and worlds of these games and incorporated elements of them into my own childhood play. I distinctly remember creating a world of my own, based on Shadowgate’s mythology that I returned to throughout elementary school during creative writing assignments. Games tested my problem-solving skills as well as my reflexes: in a long tunnel in Shadowgate, a variety of treasures lay on the ground, part of a dragon’s hoard, but taking one prompted the dragon to spew its fiery breath. First taking a discarded shield (which would eventually melt, after a certain number of blasts from the dragon), I had to determine which treasures were important enough to risk immolation. I quickly learned not to be greedy. Playing NES games helped to foster my critical thinking about problems and rewarded me in measurable ways for doing so; in other words, I felt empowered and enriched by my accomplishments and was able to apply my newly learned skills in ways that made me feel valuable (even if only within a simulated world). I felt connected and invested in the problems I solved, and these habits of mind stayed with me long afterward. Games, to modify Kenneth Burke (1941/1974), were my “equipment for living” (p. 294).

My experiences are by no means unique. Countless children growing up in the 1980s and 1990s, as well as those who are growing up now, see games in similar ways. Many can point to specific incidents in gaming with as much enthusiasm as they can point to incidents in their “real lives” – whether for their visceral excitement, their influence on their thinking, or the investment in the stories they participated in creating in game worlds. As composition instructors, we are aware of the value of incorporating varied literacies in our instruction, and equally aware that student engagement is vital to effectively improving reading and writing. Games provide an opportunity to accomplish both goals.

As I hope this chapter and thesis make clear, games have enormous potential for education, especially for developing students’ knowledge and application of rhetorical principles and composing processes. However, like film, books, television, speech, and other symbolic

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further information on the causes and outcomes of the crash, see game designer Chris Crawford’s (1992) recollections of his time working for Atari, including during the crash years.)
objects, students and instructors need both analytic frameworks and pedagogical approaches for teaching and learning video games as a means to improve reading and writing. My goals for this thesis are to build such frameworks and to provide critical reflection on some pedagogical approaches for incorporating games in the composition classroom, drawing from my own experiences in and out of the classroom, existing composition scholarship, and the interdisciplinary field of game studies.

Definitions and Terminology

Although at first it might seem a simple enough thing to consider, what a game is actually turns out to be much more difficult to pin down. Given my focus on games in this thesis, it is important to define at the outset exactly what I mean when I say “game.” Because “games” and “play” form such a significant part of human interaction, they have been as difficult to define as other ephemeral, situational concepts such as “language” or “culture.”

Johann Huizinga’s (1938/1955) *Homo Ludens*, often seen as the historical foundation of game studies, occupied itself with “play,” the activity, rather than games, the artifacts, but Huizinga’s definition of play influenced later game studies scholars immensely, and his concepts of play later came to be applied to games and refined to define them. According to Huizinga, play “is free, is in fact freedom” (p. 8). In other words, it is an activity freely undertaken, not forced, and is not work. Secondly, Huizinga argued that play is “a stepping out of ‘real’ life into a temporary sphere of activity with a disposition all its own” (p. 8). For Huizinga, there was a separation between life and play, resulting in what Huizinga called a “disinterestedness of play” (p. 9), a sense that play is not serious, although Huizinga was careful to point out that players are often completely absorbed while at play despite its nonseriousness. Following from this, his third characteristic of play was its bound nature – its “limitedness,” possessed of its “own course and meaning,” with play having a specific time and place and not extending beyond those borders (p. 9). Finally, to Huizinga, play was ordered: “Into an imperfect world and into the confusion of life it brings a temporary, a limited perfection” – play has definite, enforced rules (p. 10). Huizinga’s definition of play was groundbreaking, in that it seized upon individual and cultural characteristics of play, though his definitions do present a difficult classification strategy for

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games – if a game doesn’t have clearly defined rules, or interacts with players’ lives (thus breaking its boundaries), is it still a game?

Writing in direct response to Huizinga, Roger Caillois (1961) attempted to rectify some problems with Huizinga’s definition in his book *Man, Play and Games*. Caillois defined games as, like Huizinga, freely entered into, separate from “real life” and bound in time and space, nonserious (“unproductive” – not resulting in real gain), and governed by rules. Unlike Huizinga, Caillois suggested that games are “make-believe” and “uncertain,” that even with rules their outcomes are not fixed beforehand (p. 9-10). Again, though these characteristics are useful, they raise questions: is gambling a game, given its possible material gain? Is a game like poker “make-believe?”

Extending and deepening Caillois’s and Huizinga’s definitions, game studies scholar Jesper Juul (2005) outlined a more structured classification scheme:

A game is a rule-based system with a variable and quantifiable outcome, where different outcomes are assigned different values, the player exerts effort in order to influence the outcome, the player feels emotionally attached to the outcome, and the consequences of the activity are negotiable. (p. 36)

While Juul’s definition still had some problems, it fit closely with what we tend to think of as games; it situated games emotionally while also acknowledging their rules and assumes that different end states held different values (i.e. some are winning, some are losing, some are neither). Juul’s definition resisted Huizinga’s and Caillois’s notions that games were bound in time and place or make-believe, instead concentrating on the system of rules and the outcome of those rules as the hallmark of a game.

The important characteristics of games for my purposes are their rule-based nature, their influence on player attitude (i.e. engagement and immersion, what Juul called “attachment”), and their ability to use player effort to create an understandable experience that can be reflected upon (in other words, they result in some sort of “story,” whether concrete or abstract – “I killed the minotaur” or “I put blocks together and then the lines of blocks disappeared”). Specifically, I am interested in games where player actions and agency are constrained by computers, and where players play games on a screen (rather than on a board, or in a physical location in the real world) – in other words, I am interested in digital video games.
Defining digital games

Digital games, while a subset of games in general, are also a broad category consisting of several subcategories: massively multiplayer online games (MMOGs) maintain a persistent world that player avatars interact with (that is, the “place” of the game exists even when individual players are not interacting with it); non-persistent multiplayer games run exclusively in instances, with the simulated world essentially re-starting every time players interact with it; single-player games may have persistent worlds or lack them, but they are played by a single human participant who acts against (or with) computer-controlled environments and/or characters, rather than with other humans. All of these types, since their play is reliant on a processor to allow the player to interact with the game world, are video games.

Ren Reynolds (2007), writing for the virtual world blog collective Terra Nova, proposed the following definition for “computer games”: “A computer game is a game where at least some of the bounds of game-acts are essentially controlled by information technology.” Reynolds’ definition, with its emphasis on the formal interactive aspects of games (i.e. how many people play and how does the game enact its rules), mirrors my own classification of digital games as separate from other types of games. While Reynolds used the term “computer game,” his definition has overlapped almost exactly with what I mean by “video game” (and, I would argue, console platforms are simply computers with specialized functions – they are made to play games rather than to word process, for instance). Obviously, video games (whether MMOG, multiplayer, or single-player) have a variety of genres – action, science-fiction, adventure, puzzle, survival horror, role-playing, to name but a few. However, my purpose in investigating definitions here is not to delineate these genres but instead to point out the necessity of a computer to define and execute at least some rules in video games.

Note that many massively multiplayer games, though their rules are computer-driven, do sometimes allow for negotiation. However, these games ultimately require a computer to govern the change in rules – essentially, the computer that generates the behavior of the world enacts new rules by drawing on existing procedures (much the same way we “break procedure” in everyday life by calling on higher orders of rules – the spirit rather than the letter of the law, etc.) which allow modification to rules, and only within set limits. A player administrator could not,

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3 Wikipedia’s article on “Video Game Genres” covers several genres, though the taxonomic classification of game genres is open to interpretation, considering the shared influence of narrative content and game play mechanics on genre.
for instance, make *World of Warcraft* (2004) suddenly follow the rules of *Aion* (2009). One of the major differences between MMOGs and single-player video games is the added rule, in MMOGs, of players being able to overwrite existing rules – a meta-rule for players in administrative roles. Such changes in governance don’t (usually) occur in single-player games.

Similarly, while players may not play games according to the expectations of the designers, those players are still abiding by the rules of the game; if I refuse to shoot anyone in *Grand Theft Auto IV* (2008) and instead play in a civil and law-abiding way (just driving my car around town, stopping at lights and for pedestrians), I am still relying on the computer to generate the reactions and systems I use to move around in the game world, and am relying on the computer to monitor my (lack of) progress toward the game’s goal. I might even, as is often the case in open-ended simulations like *The Sims* (2000), invent my own goal (for example, see how quickly I can make a relationship turn sour); my actions are still constrained by the governance of the computer and my agency within the game world is only available through interacting with the computer. Juul’s emphasis on outcomes does break down somewhat at the point when players begin to assign their own goals; however, he has classified open-ended simulations as a “borderline case” (pp. 44, 47). Games that provide outcomes can still be played without necessarily reaching one.

I use “video games” as a catchall term in this thesis to refer to any game that is digital and whose rules are written in computer code and are interpreted and applied to a game world by software. The software itself may run on a Windows operating system, a Mac, a UNIX system, or a special computer designed to play games and connect to a television (that is, a console system such as the PlayStation 3 or NES). Though compelling arguments have been made regarding the influence of system hardware on game design (Monftfort & Bogost, 2009), my interest is on the software concerns rather than the material considerations of hardware – in short, video games may be played on a computer designed to do things besides play games, and in that case they would be both “computer games” and “video games.” “Video games” seems to be the term used most often (Selfe & Hawisher, 2007, p. 2) and has the benefit of also being in popular use; most of us can understand what is meant by the term “video game” even if we can’t quite define it. Analog games like board games, dice games, card games, or more freeform games, while deserving of their own attention, are outside the scope of this thesis. Thus, when I discuss
“serious games,” I mean “serious video games,” and when I mention other games as points of reference, they are almost invariably video games.

**Interactive fiction, text-based games, and video games**

Yet it gets more complicated still because within even within this category of “video games” I address a somewhat different type of video game – text-based games. When dealing with this particular subset, I use the terms “interactive fiction” and “text-based games” interchangeably due to the preference of scholars who particularly address that form. In particular, Nick Montfort (2003) used “interactive fiction” as his term as it “includes what has been called the ‘text game’ or ‘text adventure’ along with other works” (p. vii).

![Diagram](diagram.png)

**Figure 1. Text-based games are “interactive fiction” and “digital games.”**

What has been important for Montfort, and for my purposes, is that text-based games understand and respond to natural language input, with input and output in the form of text. This text-based input leaves room for more explicit writing strategies (leaving aside, for the moment, arguments that visually-based games are also a form of writing). Furthermore, as opposed to hypertext fiction or e-literature, interactive fiction simulates a world and its rules through its output-input loop. These two characteristics, the simulated world and the natural language parser, define interactive fiction for Montfort, and I follow his definition in discussing the form.
While I realize the term “interactive fiction” may conjure, especially in English studies, ideas of hypertext fiction along the lines of Michael Joyce’s (1990) work in *Afternoon, a story* or Shelley Jackson’s (1995) *Patchwork Girl*, those sorts of fiction do not simulate a world or react meaningfully to natural language input, nor do they engage “players” in acting within the game world to affect the outcome. While those works may not, for Montfort, be “interactive fiction” in that they do not include a text-based parser, for many in the digital humanities they are, in fact, “interactive fiction.” However, as Figure 1 shows, my focus is the overlap in the two distinct sets of “interactive fiction” and “digital games” – text-based programs that are interactive fiction (in Montfort’s terms and in Joyce or Jackson’s terms) and games (in the terms of Reynolds and Juul).

Essentially, “interactive fiction” outside of Montfort’s definition like hypertext fiction, e-literature, or analog multi-linear novels (such as the *Choose Your Own Adventure* series) are not games, but neither are some works that do fall within Montfort’s definition, as he himself points out (vii); however, all of the works I discuss are both “interactive fiction” (in Montfort’s eyes and in the eyes of digital humanists) and “text-based games.” However, because the chapter which addresses these games focuses on their qualities as games in addition to their qualities as fiction (that is, on their rule systems and on their narrative elements), and focuses on both of these elements with equal force, I use both terms.

Of course, advocates of a transactional theory of reading such as Wolfgang Iser (1978), Louise Rosenblatt (1969), Gerard Genette (1991) and many others have argued that all fiction (and indeed all meaning-making) is “interactive.” New media theorist Lev Manovich (2001) has similarly resisted the term interactivity: “art is ‘interactive’ in a number of ways. Ellipses in literary narration, missing details of objects in visual art, and other representation ‘shortcuts’ require the user to fill in missing information.” (p. 56) Manovich and the transactional reading theorists have rightly pointed out that some interaction takes place in all symbol use, and I have no disagreement with them.

Thus, arguments could be made that “interactive fiction” is a superset of all games that tell stories, whether analog, digital, or a hybrid; what would differentiate games from hypertext fiction under that thinking would be their rule-based generation of content. In that case, “Interactive fiction” and “Games” would be overlapping sets, with the overlapping area being “Games that tell stories,” a set which would include some examples from each of the analog/digital/hybrid groups, while some analog/digital/hybrid games would only be in the
“Games” set. However, Figure 1 is only intended to show the relationship between academic considerations of “interactive fiction” and text-based games in a larger context.

Manovich has avoided the trap of interactivity becoming a meaningless term, partially by positing an “open” interactivity, wherein “both the elements and the structure of the whole object are either modified or generated on the fly” by users. (p.40) I refer to interactive fiction which also involves a text-based parser (i.e. text-based games) using this idea of interactivity. Ultimately, while “interactive fiction” does mean different things in different contexts, I use it to refer to a specific type of video game that involves non-trivial user action at a text-based parser level, with users acting within a simulated world.

Games and Educational Value

Seeing a connection between games and education is not new. It has, in fact, existed for centuries. Classical Roman educator and rhetorician Quintilian (trans. 1856/2006) argued for instruction as “amusement,” so as to engage learners more deeply in their tasks (1.1.20). Quintilian recognized that, in education, “the will cannot be forced” (1.3.8), similar to the voluntary nature of games. Quintilian further described the educational value of games to the mind itself: “There are some kinds of amusement, too, not unserviceable for sharpening the wits of boys, as when they contend with each other by proposing all sorts of questions in turn.” (1.3.11) Quintilian’s curriculum was, in some ways, built on play – on the natural playfulness of his pupils, and on turning this play toward the structure of a classroom experience.

Aristotle (trans. 2006), writing a few hundred years before Quintilian, also held to the belief that games could be instructive. In his Politics, Aristotle asserted that games, both mental and physical, “ought to pave the way for [students’] future instruction: for which reason the generality of their play should be imitations of what they are afterwards to do seriously” (p. 169). Video games’ imitative qualities, their ability to model systems and behavior, seem a good fit for these classical ideas.

Maria Montessori’s 19th century approach to education has frequently been cited by game designers as an inspiration for their design theories: Will Wright, creator of The Sims, one of the best-selling video games of all time, claimed, “‘The structure of Montessori toy is that the kid will discover things while playing with a toy … Having the kid discover these principals is so much more powerful than a teacher coming up and saying we're going to learn about this” (as
Wright drew inspiration from Montessori’s approach to education, which was often game-focused, taking advantage of the natural inclination toward play as well as play’s inherent ability to foster imagination and effort for productive ends.

More recently, learning and literacy scholar James Gee (2008) has argued “one of the biggest contributions the study of good video games can make is to illuminate the ways in which learning works when it works best for human beings” (p. 28). Gee has spent the recent part of his career making a connection between learning and video games, claiming that the learning principles video games demonstrate “could and should be applied to school learning tomorrow” (p. 30). Like Quintilian, Aristotle, Montessori and Wright, Gee has valued games’ abilities to simulate and prepare players for real-world challenges while also immersing them; moreover, Gee has seen video games as unique in their capacity to distribute intelligence (between player and character, each of whom must work toward a goal) and promote “cross functional affiliation,” leading to the implication that individual players can draw on their own strengths as “resources, not barriers” (pp. 26-28).

Gee’s student Constance Steinkuehler and her student Sean Duncan (2008) carried ideas of games as educational sites further through their research in massively multiplayer games, arguing that games, as simulated worlds, “build situated understandings of important phenomena (physical laws, for example) that are instantiated in those worlds amid a culture of intellectual practice that render those phenomena culturally meaningful” (p. 531). Steinkuehler and Duncan asserted that the collaborative construction of knowledge, creation and testing of hypotheses, and alteration to hypotheses based on reasoning through models that occurred in massively multiplayer games (and, I would argue, games in general) inculcated scientific reasoning as effectively as classroom instruction. With the force of empirical evidence (in the form of analysis of thousands of World of Warcraft forum posts), Steinkuehler and Duncan linked a specific type of learning valued by academics with the learning practices of gamers, further creating a space for games in education.

Steinkuehler, Duncan and Gee are notable scholars within a growing field of educational game studies, which has taken the connection between games and learning as its focus, from the varied perspectives of design, application, and qualitative or quantitative analysis. Scholars working within the field have sometimes developed games designed to explicitly or implicitly address instructional issues (as in the case of Edward Castronova’s Arden (2007), based on
Shakespeare’s works), sometimes analyzed the effectiveness of those games (as in Elizabeth Losh’s (2008) analysis of *Arden* as a learning tool, wherein she claims the game failed to deliver on its educational promise and moreover was a literal failure as a project), and sometimes studied quantitative or qualitative data of play in order to detail the significance of games to the educational enterprise (as with Steinkheuler above).

Regardless of the approach, educational game studies scholars have worked from the assumption that games “give a glimpse into how we might create new and more powerful ways to learn in schools, communities, and workplaces,” and that they “help us learn by integrating thinking, social interaction, and technology, all in service of doing things we care about” (Shaffer, Squire, Halverson, & Gee, 2005, p. 106). The field has recognized and supported games as meaningful objects, not merely for their cultural position, but for their current and potential contributions to learning.

**Games in Composition**

In comparison to broader educational scholarship on games and gaming, composition has a shorter history of embracing games in classroom study, and often as objects of cultural criticism rather than as productive for the writing process (e.g. Ken McAllister’s *Game Work* (2004) or Eric Hayot and Edward Wesp’s *The Everquest Reader* (2007), which, while insightful, have largely neglected games as facilitators of writing, seeing them instead as chiefly cultural products). Rebekah Shultz Colby and Richard Colby (2008) critiqued this stance, pointing to a history of games in composition classrooms that neglect gameplay and its (educational) entertainment in favor of critique: “We feel the primary reasons computer games have not been more fully integrated in the writing classroom are because of traditional conceptions of work and play” (p. 302). Shulz Colby and Colby, writing with Matthew S.S. Johnson (2010), noted that even compositionists sympathetic to game studies and the use of games in writing classrooms could collapse the broad interdisciplinary scholarship to a handful of “hot-button media issues” (p. 764).

However, some compositionists have focused on video games as ways to encourage and develop critical thinking and literacy skills. Cynthia Selfe and Gail Hawisher (2007) built on James Paul Gee’s work in situating games within a larger question of digital literacy, seeing gamers’ literacy narratives as ways to view a range of questions of “the literacies acquired,
practiced, and valued within the digital environments of computer games” (p. 1). Jonathan Alexander (2009), citing Selfe and Hawisher as an influence, also looked at particular literacy narratives, though he used those narratives in conversation with current scholarly and educational practices in order to ask how we might use gamers’ literacies to “revision the place of new media, particularly gaming, in the composition curriculum” (p. 37). Alexander’s characterization of game studies, as noted, was somewhat problematic, but the fact remains that he has seen games as a valuable (and underutilized) writing pursuit.

Others have focused on games as challenging our definitions of “writing” and “reading,” among them Kevin Moberly’s (2008) argument that interaction with complex symbolic screen objects makes playing games a form of writing. Discussing the supposed “absence of writing” in playing games, Moberly suggested this is an effacement rather than an absence, as “games are written to disguise the fact that their complex symbolic environments are constructed almost entirely through writing” (p. 285). He further pointed to the idea that games as objects of study (and play) in classrooms can enable players to be more savvy rhetorical readers, by allowing them to understand discourse communities and the construction of those communities, and by encouraging them to read the symbolic structure of inherently consumption-based games such as MMOGs (pp. 294-296). In this way, students become aware of ideological structures and can better read other such structures, something of great importance to composition.

John Alberti (2008) also rethought reading and writing as discrete processes through games, arguing that through their interactivity, games make apparent the false binaries of active/passive, work/play, and important/trivial (pp. 262-263). He further claimed that video games return writing to a visual realm, where it has arguably really been situated all along. (p. 265) Finally, Alberti has asserted, video games can remind us of the illusion of texts as static entities, something that compositionists are aware of but that is still sometimes forgotten, due to their emphasis on the experience of creating a text by playing rather than relying on a physical artifact, such as a book (p. 266). Alberti has valuably related games to theoretical positions in composition, helping to secure a place in the discipline for games not as tacked-on additions to pedagogy but, in many ways, the best examples of disciplinary values.

Matthew S.S. Johnson (2008) championed games as methods for civic engagement of students, by focusing on extra-curricular game-related writing as competent use of rhetoric by students that can result in real change. Johnson saw the writing that (specifically MMO) gamers
did outside classrooms as meaningful and motivated. As Johnson put it, we should see “gamer-authored texts as significant examples of public writing and the gamer-authors’ practices as instances of civic participation not unlike that which many composition instructors hope to foster in their classrooms” (p. 271). Johnson arguably examined the texts “outside” the game, but his point was that this writing results in change within the game world itself, as in the case of a player base lobbying for changes in rules or game balance and having those arguments heard and responded to by designers.

From a more explicitly rhetorical perspective, Collin Brooke (2009) has seen video game interfaces, rather than the experiences of players, as a way to demonstrate his re-envisioned canons of rhetoric (specifically the canon of style, re-imagined as “perspective”), further incorporating video games into rhetoric and composition classes. Brooke has argued that new media necessitates a new role for interface in rhetorical theory, and has used video games to demonstrate the power of interface as a frame for that theory. He has argued for the importance of a new media rhetoric based in understanding systems and processes, which I focus on more fully in Chapter 2.

Although the above writers see the value in video games in rhetoric and composition, and offer valuable insights into the ways games can be used in classrooms, they have often not been attendant enough to the unique ways games themselves persuade. The interdisciplinary field of game studies has offered a variety of perspectives to complement traditional modes of rhetorical analysis and production, which could and should be adapted to address the unique affordances of video games as a medium.

**Some Approaches to Games in Composition Classrooms**

I aim to contribute to the ongoing conversation in rhetoric and composition scholarship about the possibilities and limitations of video games. Chiefly, I seek to answer two questions for composition instructors: how might video games apply to principles we value in composition (specifically, critical reading and writing habits and social engagement), and how can we build a pedagogical framework that allows instructors to apply games effectively to those principles? Many instructors, even those familiar with digital rhetoric and new media, have little experience with games, and even less with games in classroom settings. I argue that games are, first,
valuable media that have a place in the classroom and, secondly, that they can offer students and instructors new ways to approach writing instruction and critical reading habits.

Video games play an increasingly important role in many students’ lives (and, for that matter, the lives of some instructors). Games are more and more central parts of social networking sites like Facebook and mobile phones, which are themselves indispensible to students, and so-called “casual games” are functioning as gateways, drawing wider and wider demographics into gaming with each passing year. Compositionists need an approach that values student engagement with these texts and simultaneously employs them in ways that promote critical awareness of their persuasive potential, specifically in terms of students becoming better readers and writers.

In chapter 2, “Metal Gear and Video Game ‘Textual’ Analysis,” I outline a general heuristic for video game analysis and, subsequently, model application of that heuristic to a recent popular commercial video game. When composition instructors ask students to rhetorically analyze a text, we model what we mean by “rhetorical analysis” beforehand, even though what we’re asking students to do is something that they are likely already familiar with. Everyone evaluates and critiques persuasive tactics on a day-to-day basis, though they may not do so with the rigor or tools we ask them to use in the classroom. What we model, then, is a more nuanced and complex sort of the analysis they already use, attaching specialized terminology and concepts in order to better approach the educational goals we set, of students becoming more critically aware readers and writers.

Using pre-existing student skills to reach larger educational goals makes sense as a general classroom practice and particularly in a new media environment, wherein students have often developed extensive new literacies but may not apply them critically. This heuristic is part of an attempt to bring texts relevant to students’ lives into the classroom, in response to calls from The New London Group and many others (Paulo Freire, Gunther Kress, Henry Giroux, etc.). Harnessing student awareness of and facility with new media objects – like video games – seems a vital part of this. Instructors and students alike need a model to work with these objects. I begin by discussing video games as storytelling objects and as cultural artifacts, briefly outlining ways reader/players might critique both of those aspects, and finally draw on Ian Bogost’s (2007) idea of “procedural rhetoric” to explore the unique mode of persuasion games utilize.
In chapter 3, “Serious Games, Composition and Social Activism,” I argue for attention to “serious games,” games whose content explicitly relates to real-world political, social, or cultural issues. As opposed to chapter 2, which concerns itself with a commercial video game, I use chapter 3 as a way to encourage thinking about and writing with video games in relation to the outside world of policy. Working with the heuristic outlined in chapter 2, I look at a specific serious game as a way to encourage student thinking and action in a social realm, as well as its relevance to students’ writing.

I begin the chapter first arguing for rhetoric and composition’s stake in a socially aware and active student body, drawing from classical rhetoric and contemporary composition theory. I then attempt to define “serious games,” briefly discussing the concerns game studies scholar Ian Bogost has to the label as trivializing other types of games, though ultimately I return to the term as a practical one for differentiation, and proceed to outline the history of the term as well as defining major characteristics and types of serious games. I focus on “games for change,” a serious game type that explicitly addresses social and/or policy problems through simulation of the systems on which those problems are built. Composition, with its investment in citizenship education, has unfortunately produced very little scholarship considering “games for change” as a method of engaging that educational goal; even educational game studies is relatively silent, though that field does at least consider serious games broadly as tools for learning. I close the chapter by first providing details of my own classroom experiences with serious games, then providing a case study that instructors could use in composition classes (Oligarchy (2008), an example made more timely with the recent oil spill in the Gulf of Mexico), and finally discussing the further implications and potential pitfalls of serious games. On the whole, I believe serious games may present challenges to instructors, but are accessible to those even without much experience in game studies, and equally to students, who will benefit from the experience critically reading and writing about problematic social and political systems.

However, video games can be used for more than analysis and social critique; they can also be powerful ways to re-envision writing. In chapter 4, “Interactive Fiction as Designing and Composing,” I discuss a classroom research study that my own first year composition students participated in while designing text-based video games. I first give an overview of theoretical approaches to video games and text-based games, then describe the methodology and purpose of
my study – to examine students’ critical reading and writing skills in the course of designing a text-based game and reflecting on that game.

Looking at trends within student work, I isolate several ways students showed improvement in their writing and reading through design: They developed a deepened sense of audience by addressing an ever-present idea of a player who could only respond to explicit textual messages in their games and, furthermore, they connected this to other writing activities, reflecting on the necessity to consider audience in non-interactive media even more fully; they came to a broader understanding of “writing,” viewing its ability to transmit meaning through a variety of channels as (at least) equally as important as its technical conventions and formal features; they also recognized the value of a recursive and reflective process of writing, emphasizing the ways their games highlighted the specific areas they could improve on through seeing them played and responded to; finally, they valued the act of non-linear narrative production, pointing out its difficulties as well as its affordances in comparison to linear text, specifically by comparing the act of composing a game to composing multimedia objects (ones more frequently encountered as writers, e.g. Web pages).

Cautious of endorsing pedagogical applications of text-based games without pointing out the potential pitfalls, I close the chapter by pointing out the challenges I faced in encouraging students to view programming as writing as well as the difficulties inherent in introducing unfamiliar technology in composition classes, and finally offer advice to instructors considering implementation of text-based games in their composition classes.

While each of these chapters functions as an individual argument for specific approaches to and types of video games in composition classrooms, my thesis as a whole argues that video games are a powerful rhetorical domain, as-yet mostly untapped by compositionists. This thesis is one step toward rectifying that problem. Given the rise of the medium’s popularity and its potential for writing instruction, we should take notice of it.
Chapter 2

Metal Gear and Video Game “Textual” Analysis

As described in Chapter 1, and as scholars such as Gee (2008), Hawisher and Selfe (2007), and Alexander (2009) pointed out, video games are increasingly ubiquitous in students’ lives (and, for that matter, in the lives of instructors) and thus should be brought into the classroom as texts to be studied and analyzed. Despite this ubiquity of video games in students’ lives, students may not be equipped to ask the best questions when analyzing games. In the same way that they are inundated with – and are often quite aware of the necessity of critically reading – advertisements, television programming, and sometimes suspect journalism, yet need composition classes to develop reliable tools to analyze these media objects, students should be able to rely on instructors to model critical reading of a video game.

However, many composition instructors are unaware of the sorts of questions that might be asked when analyzing a video game, and thus have no model to draw from. To begin to rectify this difficulty, in this chapter I propose a multi-part heuristic that addresses the modes of persuasion unique to games alongside and in conversation with traditional analysis. By “traditional analysis,” I am referring specifically to the sorts of rhetorical (and narrative) analysis that is already used in composition, reserved for more familiar media forms, such as alphabetic text, film, orality, and audio. In composition, we increasingly recognize not only the similarities, but also the important differences in various modes of writing (Selfe 2009, George 2002), and like aurality or visual media, video games require an acknowledgment of their unique characteristics and the way those characteristics can serve composition goals. In this chapter, I seek to do just that, by using my heuristic to model and comment on the analysis of a specific video game.

In other words, this chapter can stand as an example of the sort of questions students and instructors – particularly those with little experience with video games – might ask when reading

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4 By way of comparison, game studies has a history of resisting narrative analysis (especially in the early years of the field) just as composition initially resists the introduction of new media practices. However, the “ludologist” camp (see Eskelinen 2001; Frasca 2003) has largely admitted the importance of narrative as a method for understanding games (c.f. Frasca 2003b, Juul 2005); similarly, compositionists should admit the value of a comprehensive approach to video games.
them. I chose the video game *Metal Gear Solid 4* (2008) (the latest in an ongoing video game series) as the target of my analysis because it presents seemingly contradictory messages in its game-play on one hand and its narrative on the other, and therefore offers a complex and challenging text. Moreover, because of its contradictory messages, it clearly demonstrates the necessity of reading games on multiple levels simultaneously.

**New Media, New Rhetoric**

Collin Brooke (2009) suggested that “new media invites us to rethink (or reinvent) the canons of classical rhetoric; understanding them as practices that might, in turn, be used to understand the proliferation of interfaces that surround us” (p. xiii). While Brooke is specifically discussing a new vision of the canons, his point that new media changes rhetoric can be drawn more broadly.

As Brooke suggested, new media has had an appreciable influence on rhetorical analysis in terms of new *types*, rather than reconfiguration, of rhetoric. New technological developments have resulted in new methods of understanding the “writing” (photographing, filming, etc.) allowed by those developments, resulting in writers from Roland Barthes (1977) to Gunther Kress and Theo van Leeuwen (1996) arguing for a form of rhetoric that addresses the visual in specific. However, the call for visual rhetoric accompanied (and continues to accompany) the rise of visual culture; composition could only recognize the need of a theorized and pedagogically enacted visual rhetoric when visual rhetoric had already, in some sense, arrived. In other words, without the proliferation of a new medium and its resulting cultural influence, rhetoric would have remained focused on text and speech rather than sight. Conversely, a new medium requires a new rhetoric to apprehend it.

Ian Bogost (2007) used that notion of emerging requirements to argue that a similar shift has occurred in the late twentieth and early twenty-first centuries. Notably, he has rejected the idea of a monolithic “digital rhetoric,” claiming that it “typically abstracts the computer as a consideration, focusing on the text and image content a machine might host” (p. 25) rather than the primary properties of computers as instruments. In Bogost’s view, digital rhetoric has often focusing old tools on new objects of study without truly responding to the new environment, which Bogost judged as problematic. His concern has been that a computer is often treated as “a black-box network appliance, not as an executor of processes” (p. 28). In other words, the actual
things that a computer does (information which also has a persuasive goal, having been considered by designers and written by programmers) may not be given the attention they deserve, with digital rhetoric remaining firmly rooted in modes of classical analysis rather than developing new techniques for new media forms.

Admittedly, Bogost’s position suggests a lack of familiarity with the subfield of computers and composition, since his critique of a monolithic digital rhetoric that ignores the capacity for the generation of content in favor of static content echoes Brooke’s arguments. However, Bogost’s concerns may apply to a more general trend, in the wider composition field, to resist incorporation of new analysis for new media objects. Alexander (2009) claimed “many in the larger field of composition studies are not yet aware of the possibilities for transforming the way approach writing instruction that emerge when critically considering the potential place of video and computer gaming in the composition classroom” (p. 36). Alexander charitably figured the lack of attention to video games as a problem with awareness of their persuasive power, and in large part I agree with this assessment. One of the reasons video games are ignored by the field at large may be a lack of appropriate rhetorical terminology to accompany the new form.

Bogost has offered a new type of rhetoric, what he calls procedural rhetoric, to address an area that he believes needs to be differentiated from digital rhetoric: “Procedural rhetoric is a general name for the practice of authoring arguments through processes. … its arguments are made not through the construction of words or images, but through the authorship of rules of behavior, the construction of dynamic models” (p. 29). Essentially, procedural rhetoric focuses on the way rule systems (and the interfaces that allow interaction with those systems) make arguments. As a quick example, in the popular computer game The Sims (2000) – a simulation of reality with characters representing people, and objects representing real life objects – there is a process to determine the overall happiness of Sims. The more expensive objects are, the more they contribute to Sims’ happiness. As it is a simulation of life, the game’s rules make an argument about money, work, and happiness – basically, that money can buy happiness.

Despite (or perhaps because of) its differences from established rhetorical fields, procedural rhetoric is not intended to supplant, but to support, other types of rhetoric. In the same way that filmic analysis relies on visual rhetoric in conjunction with classical configurations of rhetoric, procedural rhetoric opens a space to apply specialized rhetorical tools toward
understanding a particular kind of persuasion that occurs in computer-mediated interaction. Drawing on Burke’s theory of identification and his expansion of rhetoric to potentially infinite domains (bounded only by meaning-making activity), Bogost cogently argued that the symbolic system of computational processes requires a different type of rhetoric (pp. 20-21).

Similar to Bogost’s noted concerns, Brooke acknowledged the difficulty in applying the rhetorical strategies of old media to new media objects when discussing a reading of hypertext fiction: “Criticism of ‘the content of the story’ relies on an implied social contract among critics, enforced by the publishing industry and intellectual property laws, that fixes textual objects, thereby making them available for readers in different locations and at different times” (p. 11). Brooke seemed to echo Bogost when he claimed, “A rhetoric of new media, rather than examining the choices that have already been made by writers, should prepare us as writers to make our own choices” (p. 15, emphasis in original). Procedural rhetoric is intended to allow for this sort of investigation, through refocusing on the systems that construct choice rather than on the choices themselves.

When Brooke claimed that “A turn toward the interface as our unit of analysis would be acknowledgement that it is not necessary that these processes culminate in products,” and went on to say that books and other texts are “special, stabilized instances of an ongoing process conducted at the level of interface” (p. 25) he made a step in connecting rhetoric and composition to the sort of work that Bogost has done in computer science and game studies. Brooke has recognized the value of process and interface to a new media culture while still acknowledging the importance of “special, stabilized texts” in their own terms. Moreover, he has embraced a new type of rhetoric, one that relies on computational process as persuasion rather than as a gateway to it.

Creating a Heuristic

If, as Brooke and Bogost suggested, a new approach to rhetoric is necessary to accommodate procedural meaning-making, a heuristic to guide that approach may be useful. Furthermore, with a game of the narrative and procedural complexity of Metal Gear Solid 4, a heuristic is necessary. Ultimately, my analysis heuristic consists of three major, interrelated areas: context, narrative, and process. All three areas work together in layered ways to contribute to the meaning of a game, and may compete with each other for that meaning. Table 1 below
outlines the most salient aspects of the three-part approach. Each deals with a different aspect of meaning-making in games.

Table 1
A Heuristic for Video Game Analysis

<table>
<thead>
<tr>
<th>Method of Argument</th>
<th>Context</th>
<th>Narrative</th>
<th>Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relevant Questions</td>
<td>Relational</td>
<td>Dramatic</td>
<td>Systematic</td>
</tr>
<tr>
<td>When and where was this made? By whom? In what circumstances? Where does it fit? How is it received?</td>
<td>What is happening? Who is in control? Who am “I?”</td>
<td>By what means does the world work? Who do rules apply to? Is there a goal?</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Experiential Focus</th>
<th>Author Experience</th>
<th>User Experience</th>
<th>Cultural Experience</th>
</tr>
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<tbody>
<tr>
<td>Cultural Experience</td>
<td>Author Experience</td>
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<tr>
<td>Author Experience</td>
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<tr>
<td>User Experience</td>
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<td>User Experience</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Comparative Objects</th>
<th>Other media – games as part of a media ecology</th>
<th>Other stories – Games as part of a storytelling ecology</th>
<th>Other games – games as part of a game ecology</th>
</tr>
</thead>
</table>

The row of Table 1 labeled “experiential focus” requires some explanation. Although each category of analysis is obviously interrelated, and users interpret author’s messages within a cultural framework (that is, cultural, author and user experiences are present in each of the frames of analysis), it can be useful to emphasize one type of experience over another for the purposes of situating analysis. I have included cultural, author, and user experiences in each column as a reminder that these forces are inextricable; however, I have italicized what I believe might – at least in some cases – be more applicable to the frame of analysis. While, for instance, narrative analysis should not solely focus on authorial intent, one way to consider narratives is through looking at the generic and formal elements employed by an author or authors. Similarly, looking at a game’s cultural context also requires keeping in mind its author’s background and the user’s interpretive framework; however, social and industry forces still seem important to fitting particular games in reference to others and other media.

Context examines the relationship between the game and its creators, the game’s place within and in relation to the games industry (e.g. is this an independent/ mainstream development? What is the studio size? What is the platform availability?) as well as other media (e.g. is this also part of a film franchise?) and/or social forces (e.g. does this game’s portrayal of
class, race or gender reinforce problematic stereotypes?). Essentially, context is about establishing what meaningful relationships exist between the game as a complete object and other forces, people, or objects in culture. Context would be the place to engage students in discussions of, for example, the perennial topics of video game violence and misogyny – topics that are doubtless worth addressing, but are certainly not the only things about games worth addressing.

Narrative looks at the creation of coherent story (or lack of it), drawing from fairly standard literary analysis questions – setting, character, plot, dialogue, etc. The wrinkle in standard analysis occurs in the complex relationship between the designer of a game, who ultimately controls the outcome(s) of a game’s narrative, and the player, who controls the pace and progress of it. Questions of authorial power and intent are, of course, familiar; in fact, games seem an excellent way to engage with such questions, which frequently confound students. Obviously, sometimes video games have no discernable plot. For instance, the object of *Tetris* (1985) is to create lines of blocks, not to advance some narrative structure. In these cases, we might ask why the narrative structure is missing, and whether narratives are necessary for those games that have them. A relevant question, and one with no easy answer, follows: How does the absence or presence of a narrative influence games’ relationships to other media types, such as film, still photography, speech, or alphabetic text?

Finally, procedure is perhaps the most identifiable as a distinctly game-based method of analysis. Whereas context and narrative have definite homes in composition, procedure is less likely to be familiar to composition instructors. However, procedure is what makes games unique, and it is equally responsible for meaning-making in games as much as context and narrative (in some cases, arguably much more responsible for the meaning of a game). The rules designers construct, which in turn build the world a player experiences, make their own powerful arguments, and understanding those arguments and the influences they have on user perspective and subject positioning are imperative.

Because compositionists are likely familiar with narrative analysis and contextual readings of a work, I have focused on procedural analysis below. In addition, procedural readings of video games tend to be more complex than narrative or contextual readings since a game relies on process to be recognized as such (although it is in part because of the simplicity of video game plots).
Analyzing *Metal Gear Solid 4*

*Metal Gear Solid 4* (or simply *MGS4*) is part of a series of video games – a popular one, and rare among video game series in that it has spanned over two decades and continued to grow in popularity. The *Metal Gear* games are, according to the creator, “tactical espionage action” – essentially, 3rd-persen action games with prominent elements of stealth in the context of playing a spy-like character. The series has migrated between various systems over the course of its life, though it has always been released first on consoles, from the Nintendo Entertainment System (see Figure 2) to the Sony PlayStation and its successors, the PlayStation 2 and PlayStation 3. *Metal Gear Solid 4*, the latest game in the series, was released on the PlayStation 3.

![Figure 2. The series has retained most of its core gameplay elements but has evolved visually since 1987. Here, the main character is attempting to avoid being noticed by enemy soldiers. Image used with permission.](image)

*MGS4*’s game’s camera is adjustable, though the series has always maintained a third-person perspective, whether the camera is top-down, over the shoulder of the main character, or in an isometric position (see Figure 3).
In *MGS4*, players have a technology called “OctoCamo” at their disposal, allowing them to blend in with virtually any background. In theory, OctoCamo is intended to maximize the ease of the stealth gameplay (in earlier titles, stealth was often difficult to maintain). The avatar can perform a variety of stealth-assisting movement actions, from leaping over short walls, to crawling, to walking in a crouch (though the age of “Old Snake” makes the crouched walk painful after a short time, and the character stands to stretch his back).

The character also knows a variety of combat techniques, including unarmed (lethal and non-lethal) maneuvers, melee combat, and extensive use of firearms (tranquilizer and live-fire varieties). In addition, the character carries a variety of utility items, including heat compresses (for Old Snake’s back pain), the “Solid Eye” (a battery-powered multi-use vision enhancer, allowing the character to see in the infrared spectrum and functioning as binoculars), and the Codec. The last item allows the character to communicate with his mission support team, who provide advice and exposition, and who often function as proxies for the political, military, and social views of the game’s designer (see Figure 4).

The narrative and procedural elements continue to grow in complexity with each iteration of the series, and while this increased complexity often results in a rewarding and challenging gameplay experience, the series is often criticized for its labyrinthine, overwrought, and unnecessarily confusing plot, full of double-, triple-, and even quadruple-crosses.
Figure 4. The Codec allows the player character to communicate with a support team. Here Otacon, a scientist (and sidekick) character, is revealing more information about a type of enemy in the game world. Image used with permission.

**Context in *Metal Gear Solid 4***

In the case of *Metal Gear Solid 4*, the game’s designer, Hideo Kojima, is famous within the video game industry for creating groundbreaking mechanics as well as convoluted plotlines in games that frequently remove control of the action from the player. Essentially, Kojima is seen as the quintessential video game auteur. Kojima’s status as a Japanese citizen, the influence he claims film has had on his design mentality, and his ambivalence toward interactive storytelling, often expressed in interviews, are also relevant. In addition to the designer (and his self-named design studio), the popularity of the game series, its large devoted fan base, and the anticipation surrounding this installment of the series (due to a prolific advertising campaign that successfully inspired both anxiety and curiosity in potential players) all contribute to the context of the game. The final part of the context of the game, and perhaps most important, is the history of the series as taking advantage of these contexts *within the games themselves* – what we might call “high context.” What I mean by this is that *Metal Gear* games tend to break the fourth wall within their stories and acknowledge the popularity of the series, the fan criticisms of earlier installments, etc. In other words, they rely more explicitly on their being products of a particular time and place, as opposed to “low context” games that do not capitalize on their extra-game surroundings.
The context of *Metal Gear Solid 4* contributes to its overall meaning by highlighting the understood audience. In the same way we understand arguments in general as written and read in time, the particular context of *Metal Gear Solid 4* suggests that Kojima expects loyalty from his fans and expects his games to produce an impulse to play *all* rather than *one* of the series. The context of the game’s narrative itself (rather than the context of the game’s production) also contributes to its meaning.

In a classroom setting, we might generate some specific questions for reading a game’s context: When, by whom, and where was it developed? When, by whom, and where was it published? On what platforms is it available to be played, and why might that matter? Does the game address its own status as a media object, or does it remain transparent? Does it draw attention to its own context?

**Narrative in *Metal Gear Solid 4***

Narratively, *Metal Gear Solid 4* shares the characteristics of other games in the series. They share the history of our world for the most part, even though *MGS4* is set in a nanotechnology-equipped near future. The games follow a single operative inserted into enemy territory. The player character inevitably faces one of more Metal Gears, a series of bipedal (usually, but not always, nuclear-equipped) battle tanks. The meddling of politicians, and the theme of politicians and soldiers at odds with one another, along with the idea of politics perpetuating war rather than avoiding it, are common in the series and in *MGS4*’s narrative. Centralized government is almost always negatively portrayed, and advanced technology is also suspect; usually these two suspicions support each other, as with the US government’s immoral use of nuclear technology and nanotechnology. Global communication and nanotechnology networks are used to literally control citizens’ behavior, and artificial intelligences oversee this control.

Overall, though, the most prevalent theme in the *Metal Gear* series is pacifism. Each of the games includes a member or members of the protagonist’s support team that function as a sort of mouthpiece for Kojima, and those members inevitably profess a pacifistic agenda (even if they are in military service). Colonel Roy Campbell, along with several others, functions as that sort of character in *Metal Gear Solid 4*. In one mission briefing, Campbell comments on the state of the world:
America has now turned war into a form of economic activity. Analysts are calling it the "war economy," in that it's picking up the slack for the downward-sloping oil market. But I, for one, don't intend to simply stand by and watch it happen. For the PMCs, market expansion entails fanning the flames of war... It means more refugees.

Near the end of the game, another character puts it similarly:

Powered by the industrial and digital revolutions that came before it, this age gave birth to a twisted economic revolution - a battlefield revolution. It created a new world without substance. In this new world, there were no ideologies, no principles, no ideals. There was only the war economy.

Previous games have had similar polemics against topics such as nuclear proliferation and deterrence, military experimentation in biological warfare, government and media collaboration in controlling public opinion of military conflict, and slavish devotion to the military-industrial complex. *MGS4* particularly criticizes casual violence and casual portrayals of violence in numerous instances, from the main character’s post-traumatic flashbacks of earlier combat to the idea that “war is a game” for PMC soldiers.

All of these themes, however, are experienced from the perspective of the player character, a single person charged with overcoming insurmountable odds in order to accomplish his objective. The player characters’ actions might be seen as in support of the argument of the narrative in that they are manipulated by government conspiracies, though their actions ultimately make a positive impact on the world – in other words, the struggle against overwhelming resistance is necessary to establish a peaceful world – though this argument is a difficult one to reconcile with the procedural rhetoric at work.

In a classroom setting, we might generate the same sorts of questions for narrative content as we do when working with film, though the answers will inevitably be much different for an interactive story. The first question we might ask is whether or not the story is truly interactive at all – that is, how much control the player has over the outcome of the narrative. Further, we might ask whether the narrative encourages or punishes player deviation from that narrative – that is, how much control the player has over the journey of the narrative. Additionally, we might ask whether the plot has thematic elements that the procedure or context seem to support, deepen, or contradict.
The thematic and narrative elements of the *Metal Gear* series seem to overwhelmingly support pacifism. However, the specifics of the player’s interaction with the world can also be seen to undermine the overtly pacifistic, politically sensitive plot of the game. These procedural elements make an argument of their own that is equally important to interpreting the overall meaning of the game.

In a YouTube video titled “MGS4 Big Boss Hard Snake vs Frogs v2 (exterminator),” (DeadPhoenix86, 2008) we can watch as the character goes on a literal rampage, using a variety of weapons (from sniper rifles to grenade launchers) to kill dozens of enemy soldiers called “Frogs,” with the help of several other in-game characters. The player takes part – with apparent glee – in this killing; the title of the video alone (“exterminator”) suggests the player reaction to the scenario. The ability of the player to choose amongst a large variety of weapons is a procedural argument for large-scale violence. The enemy soldiers, though their corpses disappear in a flash of light, are a normal human (albeit nanotech enhanced) all-female special forces unit called FROGS; their nanomachines cause their corpses to disintegrate, robbing the player even of a reminder of murder, procedurally erasing consequences for violence. The pleasure that the player in this video seems to receive from responding with outright violence – rather than the stealth implied by a game supposedly about “infiltration” – raises some serious questions. However, this is not the only instance of the rules of the game advancing an apparently violent argument.

For instance, *Metal Gear Solid 4* also uses a ‘stress’ and ‘psyche’ gauge to approximate the main character’s mental state. Normally, being seen by enemies and engaging a threat raises stress level. However, prolonged violence can also result in a ‘combat high,’ nullifying the negative effects of stress. This procedural representation (apart from being an intriguing oversimplification of conflicting emotions) initially seems to suggest that overt violence may be the better way to respond to threats. Additionally, as long as Snake isn’t seen, he can kill whomever he pleases and his stress level will remain constant.

In games prior to *Metal Gear Solid 4*, the protagonist could kill with impunity and not affect the mission or his mental state – that is, the only negative consequence of killing someone was hiding the body (though even that was a recent addition to the series’ mechanics). The
rewards for completing *Metal Gear Solid* were, among other things, an accessory that granted the player infinite ammunition, further procedurally encouraging violence.

The usual response when a player triggers an “alert mode,” as a result of being seen by an enemy soldier, is to kill the soldier. Once a player isn’t actively seen, they are free to hide, and the alert mode will disappear. In this case, the enemy soldier is treated as an acceptable sacrifice even if the player is intending to remain fairly pacifistic. How do we reconcile the narrative thread – advocating pacifism – with the procedural indication toward violence (or, at the very least, the procedural argument of hellish battlefields being comfortable to the protagonist)?

One of the ways we might is by acknowledging the overall procedural generation of the game. Several procedural elements resist easy categorization as rewarding violence, though largely by simply *not* rewarding it, rather than by punishing it. At the end of each game in the series, the player is “graded” on their ability to play the game. Those players who trigger fewer alerts and kill fewer enemies are rewarded with more “extras” for completing the game. These extras range from concept art to short stories to in-game items, though they usually make no appreciable difference in the difficulty of the game. There are few (though some) rewards for nonviolence, and the ones that exist are effectively intangible.

However, there are points when the series encourages the player to consider nonviolence – paradoxically, this usually occurs when the player is also *forced* into violence. On (at least) two occasions, the player character is forced to kill a mentor: in *Metal Gear Solid 3*, the player character Naked Snake must shoot his mentor the Boss – she sacrifices her life to cover up the US government’s involvement in the theft of nuclear weapons, and in *Metal Gear Solid*, player character Solid Snake must fire a missile at his former mentor-turned-cyborg ninja, Gray Fox.

In the former situation, the player is forced to “pull the trigger” with a button press, as opposed to merely being shown the Boss’s death in a cutscene, as would normally be the case when the outcome of a game action is a foregone conclusion. The player character realizes that his mentor is sacrificing her life and her reputation as a soldier by becoming a scapegoat and wrestles with the rightness of his actions, an ambivalence the player is forced to embody through drawing attention to the gunshot.

In the latter situation, the player character actually wrestles with the player’s control and *refuses* to kill his noble mentor in order to destroy Metal Gear, instead saying “It’s no good!” or “I can’t do it!” when the player presses the “fire” button. This instance of procedural rhetoric
might be said to reduce the player’s power in the ongoing narrative, but it also encourages the player to identify with the character’s reluctance for killing (even if he hasn’t done so beforehand). These reflective moments are few and far between, but they could be said to encourage the player to reflect on all the deaths he or she may have been responsible for; highlighting specific choices may throw the others into relief, in other words.

Because the game forces players to watch literally hours of cutscenes which present a pacifistic argument and simultaneously releases him or her into a world that tests the player’s pacifistic resolve, playing the game may be seen as an invitation to complete the game’s narrative argument through gameplay. As Bogost put it, “A procedural model like a videogame could be seen as a system of nested enthymemes, individual procedural claims that the player literally completes thorough interaction” (43). The enthymeme’s rhetorical power is, of course, already well known to compositionists; the involvement of player agency in completing a designer’s argument taps into this rhetorical power.

In his article “Videogames of the Oppressed,” (2004) game studies scholar and game designer Gonzalo Frasca said this about games influencing players:

Neither art not games can change reality, but I do believe that they can encourage people to question it and to envision possible changes. Unlike narrative, simulations are a kaleidoscopic form of representation that can provide us with multiple and alternative points of view. By accepting this paradigm, players can realize that there are many possible ways to deal with their personal and social reality. (p. 93)

Frasca’s argument supports MGS4’s design. In other words, the representation of violence is not necessarily the advocacy of it. We could say that Metal Gear may not launch a single argument against violence, but drafts a player into completing a variety of arguments through narrative preconditioning and procedural testing.

Through the deployment of conflicting procedural and narrative arguments – each breaking the fourth wall in their own way – in the context of production and the history of the series which further breaks the fourth wall, Kojima may be responding to Frasca’s call for a sort of Boalian/Brechtian game. Frasca suggested that, just as Brazilian dramatist Augusto Boal (1985) advanced Bertolt Brecht’s “theatre of alienation” to a “Theater of the Oppressed,” games should attempt to influence real changes in player attitude: “Boal’s main goal is to foster critical thinking and break the actor/spectator dichotomy by creating the ‘spect-actor’” (p. 88).
Frasca has been interested in the ways in which Boalian theatre forces audience to examine their own subject positions by drafting them into participating. Similarly, we could say that Metal Gear may not launch a single argument against violence, but drafts a player into completing a variety of arguments through narrative preconditioning and procedural testing, ideally causing the player to examine where his or her beliefs deviate as the player character calls them into question narratively and procedurally. The particular lessons learned in *Metal Gear Solid 4*, then, might be understood as particular evidence of the abstract idea of games influencing players toward critical thinking.

Along these lines, Ian Bogost outlined some key questions for reading procedure, which would be useful in a classroom setting: “What are the rules of the system? What is the significance of these rules (over other rules)? What claims about the world to these rules make? How do I respond to those claims?” (p. 258) Though these questions are broad and would need to be pointed toward particular procedural elements – we might, for example, as students to pay particular attention to the way a character is allowed to move through a game space – they form a useful foundation.

**Classroom Applications**

One of the ways I see this model as useful in a classroom is its ability to encourage students to think more deeply and critically about interface. In composition, we should already ask students to analyze interfaces; as Selfe and Selfe (1994) pointed out,

> Within the virtual space represented by these interfaces, and elsewhere within computer systems, the values of our culture - ideological, political, economic, educational - are mapped both implicitly and explicitly, constituting a complex set of material relations among culture, technology, and technology users. (p. 485)

Selfe and Selfe argued that most computer interfaces perpetuate exclusionary discursive practices, reify ideas of class privilege, and emphasize rationalism while ignoring other ways of thinking. As a type of computer interface, video games also frequently procedurally enact these arguments. However, as Anne Wysocki and Julia Jasken (2004) suggested, “computer interface designs encourage us to see forgetfully” (p. 30). As opposed to other interfaces, video game interfaces are less invisible, and their arguments are more obvious. Students are likely able to picture a video game interface’s constraints making an argument more readily than they might
picture a word processors’ doing so. With the foundation laid for analyzing and critiquing a less transparent, more explicit argument, students can be asked to analyze more invisible interfaces’ warrants.

Constructing an assignment that asked students to analyze a text like *Metal Gear Solid 4* would also help to create “a conceptual foundation upon which teachers can build a program of political critique,” a building block for students to “recognize and question the politics of computers,” to refer to Stuart Selber’s (2004, p. 75) idea of critical literacy. Examining the procedural and narrative elements of the *Metal Gear* games encourages students to think about the way economies are driven, the risk/reward scenarios of the game, the possible necessity of violence, and the potential incitements to action that such a game might produce, among other avenues. The above emphasis on interface could work together with reading the game’s themes and narrative movements, with students producing texts that outline the stakeholders in video games’ messages, or critiquing the experience of play in contrast to reflection on it. Instructors could ask students to look at a game with the three areas the heuristic outlines in mind, and determine where its arguments (contextual, procedural, narrative) might arise from. Students should be able to articulate what might regulate the belief systems of players (and designers) and whether those forces are ones to be supported or challenged. In so doing, they can see the sociohistorical basis of all knowledge and the ways they might react to/against those forces.

Similarly, through the lens of ideology, students could be asked to plot a course for characters in the series, using the interface as grounding for doing so. If games are “partial and subjective simulations in which individuals are essentialized and their origins wholly determine their ends” (Voorhees, 2009), interfaces form the basis for that essentializing; they are the ideological framework. Voorhees claimed that video games serve an apparently equalizing function, placing players in a supposedly neutral space and asking them to behave as if everyone who plays a game is equal in some way. However, obviously this is not really the case, with different player attitudes and abilities influencing their reactions to video games. The supposedly neutral position of players is itself part of an ideological framework that can serve to separate players from critical questions. On the other hand, students can see the construction of that ideological frame as a way to move toward a type of consubstantiality, a way to identify with a character unlike themselves in some way. Doing so would also allow them to reflect on concerns of audience; since no video games is created for *anyone*, they could also begin to see how no
other texts are. Reading games in terms of audience, and producing writing that reflects on those decisions, would allow for transferrable knowledge to be applied to other media and to students’ own writing. If Ian Bogost’s claims about procedural literacy are founded, then it’s possible to see how from here, students could see that ideology is just as present in less narratively-centered interfaces – that is, that their ability to read rule systems will transfer to other spaces.

In addition, acknowledging the writing process itself as a rule-based system can lead to more productive student response; Jesper Juul (2005) called this type of rule set an “emergent” one, like chess: “A game of emergence has a broadly defined goal – there are many game states that quality as the goal – and a large number of ways to reach these states” (p. 76). Many procedural activities as also emergent ones, not simply games. I would suggest that writing has emergent properties, with multiple paths leading to a desired outcome.

Furthermore, I would suggest that writing is a procedural activity. By this, I mean that writers make choices about the subject matter, method of presentation, and rhetorical purposes of their work. When we make those choices, we either enact – or create – rules to guide us. We adhere to the procedures of, for instance, generic strategies and discourse conventions such as citation, but we also use invention strategies as ways to generate or recognize the rules we use to generate ideas. I am not merely suggesting that we codify writing as a series of rules for producing certain texts; on the contrary, I’m suggesting that we already acknowledge the power of certain rules to produce certain kinds of texts, and that we continue to add to our bank of procedures as we become more experienced writers. For instance, we decide to deploy an interesting anecdote in order to introduce a complex idea or to signal a friendly tone. As in chess, we acknowledge the ability of various writing schemas to produce the desired result. Unlike chess, writers have a nearly limitless number of opening moves – but an experienced writer can still recognize many of those moves and put them to good use. It is telling, I think, that we so frequently describe risky introductions as opening gambits and discuss making “rhetorical moves” in the strategic, chess-like sense.

Writing systems also, like the procedure of video games, make arguments about what we value in various settings. While not enacted by computers (except that, as mentioned above, computers do constrain reading and writing to a large degree), encouraging students to think procedurally about writing has obvious benefits. With a new critical vocabulary and frame of reference, students can examine their own writing processes and the application of the rhetorical
situation to various writing tasks. Systemic thinking also has benefits for critically examining the structure of the institution and classroom, by making students aware of the real material and ideological forces at work in their education. When we bring rule systems to students’ attention, we encourage them to think critically about the ideology of the classroom, their material conditions, and the other variables that might influence their actions and writing.

Obviously, my analysis in the earlier portions of this chapter, focused on the tension between procedure and the games’ narratives, barely scratched the surface of classroom applications of my heuristic, and of procedural thinking in general. Procedural representation of character gender, for instance, would be worth exploring, especially in the cultural framework of player demographics and the games’ country of origin. Similarly, the representation of age in “Old Snake” would make for interesting critique across other action games in the context of physical ability. The heuristic could easily be applied to multiple video games in conversation with each other, to highlight differences in the scope and purpose of various games. Students could also apply their critical facility with video games to other academic writing in a composition course – a paper on representations of and value of the elderly could easily incorporate material from MGS4 to demonstrate the complex relationship between competence and aging.

In other words, the example of Metal Gear Solid and other video games can demonstrate to students that examining context, narratives, and mechanics alongside each other can lead to a more productive and deeper understanding of the larger argument that a text (or multiple texts) might make. Applying this to other rules systems, students can examine interfaces beyond games – interfaces such as the ones we use to communicate with each other and the ones we use to interact with the world itself.
Chapter 3
Serious Games, Composition and Social Activism

As I alluded to in Chapter 1, rhetorical instruction and social awareness have long been connected. Aristotle (trans. 2006) linked rhetoric directly to public action: “we must be able to employ persuasion, just as strict reasoning can be employed, on opposite sides of a question … in order that we may clearly see what the facts are, and that, if another man argues unfairly, we on our part may be able to confute him.” (1.1) Aristotle rejected immoral persuasion as “warping the carpenter’s rule,” clearly showing rhetoric’s intended use for the common good. The quest for truth and fairness in public policy and social situations accompanied rhetorical instruction to Rome, with Quintilian’s (trans. 2006) idea of rhetoric as “a good man speaking well.”

The goals of civic rhetoric, in inspiring noble and virtuous action in the listener, have influenced rhetoric and composition programs today, as compositionists have recognized the value of citizenship education’s aims at inspiring thoughts and values that promote positive social action outside the classroom.

Composition studies has a history of seeing writing as a tool to encourage critical thinking and social activism. James Berlin (1987) traced one branch of this thinking, what he calls “epistemic rhetoric,” to 1967. Edward Corbett (1985) argued that this lean toward humanistic education for the express purpose of equipping students with language skills necessary for citizenship can be traced to Cornell’s communication department in the 1920s. Kathryn Fitzgerald (2001) saw normal schools of the late nineteenth century, with their democratic pedagogy and emphasis on student engagement with their own thinking, as direct ancestors of contemporary composition’s aims.

In the previous chapter, I demonstrated videogame analysis as a useful classroom activity and modeled a hybrid narrative/contextual/procedural analysis. In this chapter, I focus on videogames with explicit connections to citizenship and social activism to make an argument for their inclusion as well. I contrast these “serious games” to those that have tended to be the focus of compositionists – mainstream commercial games without explicit agendas – in order to further demonstrate the connection between the goals of composition and video games as objects of study.
Defining “Serious Games”

Ian Bogost (2007) wrestled with the term “serious games” at some length, as the word might mean “solemn,” “weighty,” “grave,” or “highbrow,” eventually pointing out that serious games are only serious “in relation to some nonserious alternative” (p. 57). Seriousness in this sense is usually in the service of some institution interested in furthering its own agenda (e.g., government institutions using games to demonstrate the rightness of particular policy decisions): “Seriousness implies actions that support the goals and progress of these institutions … Serious games are videogames created to support the existing and established interests of political, corporate, and social institutions” (p. 57).

Bogost eventually dismissed the “serious games” moniker, instead arguing that simply translating existing political, pedagogical, or activist goals into video games doesn’t take advantage of the unique persuasive power of the new medium. Rather than merely being employed in the service of institutional power, he asserted that truly serious games should function as a method to “open discourse … finding new structures of thought not immediately given by a current worldview” (p. 58). I would argue the best serious games do this even when created in support of a particular agenda, or at the very least that thoughtful analysis of games can lead to the sort of deepened discourse Bogost has called for.

Bearing in mind Bogost’s apprehension of the label, I use “serious games” as my term in this chapter due to its acceptance within game studies scholarship. Moreover, I am specifically discussing games made in direct reference to real-world political, social, and educational issues, whereas Bogost’s “persuasive games” label is intended to apply to all games regardless of content, rather than to a specific subset of games. Though I accept the notion that videogames of all kinds engage in persuasion, the “serious games” label is still a useful one to discuss intention and subject matter – keeping in mind the arbitrariness of the terminological distinction.

Bogost’s view of serious games as calling into question, rather than supporting, the institutions that create them is strikingly similar to a pedagogical stance in composition. Critical pedagogy the likes of which has been defined by Ira Shor (1992) and Paulo Friere (1970/2000) is concerned with precisely that calling-into-question. James Berlin (1988) summarized this stance as “attempt[ing] to place the question of ideology at the center of the teaching of writing,” opening “a detailed analysis of dehumanizing social experience and a self-critical and overtly historicized alternative based on democratic practices in the economic, social, political, and
cultural spheres” (p. 682). Hence, if serious games do challenge ideological positions through exposing the work of ideology – that is, by making its rules explicit and visible – then they belong in composition classrooms.

The term itself may have originated with Clark Abt’s (1970) book Serious Games, in which Abt was “concerned with serious games in the sense that these games have an explicit and carefully thought-out educational purpose and are not intended to be played primarily for amusement” (p. 9). Though not citing him directly, the Serious Games Initiative, along with their affiliates Games for Health and Games for Change, share Abt’s ideals in using games to expose and solve real-world problems.

The Serious Games Initiative, established by the Woodrow Wilson Center for International Scholars in 2002, has stated its purpose is using games to “solve problems in areas as diverse as education, health-care, national defense, homeland security, analytics, corporate management and more.” (“About”) The birth of the Serious Games Institute gave a label to a subset of games that had existed since the birth of video games (and before, if card and board games are included).

Ultimately, serious games model problems in order to demonstrate methods to solve them; they work procedurally to simulate a situation and then elicit player responses for a solution. In focusing on player involvement to achieve specific goals, they resemble other video games. However, the subject matter is what differentiates serious games from their counterparts.

Educational games like Math Blaster (1987), Where in the World is Carmen Sandiego? (1985), and The Oregon Trail (1974) were well-received by school boards as “edutainment software.” Given that they model educational problems and propose procedure to solve them (mathematical skills, geography knowledge, and historical information, respectively), these games should be considered serious games.

However, educational software has had a fairly rocky reception by students, who may see games as “tricking” them into learning by wrapping an otherwise boring lesson in a game. When James Gee (2008) wrote that he valued the ways games could involve learners in the world through activity (p. 30), he was in some ways speaking against bad educational games, games which tell players things rather than allow them to discover them for themselves. Some designers have taken this criticism to heart and have created another category of serious games designed to do just that.
Games for change, as this new category has come to be called, promote specific solutions to political or social problems through modeling social or political systems and placing players in a position to consider the outcomes of actions. In games like Ayiti: Cost of Life (2005), where players manage the resources of a Haitian family to demonstrate the complex concerns of life in developing nations (resources, for instance, are limited so that only one family member will likely be educated, while the rest work to support that education), players are encouraged to think about ways to improve the real-world systems the games simulate – or, at the very least, to recognize the problems in those systems.

As opposed to less successful educational games, games for change provide a system players can manipulate and *show* the consequences of that manipulation. Given the potential of this type of game to not only demonstrate social or political problems, but also to persuade players of ways they might think about addressing those problems, games for change seem a perfect fit for a composition classroom focused on issues of social justice or involvement in political process.

Unfortunately, very few compositionists discuss serious games at any length. While scholarship on video games in writing classrooms is growing daily, the focus tends to be on massively multiplayer games and literacy or construction of identity in single-player games. The lack of attention paid to serious games, given composition’s interest in social change, is puzzling. Even those that discuss serious games usually focus on explicitly educational ones. Because college students are already encouraged to interact more with the world outside the classroom – and because we as instructors often have a difficult time engaging students in larger social issues - I believe that examining non-educational, politically charged serious games can open doors for students to examine real-world systems, by imbricating them in the production of those systems.

**Connecting Serious Games to Pedagogy**

Although compositionists have not been a part of the conversation, other educators have addressed serious games. Ritterfeld, Shen, Wang, Nocera, and Wong, (2009) argued that serious games empirically demonstrate some positive influences on learning, by comparing subject matter taught with a serious game versus traditional classroom instruction (i.e. skill and drill). The researchers focused on multimodality as the primary reason students were able to retain and apply information, though they cautioned that multimodality in and of itself is not a panacea for
education. Moreover, the content of the game was explicitly educational rather than centered in any sort of social activism.

Similarly, Leonard, Murray, Laird, Bohr, and Park (2006) produced a game directed at teaching K-12 instructors about incorporating games into their classroom. While the researchers describe their project as a success, and they are using a “serious game” to meta-reflectively demonstrate benefits to learning, their subject matter was educational rather than social. Regardless, the graduate students involved in their project not only had fun but took long-term pedagogical considerations away from the experience, which is encouraging in thinking about the potential of games in composition instructor-education.

On the other hand, Carpenter, Lundell, and Rubin (2007) did implement a game for change, centering on genocide prevention, in their educational study in a graduate-level policy class. Their results were equally encouraging: the game grounded students’ abstract knowledge in an imagined first-hand experience, gave students as a learning community a common frame of reference against which to evaluate different causal and principled arguments, and elicited a fairly nuanced discussion among the students as to how such events might be avoided in the future. (p. 126) However, Carpenter, Lundell and Rubin focus almost entirely on the narrative experience of the game (despite their allusion to “causal” arguments); the game seems to have been received largely as another text to read, despite its procedural nature. Although students recognized the simulation was making some arguments (p. 125), the nature of the game as a game was largely an afterthought for the researchers, who were mostly interested in the socially networked means of exploring a problem. Undoubtedly, the social aspect of the game was important and is worth further exploration; however, the lack of attention to procedural argument as a way to think through the systems that led to the Rwandan genocide is disappointing.

While other educators have written about serious games, they tend to fall into line with either the first two groups mentioned above, who used serious games as teaching tools in a more overt way (i.e. educational games), or with the final group, who effectively ignored the rhetorical nature of process (even though they were using a game for change).

Composition pedagogy can take some instruction from the above studies: first, they demonstrate a place for serious games (educational or games for change) as learning tools in a
classroom setting. Secondly, the lack of attention to rhetorical aspects of games dealing with social issues provides a space for composition pedagogy to take part in the conversation.

**Classroom Experiences with Serious Games**

In my introductory composition courses, I have used serious games on several occasions. Students have found the elements of procedural analysis of real-world issues a challenging and unique way to look at persuasion, and take to disassembling arguments, especially underlying warrants of systems of rules, with enthusiasm and often surprising insight.

Specifically, *The McDonald’s Video Game* (2006), a game that places players in the role of an evil business tycoon (in this case, in the fast food industry) has resulted in students questioning larger systems – not merely fast food, but also the general consumer model of the developed world – and procedural examination of the game’s ideological frame has led to spirited debates about whether the deck is stacked. That is, some students have taken the game as a call to action to reform the system itself, whereas some have argued that the game’s simulation omits key details such as consumer demand.

Regardless, my students have engaged with these subjects in terms of the efficacy of the game’s warrants, claims, and evidence, and used their personal experiences of playing serious games to articulate their own investment in the systems they represent. Furthermore, students saw them as an invitation to an ongoing conversation rather than as entertainment or distractions, and took those experiences – often powerful ones, as they required involvement on the students’ parts – outside the classroom.

In short, serious games have provided me with a means for my composition classes to look at symbols and symbolic systems as means to reorganize and recognize political/ideological/emotional persuasion, through critique of experience which is created by those systems rather than static texts.

**Case study: Molleindustria’s Oligarchy**

Having said the above, I now turn to a serious game that could be used for promoting critical thinking about social, political, and environmental issues in a composition course. This game is a free browser-based game, meaning that it is playable by a wide variety of users (anyone who has access to the Internet, essentially). Analyzing this game not only highlights
some explicit rhetorical moves available to games, but also leads to a productive discussion of player roles within and without the game space.

Molleindustria, an Italian game collective, released *Oiligarchy* in 2008. *Oiligarchy* is a single-player point-and-click resource management browser game that puts the player in the role of a US oil baron beginning in post-WWII Texas (see Figure 1). The game is similar in some ways to the “Tycoon” series of games popular on PCs, which place players at the heads of various types of businesses, though it also functions as a commentary on those games through exposing questions of business ethics.

![Oiligarchy game interface](image)

**Figure 5:** *Oiligarchy*. The red and gray bars on the right side of the screen represent oil supply and maximum extraction, respectively. The line of numbers are the player’s money, the price of oil, the country’s “oil addiction,” and the rate of GDP growth. Image used with permission.

In *Oiligarchy*, each turn advances the calendar by a year. Players begin with enough money to survey a plot of land and place a single oil well. As time advances, players can gain control of elected officials, drill in Alaska, provoke wars in the Middle East (see Figure 3) to gain access to oil reserves there, and bankroll paramilitary forces in South America, among other deplorable actions.

Narratively, *Oiligarchy* obviously has its tongue firmly in its cheek. The game generally follows history, with the player-controlled oil industry expanding its reach to Africa, the Middle East, South America, and Alaska gradually as oil reserves in Texas are exhausted. Played without investing too much thought in strategy will lead to a global oil shortage in the early 21st century and one of several “bad” endings. Thus, the narrative flow of the game is relatively
simple – almost non-existent – as most of the game is devoted to steadily increasing the
country’s “oil addiction” and amassing money through drilling rather than telling an ongoing
story.

In contrast to its narrative simplicity, *Oiligarchy*’s procedure and context are fairly
complex. Molleindustria comments heavily on the purpose and procedural logic of the game in
their post-mortem (a common document type in the gaming industry which outlines the success
and failures of games from a design and play perspective). In explanation of their decision to
publish a postmortem and reflect on their design decisions, Molleindustria have said that “game
design is never an ideologically neutral process: games, as every other cultural product, reflect
the designers' beliefs and value systems” (2008b). The design team also recognized the influence
that their design context can have on the creation of the procedural and narrative elements of the
game in a more general way, effectively making their own argument about the inextricable,
linked nature of systems.

They have highlighted the nature of the game as not quite a strict business simulation, as
political, environmental, and social issues rapidly come to the fore of the game (as in the case of
backing a military junta in Venezuela): “Oiligarchy can be considered an extended business
sim/tycoon game … This mixed gameplay is meant to highlight the intricate relations between
war, politics, and energy corporations” (2008b). Procedurally, then, Oiligarchy attempts to model
a variety of social systems in a relatively simple game.

![Game Interface](image.png)

Figure 6. After global oil production plummets, the only option to obtain more oil is to
“recycle” humans. Image used with permission.
Molleindustria also explained that the oil production algorithm in the game is based on the Hubbert peak theory: “For any given geographical area the rate of petroleum production tends to follow a bell-shaped curve. Early in the curve the production rate increases due to the discovery rate and the addition of infrastructure. Late in the curve the production declines due to resource depletion” (Molleindustria, 2008b). The designers support the peak theory and used it as the basis of their game based on that support, intending to persuade an audience of an impending oil crisis through simulating it. Molleindustria have described themselves as “an Italian team of artists, designers and programmers that aims at starting a serious discussion about social and political implications of videogames” (2006b), and thus this real-world emphasis makes sense for their message. Given their history as designers (their previous games including the above mentioned *The McDonalds Videogame*, *Operation Pedopriest* (2007), an attack on the Catholic Church’s response to allegations of sexual abuse, or *Faith Fighter* (2008c), a two-player brawler using religious figures like Jesus, Mohammed, and Ganesha), the politically-charged message of *Oiligarchy* is unsurprising.

Molleindustria have claimed that *Oiligarchy* forces the player to deal “with responsibilities in a system that does not really punish unethical choices. The unethical gameplay is designed to reflect the free market system, which is ultimately the object of the critique” (2008b). This procedural critique takes the form of rewarding the player with progression through unethical acts, modeling a corrupt system and ensaring the player in it by preying on player desires to “win” the game. Even the endings of the game call into question the idea of “winning,” with what might be considered an ideal ending actually requiring that the player *curtail* oil production at some point in order to allow for the development of alternate energy sources – other endings highlight the diminishing returns of oil production in various nightmarish ways, from apocalyptic scenarios of refining humans into oil to World War III.

Overall, Oiligarchy, as heavy-handed as its procedural rhetoric often is, especially in contrast to its cartoonish graphics, is a useful object for analysis because it obviously begins with a set of assumptions about the way the world works and, in making that system more visible, prompts questions about it. Especially given its refusal to resort to a win/lose binary, it asks players to consider whether certain actions in the real world are “winning” or “losing” actions, and to consider the long-term effects of energy policies. (For example, see Figure 2’s representation of a plant that extract’s oil from humans due to lack of natural sources but a
continued addiction.) In other words, it asks players to think critically about the state of the oil industry vis-à-vis free market capitalism and imperialism, and does so in a compelling (and entertaining) way.

Figure 7. Players cannot drill in Iraq until they have manipulated global politics (through use of the “secret room” beneath the White House, a reward for contributing enough money to the winning political party) to incite a war with Kuwait, a counter-offensive, and created a link between terrorist action and Iraq. Image used with permission.

Oligarchy stands as a critique of a current system rather than allowing a player free reign. Despite this, it still relies on assumptions of corporations operating purely on profit motives rather than being tempered with ethics and makes almost no space for individual action. Through co-opting the player into acting in a specified role as an evil oil tycoon, the game points out the problems inherent in a system that manipulates consumers and governments into accepting free market capitalist views of energy exploitation and use. Students may critique the procedure behind the simulation as unrealistic or as oversimplifying complex problems, even if they are persuaded by the game’s logic, but being able to see and interact with a representation of very real problems will encourage students to examine those systems from other perspectives.
**Lingering Questions**

This reading of Oligarchy does raise some questions regarding serious games (and possibly video games in general). We might wonder if, even when drawing attention to ideological systems, we are perpetuating an ideology. James Berlin (1988) claimed “Every pedagogy is imbricated in ideology, in a set of tacit assumptions about what is real, what is good, what is possible, and how power ought to be distributed” (p. 682). It naturally follows, then, that even ideological critique is an ideology. Although I would argue that serious games succeed by putting ideology at the center of the classroom, the ideological stance of systemic critique may turn some students away from positive social action that is rooted in ethical or social justification, if a system-critical approach is valued too much.

Additionally, when it comes to critiquing systems through games – and then critiquing the representation of those systems – the dialogue between the player and designer (as made manifest through playing the game) may be too strong to read against the text, especially if students are not already positioned to do so. Bogost’s (2007) call for a procedural literacy, the inspiration for the procedural questions included in my Chapter 2 heuristic, could guard against the inherent allure of the interactive nature of games; essentially, it is vital that students understand the nature of procedural persuasion.

Finally, although serious games are intended to cause players to act on issues, how successful might they be? Bogost has argued that some games can lull players into a sense of accomplishment without actually having a real effect because of their explicit real-world links; that is, defeating poverty in a virtual space may make players not care to do so in real life. Game designer Jane McGonigal addresses this by designing serious games in real spaces rather than virtual ones – alternate or augmented reality games – thus forcing players to enact real change while advancing in a game (e.g. Cruel 2B Kind (2006), World Without Oil (2007)).

With that said, however, I see serious games as the simplest objects to incorporate into a composition classroom (in comparison to the heuristic I outlined in Chapter 2 or interactive fiction, covered in the next chapter). They obviously tie in with composition’s goals of producing engaged learners, and the ways their procedural arguments function allow students to approach issues from a different – and productive – perspective. Instructors looking to use serious games in their classroom should keep in mind the salient characteristics of those games and use them to support their own pedagogical interests.
For instance, games like *Oiligarchy* can support an inquiry-based classroom as one example of a critique of free-market capitalism. Instructors might ask students to find other such games (or objects that aren’t games) and compare the underlying assumptions of each. *Oiligarchy*’s available post-mortem makes this sort of comparison much easier; on the other hand, students might develop their own post-mortems (though obviously from an outside perspective). Especially in terms of serious games, whose goal is outreach and community involvement, game authors are usually available for contact. Students could correspond with designers and investigate their perspectives in an attempt to better situate their own playing in relation to the designers’ intended arguments. Furthermore, students could develop their own project with a serious game as a focal point, creating an investigative or informative multi-media document that either supports or questions (or both) the assumptions and goals of a particular game in relation to their chosen issue.

Even in terms of short daily assignments, serious games offer some avenues for discussion (and, again, this sort of inclusion would be easy even in a class that normally does not cover video games). When I discuss Molleindustria’s *The McDonalds Video Game* in my classes, I pair it with other discussion of McDonald’s unethical business practices – in video, Web page, and essay form – and ask my class to think through the affordances that various media offer for the arguments being made. As a short writing assignment, I ask students to select some other social, ethical, or business issue and write a two or three page summary of the arguments they would make in two mediums. Students begin to see both the allure of games as a site of resistance and the pitfalls of making a serious game “fun.”

Of course, serious games should merely be one part of a composition curriculum, which should be supported by productive as well as analytic activity. Despite the questions I raise about them, I do see serious games as productive. Specifically, analysis of *Oiligarchy* in contrast to other texts dealing with energy decisions and, in particular, the oil industry’s place in society, fulfills the pedagogical ideals of Shor, Freire, and Berlin; *Oiligarchy* exposes ideology through making it the center of discourse rather than lurking in the background, and analyzing it helps to give students the tools they need to ask their own questions.
Chapter 4
Interactive Fiction, Text-Based Games, and Designing as Composing

Video games are unusual pieces of fiction in that while many have fairly linear stories, the meaningful input from players complicates the way this story is “written.” The sort of writing that gets done in designing games, and the “writing” that is done by the players of those games, present interesting opportunities for study and for inclusion in composition classes.

James Gee (2008) claimed that video games are “story element generators” that, through the cooperation of game designers and game players, produce simultaneous multi-layered stories. Specifically discussing games that have a clear and strong narrative element, Gee argued that because they include a “proactive production by players of story elements, a visual-motoric-auditory-decision-making symphony, and a unique real-virtual story,” games are “a new form of performance art” that can produce pleasure and education in unique and powerful ways (pp. 84-86). Others have echoed this understanding of games as systems allowing players to combine pre-existing bits of meaning to form a personal story (e.g. Jenkins, 2004; Chandler, 2009), though few have commented on the potential benefits such an understanding of video games may have in composition classes.

Some of the few scholars that do focus on games as writing (in the sense that we tend to value in composition) appeared in the 2008 special gaming issue of Computers and Composition. Even those, however, focused on players playing, rather than designing, games (e.g. Kevin Moberly), or instead saw game design as a sort of analogue to designing composition courses (e.g. Alice Robison). Notably, the work of Annette Vee, in having cast “proceduracy” – the literacy of programming – as a valuable and transferrable literacy for composing, has been an exception (Hunter, 2009), as has Robert Cummings’ (2006) call for a rhetoric of coding. Similarly, early work in the computers and writing field that worked with MUSH and MOO programming made some arguments for seeing narrative design and the programming related to that narrative design as writing (e.g., Mark Haas and Clinton Gardner (1999); Albert Rouzie (2000); Michael Conlon (1997); several others in the years between 1997 and 2000). Earlier experiments with Storyspace, hypercard and other hypertext fiction systems (e.g. Landow (1991); Douglas (1989)) focused more on navigation than design, though they undoubtedly situated authors of hypertexts (a distinctly new form at the time) in a unique position.
With Vee’s work in mind, as well as Robert Cummings claims that “The act of writing for the machine and writing for a human audience develop similar skills, and one experience can be harnessed to inform the other” (p. 442) and that “When we consider the numerous similarities between traditional writing environments and coding environments, it is surprising that we have not experienced a call for the rhetoric of coding long before now” (p. 440), I use the terms “coding,” “writing,” and “programming” in parallel ways throughout this chapter to make an argument of their similarity. As Cummings suggested, they align more than they differ, as should be shown through student responses to writing in a programming language later in the chapter.

As Cummings and, later, Vee pointed out, those in the computer sciences have long made a connection between coding and writing, seeing them as the same thing on many levels (Hunter, 2009). Vee shares my wonder at the lack of attention paid to programming and design as literal writing exercise rather than metaphorical or user-centered – compositionists have seen programming as separate and largely unrelated, or have seen it as a metaphor for writing rather than an act of writing in itself. For my interests in non-linear narrative (as in the majority of video games and in text-based games in particular) there is little composition scholarship exploring the relationship between programming a branching, non-linear narrative and student understanding of local/global writing and rhetorical concerns, which I hope to partially rectify below.

**Theoretical Approaches to Interactive Fiction**

Drawing from a number of theorists I discuss below, I constructed a series of assignments for an introductory composition course that I hoped would enable students to experience productive connections between designing a non-linear narrative and writing a program to enact that narrative on the one hand, and other types of writing on the other. I now hope to use that assignment to provide some perspective for compositionists interested in exploring the productive connections between the teaching of writing and the “narrative architecture” of playing and designing games.

Kenneth Burke’s (1950) ideas of identification are central to interactive fiction design because of the unique way the text positions a reader – identification is strengthened when a reader plays a game because they are completing the argument of the designer. Burke described identification by way of an example: “A is not identical with his colleague, B. But insofar as their
interests are joined, A is identified with B. Or he may identify himself with B even when their interests are not joined, if he assumes that they are, or is persuaded to believe so” (p. 1325). In other words, given a set of goals that aligns (or appears to align) between two people, identification occurs. In terms of game play, the construction of a goal by an author and the acceptance of that goal by the player (through participation in the game) engender exactly this sort of identification. Through participating collaboratively with the author in making meaning, by actually completing the author’s argument via play, players subordinate at least a part of themselves to the author’s argument.

Despite this, a critical stance is still possible, especially in text games, because of the training we have to analyze and reflect on text (as opposed to images, as discussed in the previous chapter). I saw this as an opportunity in my class and several students mentioned how their thinking was different playing text games, leading them to question the assumptions of the game more frequently but also being more willing to put aside reservations and entertain the argument of the designer because of the necessity of investing so much sustained mental energy in reading a game. As opposed to other disagreements in the class, students were able to accept (though not necessarily endorse) premises they disagreed with in text games.

Complicating Burke’s approach to persuasion, Barthes (1974, 1975) idea of the “writerly text” fits in analysis of interactive fiction because of the shifting stability of the game text as the player interacts with and develops it. Barthes, prior to the age of computing, asserted that the writerly text’s “model” is “a productive (no longer representative) one” and that it is “a perpetual present, upon which no consequent language (which would inevitably make it past) can be superimposed; it is ourselves writing” (1974, p. 5). For Barthes, the writerly text was inherently unstable, prone to multiple interpretations, and to some degree constructed at a fundamental level by its readers as actively engaged subjects rather than as passive receivers.

I see this idea as pedagogically valuable when discussing interactive fiction due to the literal instability of such texts, being always different – “story element generators” rather than self-contained stories. Moreover, thinking of students as generators of texts even while reading them further complicates the relationship between author/designer and reader/player, perhaps correcting for the power afforded to the designer in the context of Burke’s theory of identification. The plurality that Barthes saw as hallmarks of writerly texts – the unclosed meaning – empowers players in interactive fiction.
In terms of a specific critical vocabulary, Nick Montfort (2003), in his book *Twisty Little Passages*, offered a comprehensive approach to reading interactive fiction critically. He focused on the way that technical limitations and affordances can influence the construction of narrative – how the medium can limit or incite different discourses. As discussed in Chapter 1, Montfort broke interactive fiction into two discrete components: the world and the parser. Interactive fiction worlds are, roughly speaking, the setting. However, this differs from linear narrative settings in that it “is represented computationally in some sort of data structure or collection of objects … in a way that allows the interactor to act and see the results of simulated action within those worlds” (p. viii). In other words, interactive fiction creates a world that has an initial state that changes only through meaningful player input and in a potentially non-linear way. The second component, the parser, “accepts natural language input from the interactor and analyzes it” (p. ix). Parsers are the means by which players interact with the world, and different parsers recognize different input (usually determined by the designer, but also by the underlying program used to construct and play the work).

Each of these components is open to its own critical approach, roughly mapping to narrative and procedural analysis, and each has a hand in creating the meaningful experience of playing a piece of interactive fiction. By outlining interactive fiction as composed of two essential parts, Montfort opened the possibility for critique of design on multiple levels, and I used this idea extensively in class when talking about design decisions.

In the realm of literacy studies, James Gee outlined the above as some of the principles of good learning. Beginning with principles of “empowered learners,” Gee argued that “Co-design,” learner agency in the learning process; “Customiz[ing],” adaptable learning environments; “Identity,” becoming a person who learns; and “Manipulation and Distributed Knowledge,” a productive disconnect between perception and action, are important in enabling learning. Interactive fiction, though its necessity of player action, nonlinear structure, and control of a player character that is not the player who needs to understand and progress through a world, conforms to these principles. (p. 30-34)

Gee outlined other principles which also map onto interactive fiction. Though individual works may or may not correspond to Gee’s request for “Well-ordered Problems,” challenges of increasing complexity, many are “Pleasantly Frustrating” in that negotiating designer expectations of player actions is a necessity, and the parser relays meaningful feedback about
failed attempts (pp. 35-36). Gee’s idea of the “Fish Tank,” a simplified system that stands in for a more complex one, and the safety afforded in “Sandboxes,” situations where challenges have mitigated risks, are handled by interactive fiction in terms of both the navigation of game-related challenges and the parsing of written information, both of which are valuable to composition courses (pp. 38-40). “System Thinking,” wherein players see units of meaning as interrelated and contributing to a whole, is necessary to progress through the text-based environment of interactive fiction worlds (pp. 41-42). Finally, Gee’s recognition of the power of experience rather than generality as the basis for learning is important to interactive fiction; player experiences and knowledge of the virtual world work together to create scripts that govern player responses, and these responses and reactions from the text create new experiences that themselves make an argument (pp. 42-43).

Of course, Barthes, Montfort and Gee focused on reading (in Gee’s case, “playing”) rather than design. Working on the belief that these elements of textual analysis and effective learning could also be applied to the construction of games rather than simply reading them – thus emphasizing the importance of production and articulation of arguments rather than reception and reaction to them – I asked my students to create their own works of interactive fiction. As I mentioned in Chapter 1, I see text-based games as both a form of “interactive fiction” and video game. As noted in that chapter, I use both terms here.

**Methodology**

While teaching the first-year course English 112 Composition and Literature during the Spring 2010 semester at Miami University, I conducted a study of my students as they completed the major (and minor) assignments in an end-of-the-semester unit on non-linear fiction, and the results of that study form the general framework for this chapter.5

The purpose of my teacher-research is to qualitatively assess student rhetorical choices in designing a text-based game – specifically, how students understood the decisions they made in actually writing the text of a text-based game, the decisions they made in designing the

5 I submitted a protocol for Institutional Review Board approval, as is required for research involving human subjects, and that protocol was approved on March 2, 2010 as approval number 09-412. Consent forms to quote student work were distributed to my 23 students by my faculty advisor, and 22 students returned signed consent forms that I did not see until the semester was over.
environment, goals, and input for their games, and how they felt those decisions influenced them as writers. I was interested in qualitative trends in student projects and reflections such as specific rhetorical strategies in composing, views of the finished product, and opinions on classroom structure surrounding the assignment – things that would allow me to comment more extensively on the pedagogical approaches to and curricular value of interactive fiction.

Students frequently made reference to work from the major assignment unit during their minor classroom work and their reflective work during the remainder of the semester. Students reflected on their own participation, the work of their peers, and in later reflection revisited their views. Students also frequently drew (often quite sophisticated) connections in unrelated work that took place during and after the unit.

However, the data is composed mostly of student work and reflection; specifically, it’s composed of work and reflection along a particular trajectory that inherently values interactive fiction as a learning tool (since it’s being assigned in a class by someone with a scholarly stake in the intersection of game studies and composition). In other words, while students weren’t coerced into agreeing with my pedagogical approaches, they were operating in a classroom that obviously valued the approaches I used. The reality is that they may have been trying to please me as their instructor by adopting my stances. That being said, the consent process makes it less likely that students merely acted in their reflections. Some students even spoke against what they saw as material unrelated to an English class. However, I believe that (even in the case of those students who resisted the assignments) the games themselves demonstrate, in meaningful ways, the value of incorporating interactive fiction into a class.

Conceptually, this study was intended to examine a classroom application of the benefits and pitfalls of teaching interactive fiction using an (ostensibly) accessible programming language, with the goal being to assess the possibility of long-term use of this assignment in my teaching and as a recommendation to other instructors (as is or in some modified form). I present the data here with that in mind, organized by general themes that I saw emerge in student work and reflection. Obviously, it would be impossible to summarize over a month of class work for 22 students in such a small space, so I have chosen to highlight particularly surprising, interesting, or noteworthy responses, ones that suggest something larger at work in considering pedagogical avenues for this kind of work.
The students are given pseudonyms. As some students included themselves or their classmates (or versions thereof) in their games, and some included other identifying details (such as home towns, etc.), I have obscured those as well. When I do quote from student games, I attempt to approximate player input through use of the > sign and italics denoting input. For example, a scene from a game might look like this:

>examine the table
The unstained wood of the table has started to bow due to some long forgotten spill.

(Kevin)

Quotes from games are attributed to all creators. (The attribution, in this case, is a single name because this selection is from a game I wrote.)

**The Course and Assignment**

The course itself was a hybrid composition/literature course, the second in a yearlong sequence of introductory composition. I think the use of games fit into that curriculum partially because of its hybrid status – expecting a class with “literature” may have primed students to be more accepting of games, as they are fictional objects, in other words. It may have helped, too, that the curriculum of English 112 is in a state of transition; the previous curriculum was much more concerned with a unifying theme to cohere the assignments, whereas the current one is based on an inquiry model which encourages students to craft their own questions which guide their learning. My hybrid course was also a hybrid between these curricula, since I came into the program as the curriculum change was taking place. Thus, my English 112 course held to the inquiry model in some respects, but was still organized around a central literary theme: apocalyptic and post-apocalyptic fiction.

The course was organized in four major inquiry units, with the third the primary focus of the study explored in this chapter. The unit is chiefly intended to create a link between creative writing and rhetorical thinking in students, by acknowledging that all creative writing attempts to persuade an audience through a portrayal of a reality or series of events. Drawing on the learning goals of previous units, the creative production inquiry also urges students to consider their social/cultural/ideological positioning as creative writers, to critically examine their own views and processes of writing, and to explicitly reflect on the writing process and writing’s place in their lives (Miami University, n.d.).
I had used video games as objects of analysis in the class before this unit, though nothing nearly as extensive as the in-depth writing of a short work of interactive fiction in a programming language designed for that purpose. The sorts of assignments I had used before included simple interface analyses of a mouse-driven game, reimagining a (what I consider poorly designed) game based on the book *The Road* (2006), and playing through and reflecting on the experience of a few pieces of interactive fiction, as well as some “serious” games (the subject of the previous chapter). Moreover, though the games had produced quite a bit of writing in the class, they had not been – in the traditional sense – the things the students were writing, and so the change from examining to producing games was a significant shift for the students and for me.

I designed the major assignment in Inquiry 3 such that students, in pairs, would produce a text-based game that explored an issue of interest to them (but that still touched on the larger theme of the class) and then meaningfully reflect on the role of authorship and its complications in producing this game. The multi-part assignment was constructed to run throughout the course of the inquiry, and so be a major part of the class in general (since Inquiry 3 took up roughly a third of the class). The assignment prompt outlines the learning outcomes, instructions, and evaluation criteria:

**Group Assignment**

**Creative Production – Inquiry 3**

**Composing With Interactive Fiction**

Purpose: The purposes of this assignment are 1) to investigate the rhetorical choices made in composing for an interactive environment, 2) to implement those choices through creating a work of interactive fiction, 3) to respond to your peers’ projects in ways that deepen your understanding of their choices and your own, and 4) to reflect on your experiences during the project. This project should lead you to asking questions about authorship, readership, and the rhetorical dimensions of the creative process. All creative writing persuades an audience to experience a world in a particular way; writing interactive fiction may make much of that persuasion explicit in ways that traditional text might not.
My rationale for structuring the project with these four learning goals was manifold. I wanted students to apply the analytical skills they had developed throughout English 111 and the earlier parts of English 112 to a new medium before producing it, especially given the emphasis placed on reflecting about the writing process (and particularly the invention stage) in these courses. Secondly, I hoped that vigorous planning of an unfamiliar type of writing would acclimatize students to it and thus reduce their fears. Finally, I wanted to tie the project to larger writing goals beyond questions about the text, using it to explore fundamental assumptions about where power in creating meaning lies.

Instructions:

1. In pairs, decide on a particular issue, of interest to you and relevant to the theme of our class. This issue should be something that you can research in order to better acquaint yourself with.

2. Once you’ve made a decision about the subject of your project, begin thinking about how you might want to express your point to an audience. Consider the discussions we’ve had – about fiction as rhetorical object, underlying thematic messages of the works we’ve read, authorial intent, interface analysis, etc.

3. Before you start actually writing your game in code, make an outline and a script for your game. You might choose to draw it out as a storyboard, or create a map, or otherwise visually represent your world, but you should definitely script out things like room descriptions, character motivations, and potential plot lines and choices. This should take up the bulk of your time – the programming itself should essentially just be an implementation of your choices. You will draft this into a short (two page) pitch/proposal, outlining the design elements you anticipate incorporating into your game.

In retrospect, the initial design stages of the assignment should have been emphasized a great deal more. While students were able to create and reflect on games effectively, the invention stage required more guidance than I had thought. Because of the nature of non-linear narratives, students were often flummoxed by attempting to map one out via a storyboard or in-depth outline. However, by the end of the project, students made sophisticated claims regarding their creation, especially in terms of their comparison to traditional narrative’s affordances and drawbacks. Because of their lack of familiarity with the language, students seem to have rushed to using it in order to figure it out, rather than hanging back and making design decisions first.
Even without the emphasis it may have required, the invention stage of this assignment was perhaps the most productive in terms of discussing how readers are constituted as subjects by a text; while creating their games, students thought frequently about the identity of the player and character and how to engage players in their narrative (that is, how to create identification in the player with the author’s goals).

4. After the preliminary idea work has been done, you’ll implement them – in other words, you’ll write your game in Inform. You should have a working “beta” of your game for review by your peers and by me (a first draft).

Admittedly, even with the time spent in class discussing Inform 7, many students struggled with implementation of their ideas into code. On the other hand, this was a type of writing that was new to many of them, and the struggles they experienced turned out to be largely productive. Students took initiative in refining the code of their games and, though they were often buggy, they went through several revisions and came closer to the students’ goals with each. Moreover, students flocked to my office hours, which was not the case with more traditional assignments. In the same ways that Gee has viewed games as motivating, students were motivated to design games, overcoming gradual challenges and remaining invested in the ongoing writing process. Part of the purpose of the assignment’s requiring a code implementation was to produce exactly this response – challenging students enough to interest them.

5. Your peers and I will review your game and submit feedback (and, of course, you will submit feedback on another group’s work).

6. Once you’ve received feedback, you’ll post a revised version of your game to the class Blackboard site.

I reasoned that peer response was particularly important in this project due to students’ lack of models for the sorts of games they would be creating. Seeing the sorts of games that other groups created gave students a sense of what criteria for evaluation might be used for these games. I made this a collaborative process in discussing what constituted a successful versus unsuccessful game, and with students I developed a rough rubric centered on player immersion, procedural
argument, and alphabetic writing. The revision process, with attention to specific reader/player feedback, would give players a point of reference in much the same way as traditional peer response, though the black-box nature of the language operating beneath the game added an additional layer of complexity to that feedback.

7. In addition, you will write a 4-6 double-spaced page reflective essay, detailing your experience in composing your piece of interactive fiction; you should address your role in the creative process, your role in implementation, and your group's reasons and rhetorical justification for the decisions you made during the composing process. In other words, what did you do, why did you do what you did, and how does what you did make an argument?

The reflective essay was, ultimately, the focus of this assignment. I saw it as a way to gauge the overall impact of the assignment on students’ perceptions of their writing as well as a way for students to discuss working with writing both the world and in the programming language. Ideally their attention would mostly be paid to the ways they used the medium to construct arguments that worked on readers differently than traditional text. I also saw this as a way for students to discuss their writing process and how it differed from their normal writing process – for good or ill. Because I wanted to provide a space for students to discuss their personal experiences, I designed the reflective essay as an individual component to this assignment.

Grading and due dates:

April 2: Storyboard/pitch/proposal design document submitted to blackboard
In this invention stage, I’m mostly interested in feasibility and a working rhetorical explanation of what you hope you will inspire your reader/player to feel. You should cite any outside

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6 I was initially somewhat apprehensive about the evaluation of students’ games. Although I felt comfortable assessing someone’s analysis of or speculation on creating a game, it was another thing entirely to determine whether someone’s game was “good.” What criteria are fair for a freshman interactive fiction project? Does it have to be fun? How much should be based on the quality of the writing (plot, character, word choice, etc.) and how much on the larger architecture of the game? I shared these questions with students to ensure transparency; their responses to my concerns resulted in a negotiated rubric. More scholarly attention should likely be paid to evaluation of students’ writing of code in composition, though this is obviously not the focus of this chapter.
sources you anticipate will be helpful in constructing your narrative or characters. Your pitch will count as a short writing grade.

April 9: First (“beta”) draft submitted to blackboard

The “beta” will count as 25% of your overall project grade. This initial draft exists mostly so that your peers and I can provide feedback on a working prototype, to help encourage you to consider the project rhetorically as well as creatively and to receive input from a real audience. Successful drafts will engage with the theme of the course, will demonstrate a thoughtful approach to design and creative work, and will have a clear trajectory (that is, we’ll be able to tell what a finished product might look like). At this point, having bugs is perfectly fine; in fact, it’s expected.

April 15: Peer review submitted to blackboard

As with other peer review, I expect attention to the content as well as the form of the project, but in this case I also expect something similar to the informal interface analysis short writings we have done over the course of the semester. How did the group use the environment of interactive fiction to their advantage? How did they not put it to the best use? Remember, peer response counts toward your participation grade.

April 19 and 21: Presentation of games

In a brief (seven-minute) presentation, you’ll informally discuss your ideas and the eventual outcome of your game as a project. You may go a more formal route through PowerPoint, or simply demo and comment on your game as it’s played. This presentation counts toward class participation. After the presentation, your classmates and I will ask questions.

I had envisioned the presentations as a way for students to show off their work, as there is usually not such an opportunity in first year composition courses. I imagined it being a very low-stakes, informal presentation. However, the class took presentations far more seriously than I have seen in previous classes, and approached them in a variety of ways. Some groups played their game as a sort of tech demo, while some created elaborate flowcharts. One group reproduced their game in the form of a hyperlinked PowerPoint presentation and had the class collaboratively play through it. As the game in question was “unwinnable” (there were no positive endings), the resulting discussion was spirited: some students felt deceived, whereas others began to question the goal of playing a game in the first place. The presentation group argued that it was the experience, rather than the end result, of the game that mattered, and that that was their underlying argument.
April 26: Revised draft of game and reflective essay submitted to blackboard

The revised version of your game will be evaluated on the same criteria as your rough draft, in addition to the ways you responded to revision suggestions, and will count for 25% of your project grade.

The reflective essay will count for 50% of your project grade. I see the reflective essay as an opportunity for you to discuss your rhetorical approach to your project, your role in it, and the overall outcome. I don’t simply want a “I had a good time” or “this was hard” response, however; I encourage you to describe your composing process and the ways that the medium influenced it.

Specifically, you should deal with:

- How did your ideas transfer into this interactive space? How did your research influence the creative process, the game, and the reaction of players?
- How did your understanding of your role as a writer change during the creative process and the process of actually writing the game?
- How does your game represent reality? How does that representation differ from reality?
- Why did you choose to have it differ in those ways?
- What choices did you make in creating a plot, character, and settings? How did those choices influence the role of a player?
- What larger conclusions, if any, can you draw about other media based on this project?

What conclusions can you draw about composing in general?

Successful reflections will treat these questions fully and engage thoughtfully with their work, citing specific instances. Less successful reflections will be vague, general, or treat only surface features of their projects and experiences.

**Learning to Use Inform 7: Programming Languages as Writing**

Admittedly, the idea of having students learn a programming language gave me some pause. However, Inform 7, the language I selected, was notoriously simple to use. In addition to Vee and Cummings, mentioned above, other compositionists have previously launched arguments that writing code has some place in the composition classroom (see, for example, Mauriello, Pagnuccia, & Winner-White (1999); Batschelet (2004); Rea & White (1999), though
each of these articles focuses on coding with HTML and not on creating a branching narrative structure).

In order to verify the simplicity of Inform 7, I wrote my own piece of interactive fiction. Though there were definitely frustrating moments, I found the language overall to be well-documented and easy to understand, and there was a variety of support for educational use; indeed, the Inform 7 website has an entire section dedicated to classroom employment (http://inform7.com/teach/). There are also additional tutorials and full game examples on the site. The program, in addition to extensive documentation, also includes a searchable “recipe book” of examples. The language can be employed in many complex and creative ways, but it is also fairly easy construct a straightforward, traditional text-based game comprised of a few “rooms.” Overall, then, Inform 7 provided a versatile and accessible platform for first-time designers.

What initially made Inform 7 stand out, however, was the way the language was actually used. Instead of the sort of programming involving brackets, curly braces, line numbering, or excessive indentation, Inform 7 attempts to approximate natural language. For instance, while a line of code in Perl might look like this:

$cmd = "over $bg $inbase.$num $outbase.$num 0 0";

a line of code in Inform 7 looks like this:

The farmhouse is a room. The description of the farmhouse is “This old farmhouse has seen better days, but it’s still a lot better than being out in the storm.”

Obviously, not everything about Inform 7 is that simple, and the language only approximates natural language – it is not, after all, a human being:

Understand "kick [something]" as kicking. Kicking is an action applying to one thing.

Carry out kicking:

say "Kicking [the noun] will accomplish little."

Understand "kick" as kick. Kick is an action applying to nothing.

Carry out kick:

say "Looking like a fool, you kick at nothing."
(The above code would create a new action, kicking, and allow the parser to respond to the player input of trying to “kick [an optionally applied something]”.)

**Results**

With these reservations in mind, I felt confident of my students’ ability to use Inform 7 to write their own games. Throughout the weeks of the unit, and in their finished games and reflections, they demonstrated several ways that writing and thinking about interactive fiction improved their abilities as both readers and writers. Below, I have outlined some trends I saw in the student projects and in their reflections on those projects. I have focused on audience awareness, nonlinear narrative construction, awareness of and implementation of a procedural argument, and students’ view on programming as writing in particular because those elements seem most important for situating interactive fiction (and video games more generally) in a composition classroom. Students seemed to take much more away from the assignment than just these few trends, but due to considerations of space, and due to the strong connection between these trends and larger goals in composition instruction, I have limited my focus.

**Audience Awareness in Interactive Environments**

Students developed a fairly sophisticated view of audience in interactive fiction, since it’s literally up to a designer to clue a player in to what’s real, what’s possible and what “comes next.”

Several students mentioned that this was applicable in general, since in some ways all writing constructs a world for the reader. As Sharon said,

This is probably something I should do more in my writing, but when writing a game, it [audience] is really something that you have to constantly think about. It isn’t just a one way dialog. There had to be different paths and objects for the player to interact with and it was a really different experience writing something like that. The main focus was not on how I would say something; it was on how someone would react to it and how it would change their experience in the game.

Sharon focused on the challenges of the medium she was writing in, but also directly connected those challenges to her other writing. When she elaborated on her usual approach to audience, she admitted that it was “focused more on how I want it to sound and less on how I think the
audience will want it to sound” and, through her experience with writing in an interactive environment where she was made more aware of audience, she recognized her lack of attention to audience in general. Similarly, Sharon’s partner, Camilla, explained, “I usually focus on giving the reader a reason or urge to want to read my paper” but tied this to the role of audience in persuasion, stating “It’s all about what you want the reader/player to take away from the text, and this becomes more apparent when writing a game.”

Sharon and Camilla’s game itself is, in essence, a choice between traveling with one of three groups of people in a post-apocalyptic wasteland. One of the groups includes a doctor, an employee of Gander Mountain, and a chef. Another is comprised of an ex-marine, a mechanic, and a “trophy wife.” The final group is a farmer, a winner of the TV show Survivor, and a nurse. These groups pull from standard horror movie archetypes, and indeed the game is written almost in a horror style:

>go north
The Gun Room
You help the Ex-Marine to his feet and support most of his weight as you help him down the hall. At one point he feels so weak that you have to call the Mechanic and the Trophy wife over to help you keep him up. You all make it to the gun room where the Ex-Marine thanks you for your compassion. You know you should leave to give him a moment to himself, but you just can't tear yourself away. As he reaches for the nearest hand gun he looks up at you and through the pain set so deep in his eyes you see a glimmer of hope and you know that he had made his decision. You grasp his hand and pat his shoulder, failing to hold back your tears. Then you let go and make your way to the door with the Mechanic and the Trophy Wife just behind you. As you close the door, you hear it.

>wait
The Mansion
You feel the ground rumble slightly. Then, you feel it again, only stronger. You look to the Mechanic and when you see the look on her face, you know she felt it too. The three of you scramble back into the kitchen area as another large tremor hits. You crowd under the table thinking that would be the safest place. Unfortunately, the structure was not built to sustain tremors of this size because they are not normal for the area. The ceiling of the bunker caves in burying what is left of your group in rubble. You do not survive.

*** You have died ***
(Sharon and Camilla)

Unlike most horror films, regardless of which group the player chooses, the game ends in one or another kind of death, as in the above passage. Justifying their decisions, Sharon had this to say: “it seemed like we should make other groups that included the people you would have needed on
that path. We thought this would cause the player to think more about what kinds of people would be useful to choose to keep in their character’s life as they played the game through again.” Keeping in mind player reaction to their game and their underlying argument, that “the path is what is important, not the end result,” Sharon and Camilla crafted their game around specific player actions – in this case, replaying the game again and again trying to get a winning ending, thus keeping their game audience-centered.

Even those students that didn’t specifically mention audience in their reflections discussed the problems that arose from creating a character and then also thinking of a player, who was not the character, and how often (or how infrequently) the thoughts of “character” and “player” overlapped, and how that should be addressed. Articulating his player/character divide decisions, Lance said, “It was decided that we wanted our protagonist to have started some huge war destroying humanity… We wanted the player to be unaware of the wrongs they have committed and have to make some ultimate choice in the end.” He went on to explain that “In your characters former life you made some terrible decisions and we thought it was interesting to see [whether] players will change their past actions,” arguing a definite split between a player and character but recognizing the role of players in decision-making. Lance and his co-writer, John, slowly reveal the state of the world, refusing to make judgments about the actions that led to its current state At the end of the game, revealing the player character’s role in the destruction of humanity allowed for Lance and his partner to momentarily and thoughtfully close the gap between player and character, by allowing the player to determine the character’s attitude about his former self:

You know hardly anything as to what has happened but you do know that absolutely everyone hates you and that there is hardly a point in living anymore. Unless there was something you could do to change what has happened. At this point it seems that you have three options.

a) choose to be good  
b) choose to be evil  
c) choose to end it all

> b

Finally able to pull yourself together you realize how little you know. Who knows maybe you were in the right in making whatever decision you did. After all your house is still standing and in good shape. If you were at this position earlier in your life then obviously you had to have done some good. You decide that whatever decision you made should be stood by and so you decide to take advantage of your home and live out your life with your decision.

*** The end ***

(Lance and John)
Elaborating on the relationship of their game to more familiar writing, Lance added, “Of course even in normal writing all the reader knows from your writing is what they have read, but when you are trying to make a point by hiding information and trying to make them think certain ideas at certain times it becomes a little different.” The connection to thinking about the writing process, and audience, by way of recognizing a dual purpose to writing (i.e. character information versus player information), was repeated consistently in students’ projects.

**Nonlinear Construction of a Narrative**

The skills students developed in writing interactive fiction are useful in the media culture students inhabit, as they are often called on to compose non-linear texts (or to read them), like Web pages, etc. However, we also value sustained thought in the academy, and interactive fiction does this as well, requiring students to remember and apply the information in games they’re playing and/or writing. Lance points out that “When I was writing it I felt like every word and sentence I wrote carried so much more weight,” especially in his group’s game, since even small pieces of information could give away the amnesiac mystery element. Remembering what could or couldn’t be revealed to the player was the primary challenge in writing his game.

Similarly, Kurt recognized the importance of keeping non-linearity in mind when he argued that interactive fiction is “much more broken up then regular stories. … you must ask and constantly seek out information and remember it. If you don’t you lose that bit of information. So the story is broken up and left to the player to complete it as opposed to the author.” Kurt centered agency in the hands of the player, and his point seems to be that interactive fiction’s units have to be connected by the reader through actively processing information, which can be taxing for authors to keep in mind.

According to Miami’s goals for first year composition, “A key purpose … is to teach students to deliver writing in a variety of contexts, including digitally networked environments.” Interactive fiction certainly provided students with a new – and unfamiliar – context for delivery, but more than that, it gave them direct experience in creating a type of document that they frequently navigate. Katherine Hayles (2007) argued that there is a shifting cultural emphasis on “hyper attention,” the ability to cultivate and manage multiple information streams. She specifically connected hyper attention to interactivity (and, at some length, video games), advocating that instructors make use of new methods of imparting information on students. But
underneath Hayles’ argument is the admission that navigating in the world requires the ability to manage hyper attention, bombarded as we are with an ever-increasing amount of information and sensory input. Web sites and, increasingly, other writing, are designed to be accessed quickly and easily. Interactive fiction gave my students an opportunity to practice both deep and hyper attention, through engaging them in a prolonged activity (programming) alongside a hyper-attentive one (game-play). Even without considering Hayles’ argument, students obviously had to consider the interrelated nature of the parts of their writing (an activity I would argue engages deep attention), and made them aware of the form through that interrelation.

Students’ attempts at writing a non-linear narrative also made some appreciate the simple linearity they had come to expect in composition. Amber suggested that “we were able to draw some conclusions about other media based on this project. Other types of media are definitely easier [to write]” and that she “would prefer to stick to the traditional forms of writing.” However, she admitted that “this was a new opportunity for us that made us think critically about writing in a different way.”

Students were, in general, highly conscious of the ways interactive fiction differed from other writing, similar to how audio or video essays encourage/constrain certain discourses. They also applied this understanding to reading, suggesting that some arguments were easier to receive in certain media. Barbara recognized this when she wrote “When we were going through this process of implementing our argument, we realized that the player’s connection to the character could not override the message.” Because the character she and her partner had created was not the most likable and was essentially fated to die, she had to reconfigure her presentation of her message in order to accommodate player response. She went on to say “We also did not want the reader to become attached to the main character,” which is considerably harder when the reader is being addressed (as the character) in the second person.

Other students talked about how hard it was to write pages of text which someone might never see if they played the game a certain way, and how there was a tension between creating branching plot and limiting player choice to ensure a cohesive narrative structure. Anna expressed this tension; initially her game was to be a sprawling, labyrinthine collection of choices. When she understood the amount of work that went into fleshing out a game of that size, she balked: “When we sat down to actually use inform, and to write the game, we had to change the dynamic of our game a bit to make is simpler.” Similarly, Diana limited the scope of
her game and changed her writing process to suit it: “With interactive fiction, the set up rules for your writing have to be said in a specific manner, which made me feel I had to limit some of my creativity when writing in order to accomplish things … In the end, it didn’t matter what order my audience chooses to read my writing, for many different paths can be taken in many different orders.” She pointed out how she initially approached this assignment as she would a linear narrative, but finally recognized the value in writing in connecting pieces. In this sense, I believe interactive fiction made students more conscious of writing as a recursive activity through the continual re-writing (or re-playing) of what could be considered a static story. The recombination of a few pre-existing elements worked out very much like revision.

**Demonstrating Rhetorical Purpose in Games**

Finally, because students were required to have their games make some sort of argument about a larger issue, they showed that interactive fiction could be effectively used for that purpose. Many of those arguments were fairly heavy-handed, though that they exist at all is noteworthy. Quite a few of them were even well-reasoned and supported by evidence (within the game world and outside it). There was a trend to make blanket moral or cultural arguments, however, and I think it would be interesting to examine what might be behind that trend – I believe that the theme constrained students from making the arguments they really wanted to make. In retrospect, it may have been a mistake to center the course around a literary theme rather than simply using the inquiry model.

On the other hand, writing with a clearly outlined constraint (to make an argument that influences players to some sort of new thinking or action) allowed students to write persuasively to a real audience of their peers, applying procedural rhetoric in a way that demonstrated its potential. Despite the heavy-handed nature of many games’ arguments, students were practicing a sort of interactive fiction version of a game for change, as discussed in the previous chapter. Students were also clearly able to recognize the arguments they were putting forth, as they routinely articulated complex philosophical stances (e.g. there is no winning in life, only choosing an optimal route based on your values, as in Sharon’s game above).
Challenges of Code in the Classroom

The natural language basis definitely lowered the barrier of entry for writing in Inform 7; on the other hand, it may have made the language seem easier to learn than it actually was. Regardless, students generally took to the language at first, which spurred their interest in the project, although many ended up finding some frustrations toward the conclusion of the project. As one student, Clayton, put it,

We not only had problems with the language, but the way we would have to write it. With this program you have to be very specific, and if you were not then you received an error. So as a writer we had to look at examples that may help us to understand in what way we would need to write the information. As we continued with the project we realized we had to be very careful in the way we presented the information.

Here Clayton complains about a problem very common in programming – error messages that are unclear – and seems to contrast this with the way the language appears inviting and natural at first glance. On the other hand, this unhelpful confusion also often occurs in traditional writing; the difference is the machine’s inability to clarify its confusion as compared to a human. Regardless, this sentiment was repeated quite a few times.

Interestingly, however, Clayton actually did go on to compare the frustration he and his partner felt in writing with Inform 7 to a productive frustration they might experience in their more traditional writing:

This is where we discovered that we had become comfortable in our normal everyday writing. This allowed us a chance to see that our every day writing still needed to be viewed in the same manner. By doing this we could improve our writing by looking closer at what we were saying; along with, how we were saying it.

Clayton connected programming errors to “comfort” in his daily writing, the implication being that his complacency has undermined the power of his normal writing in some way, in the same way a lack of care in programming has resulted in an error message. He admired the assignment for its challenge, he said, and the ability the code allowed them to “view information differently” than traditional writing.

While I believe many students benefitted from the introduction of a way to process information in a way that draws attention to the structure and style of language through a different language (as Clayton says, above), especially one masquerading as English, several
other students had problems with Inform 7 that weren’t treated so positively in their reflections on the writing process.

For instance, Anna complained, “I do think the assignment was a little bit on [un]fair in the fact that writing a text-based video game is extremely challenging, not to mention even more challenging for three college girls who know absolutely nothing about the topic/theme of Apocalypse and Post-Apocalypse and video games.” While I might take issue with Anna’s umbrage at being challenged in a composition course, I do agree with her sentiment that some students were left out in the cold because of their lack of familiarity with video games (and the theme of the class, as well). On the other hand, only one student had heard of or played a text-based game before the class.

What Anna actually seems to mean when she references writing the game as “challenging” is the putting together of bits of the Inform 7 language itself, rather than the traditional construction of text. Along the same lines, Anna’s partner Mallory wrote, “Nearly every time I typed something, it would process as an error and I would have to go through great lengths to attempt to fix this error. I feel like asking English students to craft a video game is a bit unrealistic in this sense.” Ultimately, the majority of students described a complex relationship to the Inform 7 language. Some reflected on the process with sentiments praising the assignment’s incorporation of coding, as “really challeng[ing] my comfort zone,” saying it was “an accomplishing feeling to finish something new and have it work,” (Duke) while students like Anna and Mallory were less thankful for the additional writing challenges.

**Considerations for Other Instructors**

For instructors considering using interactive fiction in their classrooms, I would first suggest, in addition to approaching it with specific pedagogical goals in mind, that they familiarize themselves with one system for producing it and thoroughly read the documentation for the language. I used the assignment in my class in conjunction with other assignments discussing video games, using a form of the heuristic I outlined in Chapter 2. Before I asked my students to work with Inform 7, I had already completed a game as part of a graduate seminar, and the experience I had with the system was invaluable. Despite my experience, I still found myself struggling to explain programming to students on several occasions. As a discipline, we need to develop a way to integrate programming into our pedagogy in order to better explore the
argument that programming is a form of composing, and one way I believe we can do that is by learning to use one or more programming languages ourselves. In addition, instructors should scaffold assignments in such a way as to produce some writing in code before having students attempt to produce a full-length game. As with other forms of writing, students (and, in this case, instructors) are often unaware of the conventions of a form before attempting to explore that form. In the case of programming, even the smallest structural errors in writing can render a program unreadable. Along similar lines, students inevitably want to do things with their games that are either difficult or impossible; in either case, knowing the limitations of the system is a must. Instructors might, in addition to modeling some games or pieces of games (and pointing students to example code, much of which is freely available on the Inform 7 web site) have students rigorously comment their own programs. I have found this to be a useful classroom practice in general – having students use Microsoft Word’s comment feature to highlight the rhetorical moves and stylistic considerations of their own work, for instance, has often allowed me to engage them in conversation about it on a deeper level that I might have been able to otherwise. In the case of writing code, however, this practice also allows students to raise questions about the way the language works, which prompts reflection about why it is that commands are structured in one way rather than another. Eventually, students begin to get a sense of the ways programming languages differ from natural languages in terms of purpose and construction. They carry those thoughts into the objects created with those limitations, such as word processing software, Internet browsers, Web pages, and video games.

Secondly, I strongly suggest instructors create one or more games in order to have a model for students to follow for simple construction, but also as a way to gauge what might be too ambitious an undertaking for the scope of the project. I also see this is a way to consider pedagogical goals; very few writing classrooms should expect students to create a game that takes more than a half hour or so to play. The game I created took roughly fifteen minutes to play but was the result of hours of work and revision. The amount of work, and contemplating my students undertaking the same, forced me to focus on the assignment’s learning goals, especially in terms of authorship, argument, and audience awareness. Creating a game also allows instructors a better frame of reference for evaluating student-produced games and to discuss the conventions of writing employed in text-based games (second-person narration, style of description, object creation, etc.).
Finally, recognize the necessity of exhaustively covering – and having students actively work with, in class – even the simplest system of production. Obviously, introductory composition courses cannot hope to cover everything about writing, and have even less chance of covering every feature of a programming language (nor should they attempt to – that sort of thing belongs in computer science courses). Proceeding from the principle of keeping games simple enough to create in a relatively short amount of time, there are some things that should be covered in class and some that should not; however, with specific goals in mind, instructors should address the specific characteristics of programming languages. I focused on creating and describing rooms and objects in my class, asking students to think more about description than about implementation, and the results seem to have been positive. Those students who wanted to do more (and many did) took advantage of Inform 7’s documentation and the example games I pointed them to, but the initiative they took was outside the bounds of an assignment that asked them to simply model a world and create a cohesive argument in it. One way I see this potentially benefitting students is in terms of the active interactive fiction (and specifically Inform 7) community. Discussion board forums, informal online classes, and author blogs are all prospective avenues for student inquiry into programming challenges; moreover, these discussions often also deal with decisions of characterization and plot construction. It would be both useful for students and an interesting study to encourage student involvement in one or more of these arenas and to have students reflect on their writing processes in terms of the feedback from a semi-professional writing/coding community.

The above cautions and ideas stem from my own reflection on implementing my interactive fiction assignment. One way I feel I could have prevented the more overtly negative sentiments toward Inform 7, and perhaps better addressed the complex relationship that students eventually developed toward the language, is by spending more time in class going over the fine details of crafting interactive fiction. While I did spend a week of class demonstrating Inform 7, held mandatory conferences to go over programming concerns, and opened additional office hours during these weeks of class, I also accepted student assurances that they understood the language without requiring them to demonstrate that understanding in shorter assignments. The initial weeklong demonstration of Inform 7 was exactly that – a demonstration – rather than forcing students to produce something and participate in programming. The barrier to entry to Inform 7 was low enough to fool both students and me into believing it would be easy to pick up.
For those instructors that are hesitant to use a text-based language like Inform 7, which requires considerable investment on the part of the instructor in terms of gaining familiarity, there are other systems for creating interactive fiction that might be fruitful to consider. Some are menu-driven rather than language-based, some incorporate limited graphics and/or sound (creating “visual novels”), and some create “Choose Your Own Adventure”-like texts that are much more like hypertext fiction (though with persistent variables). Each of these types of systems has its own potentials and limitations; however, they would all likely lead to similar growth in student writing as Inform 7 did, due to the general nature of their interactive design.

Alongside the above considerations, I would highlight my own struggles with making time for both traditional rhetoric and the procedural arguments of interactive fiction. In my class, I should have made more forceful arguments to students about connection between this sort of persuasion through interaction and through creative writing and expanded notions of rhetoric. When they are treated separately, and because I sometimes treated them as separate ideas, students had a hard time integrating them when I asked them to do so. They also tended to see procedural rhetoric and games in general as “literary” rather than “rhetorical,” meaning that they sometimes had difficulty examining a game and analyzing its underlying claims, warrants, and evidence. Additionally, I believe that insisting on a theme for games rather than concentrating on their rhetorical dimensions led students to make this connection, and when I revisit this assignment (or one like it) in the future I will make rhetoric the center of the discussion rather than allowing thematic considerations of content to overtake it.

Regardless of these reservations and the drawbacks of the assignment, I saw significant improvements in my students’ writing and, in particular, their ability to articulate the details of their own writing process over the course of these weeks of the class. To many students, the fact that this activity was new led to being quite conscious of the learning goals of the unit and the class. Creating interactive fiction, in other words, was a strange enough experience to prompt reflection on its own, without prompting, and when I provided that prompting, students were actually able to articulate its connection to the curriculum. In general, I was impressed by their growing awareness of the importance of audience and their ability to construct nonlinear narratives’ influence on their construction of linear ones – all while creating games their classmates and I enjoyed playing, and of which they were almost universally proud.
Chapter 5
The Future of Video Games in Composition

Throughout this thesis I have argued that video games have a place in composition classrooms. My argument is only one part of a larger conversation taking place, in a variety of disciplines, about the potential and current applications of this important medium. While sociologists, anthropologists, information technologists, scholars in education, computer scientists and game designers are actively a part of this conversation (see, for example, the disciplines represented at Terra Nova), compositionists have not been as active—and we need to be.

The rhetorical heuristic I’ve outlined in Chapter 2 is one way I see that our field could make a connection to game studies, a connection I see as vitally important to our goals of teaching students to be better readers and writers. Video games, as I have said, are rhetorical objects. Not only do they function as social and cultural experiences in a larger media ecology (as noted by Collin Brooke [2009] and Henry Jenkins [2006]), but they are also persuasive in and of themselves, on a narrative level and on the level of the rules that define them, as Ian Bogost (2007) and Jesper Juul (2005) argued. The position of video games as media objects that require their own attention and as objects that enact their own unique forms of persuasion has implications for players’ ability to navigate and critique symbolic systems like language. As I argued in Chapter 4 (drawing on existing composition scholarship), this navigation and critique is at the core of what we do in composition.

The lack of composition scholarship on video games as rhetorical objects in classrooms, especially the lack of scholarship on the civically-focused serious games, has been a stumbling block for making the necessary direct connections between pedagogical theory and practice of composition on the one hand and the work of game studies on the other. Even with educational game studies scholars such as James Gee and Constance Steinkuehler making some steps toward productively using games in classrooms, their focus not on the potential of games to teach writing and rhetoric.

The few compositionists—all computers and writing scholars—who have begun to study games and their pedagogical potential have been invaluable in determining the scope of our participation in conversations about gaming (and our stake in those conversations), but within the
field of composition at large, video games are not given much attention. Jonathan Alexander (2009) suggested that, even when we do look at games in composition, we “have tended to think in terms of issues,” (p. 52, emphasis in original) and that we “may miss some of the juicer thinking about literacy that might occur when we look critically at gaming with our students” (p. 53, emphasis again in original). Alexander framed his article as directed toward the larger field of composition (p. 36), recognizing the relative invisibility of video games from the perspective of most composition instructors.

It is possible that compositionists in general see video games as a topic to be addressed solely by those who work with digital rhetoric, new media studies, or computers and writing (however one might choose to draw divisions between those categories, if at all). Arguably, scholars familiar with those areas are in a better position to understand and apply theoretical and pedagogical concepts drawn from video games. However, I think it is limiting to see video games as simply a sub-interest of digital rhetoric. Echoing an argument already made by many in computers and composition regarding the use of technology in the classroom (e.g., Cynthia Selfe 1999), video games are not simply a “technology problem” that should be handled only by those already part of a technologically-savvy sub-discipline. Even ignoring the fact that technological influence is inescapable in the writing classroom (pens and paper are technologies too) and therefore technology is always already an issue in writing, video games are an increasingly prevalent and influential medium, a medium our students are already reading and writing with, and relegating their study just to “digital” classrooms robs us of an opportunity to enable students to think through the problems they face in their everyday lives.

This is not to say that, simply because games are a popular object, they should be included in writing classes. On the contrary, my argument is that games are popular partially because they already invite users to read and write critically and place them in a position to do so. As Steven Jones (2008), approaching video games from a textual studies perspective, put it, “playing is always in the social world, always a complicated, highly mediated experience, never purely formal, any more than a text is purely a verbal construct” (p. 9).

Jones (2008) referenced the in-the-world quality of games in terms of fan communities, but his point—that video games are a complex web of symbols that involve players in their meaning-making—applies just as easily to the play experience itself. Jones also argued that the meanings of video games are “ultimately connected to social and material realities (rather than
offering merely a means to escape from those realities, as it’s widely believed)” (pp. 15-16).

Complicating Johan Huizinga’s (1938/1955) idea of a “magic circle” – the space separate from reality that Huizinga believed game play occupies – Jones instead suggested that video games inherently require players to remain aware of the real world in reference to their playing. He claimed that “the job of scholars looking at video games should be to illuminate those connections and boundaries, to trace the material and cultural determinants” that help produce meaning in games (p. 16). I would add “rhetorical determinants” to Jones’s list, and hope that this thesis has made a step in that direction.

Revisiting Previous Chapters

In previous chapters, I have begun to explore some options for using video games as tools for teaching writing, not only in analysis but also in production. In the larger context of composition scholarship, video games are obviously only one of many topics and issues we need to consider in classes, but I feel they are an important one.

The approaches to video games I’ve outlined are, of course, only some approaches. Other compositionists have approached games from other perspectives, and they have made considerable contributions to my own understanding of video games in classrooms. As I explained in Chapter 1, Alexander (2009), Rebekah Shulz Colby and Richard Colby (2008), Alice Robison (2008), Matthew S.S. Johnson (2008), and Cynthia Selfe and Gail Hawisher (2007) each contribute a perspective, from literacy to course design to social writing processes, and each perspective is valuable to a continuing discussion. As a field, we seem to be gradually coming to respect video games in the same way we have gradually come to respect other new media objects (such as web sites, digital storytelling, audio essays), and each of these authors has refigured what composition’s stake and role is in teaching with video games.

The field of composition, as well as game studies, encourages multiplicities of viewpoints, and so while the approaches I have outlined have been useful for my teaching, they may not be as useful for instructors less familiar with the technological constraints or pedagogical constraints of using games in classroom. Nevertheless, I do think that video games have a role in instruction, whether as objects of study or as spaces for writing. As Bogost (2007) suggested, “videogames are generally a more expressive subgenre of computational media than other types … videogames are uniquely, consciously, and principally crafted as expressions. As
such, they represent excellent candidates for rhetorical speech – persuasion and expression are inexorably linked” (p. 45). As composition instructors, we are in the business of understanding expression (and persuasion), and the opportunities that video games afford in doing so cannot be overlooked.

Ultimately this thesis is only a step toward situating video games more thoroughly in rhetoric and composition Undoubtedly, as with any project, there are oversights and omissions in my arguments. I attempt to address these blind spots below.

**Applying the Heuristic: Making Three Interdependent Parts Work**

The heuristic I outline in Chapter 2 (see Table 1) has some limitations. The heuristic is comprised of and calls for three interrelated strands: contextual, narrative, and procedural. Some games, however, do not, or do not seem at first read, to have all three elements involved and for this reason this heuristic may not be universally applicable to all video games, especially to multiplayer games or games without a strong narrative element. The heuristic relies heavily on exploring the channel of communication between a player and game designers, with the understanding that designers’ control over narrative and procedural elements work together to make some sort of argument. For example, the single player portion of *Call of Duty: Modern Warfare 2* (2009) included a controversial scene of international terrorism perpetrated by the player character as an undercover CIA operative, proceduralizing and narrativizing some complex geopolitical issues. This sort of gameplay lends itself well to contextual, narrative, and procedural analysis.

In multiplayer games, however, designers tend to rely as much on facilitating interaction between players as on creating a coherent story. Some multiplayer games do this by making their storylines invisible or inconsequential when addressing more than one player. Looking at a different segment of *Modern Warfare 2*, the multiplayer portion – the segment most players likely bought the game to experience – was a first-person “deathmatch” style game devoid of plot beyond the most rudimentary elements: some players are Americans, while some are various foreign armed groups; they fight each other, with no real explanation as to why. For this reason it may be difficult to apply one aspect of the heuristic, such as narrative.

Juul (2005) made allowances for video games which lack narrative elements as “abstract games,” games which *are* their rules: “The game of checkers is a set of pieces that do not mean
anything else; the game is the rules” (p. 131). However, Janet Murray managed to read (or, more truthfully, construct) an allegorical narrative in the abstract game *Tetris*: “A perfect enactment of the overtasked lives of Americans in the 1990s – the constant bombardment of tasks that demand our attention” (as cited in Juul, 2005, p. 133). In other words, even non-narrative games may have narratives supplied by the player; in that case, my heuristic maintains its applicability. In fact, the creation of a previously non-existent narrative may actually engage students more fully in the procedural and contextual elements of the game, as they try to develop an interpretation based on the imagined thoughts of the game designers and relate it to their own experiences as players. Abstract games, placing narrative power back into a player’s hands, may in some ways come closer to composition goals than narrative-based games. Regardless, the difficulties and more open interpretation of abstract games make them more problematic as a target for my heuristic; while they can be studied, they rely more on player involvement in creating a narrative (or in refusing to create one).

**Extending Serious Games outside the Classroom**

The “games for change” discussed in Chapter 3, which are inevitably highly reliant on narratives of some sort, may also pose problems for some instructors, though not because of those narrative elements. As an emerging form, games for change are difficult to find. Individual composition instructors often have social issues that they have committed themselves to more than others, and finding an appropriate game to discuss in conversation with other texts, in order to develop a deeper understanding of the systems that help generate certain social or political conditions, may be impossible. On the other hand, the lack of games surrounding particular issues means that composition instructors can reach out to the serious games community, and in particular the design collective of the Serious Games Institute, to alert them to this fact.

Several of the educators I referenced in Chapter 3 (Ritterfeld, Shen, Wang, Nocera, and Wong, 2009; Leonard, Murray, Laird, Bohr, and Park, 2006) have designed games themselves, and so it isn’t difficult to envision a semester-long composition project, probably for an advanced composition course, culminating in a detailed design document for such a game. Although I have no experience in designing professionally-developed games, the genre of the design document seems useful for a variety of contexts for which we already prepare students. Collaboratively writing proposals, section notes, and determining the limitations for
programming, not to mention the potential visual/video/audio components, would be an exciting prospect. There are likely students and professors in computer science (or in game design, given the existence of such a program) who would implement those ideas, resulting in a variety of opportunities (and need!) for studies which would illuminate the composing of a specialized design document. In other words, the relative scarcity of serious games is an opportunity for composition instructors, who have a stake in social engagement and citizenship education, to take a more pro-active role in gaming.

Furthermore, games for change can present an opportunity to avoid the false sense of accomplishment I mentioned in the later pages of Chapter 3. Rather than merely using games to examine issues, instructors can use them to encourage students to apply their newfound perspectives in the real world – as has been the goal in alternate reality gaming. Potentially, the move from the virtual to the real presents research opportunities that examine the ways student thinking about social and political systems act in comparison to the more complex, real-world versions of those systems.

Of course, as pointed out by Elizabeth Losh (2008), some games for change may fail outright. As with the lack of serious games, I see these failures as opportunities. We should develop a way to productively talk about failed texts (and I might argue this generally, not just for video games). Losh may serve as a model for this type of discussion. She outlined the problems with Edward Castronova’s Arden: it unproductively collapsed the differences between traditional storytelling and its new medium, did not take advantage of the affordances of its medium in terms of social modeling or gender portrayal (i.e. simulation allows for more experimentation and discovery than real spaces), was thought by academics to trivialize its Shakespearean source material, trivialized the fun of its non-academic players, and remained confused about its genre (to name a few). However, Losh used this estimation (supported by Castronova’s reflections on the project, and done in good faith) to discuss what could have gone right in Arden, and this is where training as critical readers (and, arguably, in procedural rhetoric) is useful. Although what Losh related are her personal accounts of being involved in the game project, her recollections could easily have been turned into a larger study on the failure of educational games, especially educational language or literature games (and there are nearly as many failed educational games as there are educational games), and I believe that such a study is a necessary one.
Further work is also necessary in examining “nonserious” games that can also lead to citizenship education. While Johnson (2008), Alberti (2008), and Moberly (2008) made some steps in that direction, this is largely because they either weren’t familiar with or simply weren’t making comparisons to serious games. The idea of games for change, as being explicitly concerned with citizenship education, is an interesting one, but if video games are a powerful persuasive medium, then they should be able to do the work regardless of their label. When games like the aforementioned *Call of Duty: Modern Warfare 2* look at real-world political situations and put players in positions to make decisions about them (Can I bring myself to shoot this Russian civilian in order to further my country’s political goals? Are those goals worth pursuing?), they act as serious games. In another example, *Grand Theft Auto IV* (2008) effectively mounts a procedural and narrative argument for facing the consequences of actions (in procedural terms, committing a crime results in being wanted by police; in narrative terms, the protagonist is attempting to leave behind a shady past and is unable to escape it), and so despite the negative press that is attached to that series, it could be considered a type of serious game. The contrast drawn between “nonserious” and serious games deserves attention; if video games are always a social process, as Jones suggested, then the social effects of video games (in terms of influencing player ideologies, beyond simple questions about whether violent video games result in violent behavior) should be examined more closely.

**Investigating Nonlinear Writing**

In terms of Chapter 4’s recommendations, many instructors may be uncomfortable with specifically using Inform 7 as a programming language, and furthermore may be uncomfortable with teaching programming in general. Although Annette Vee (cited in Hunter, 2009), Margaret Batschelet (2004), Alan Rhea and Doug White (1999) and others in composition, not to mention those in computer science and information technology, make convincing arguments as to programming being a form of writing, it is arguable that not all composition instructors teach all forms of writing—a single semester course cannot do everything. While I believe that teaching programming as writing allows students to explore other modes of thinking and to better understand the structures that lie beneath many of their daily activities (as everything involving a computer also involves programming languages, and the logic that controls those languages), composition instruction already deals with a wide variety of writing types. However, as a field,
and especially those in the field interested in video games in classrooms, we should investigate other alternatives for generating nonlinear narratives and for making more direct connections to nonlinear text production in areas apart from hand-written programs. Part of my reasoning for this argument is that we need a more comprehensive set of data on procedural rhetoric, in terms of designing and modeling systems with as a means of persuasion. Because students need to understand the social and political systems of which they are a part, they need to understand how to critique and create systems that model or represent those larger arrangements.

Apart from those concerns, there is simply more investigation to be done in determining whether nonlinear document production results in a measurable change in the writing process. In Chapter 4, I used my students’ responses to argue that creating branching narratives does influence their views of writing, but similar studies should be undertaken. Not all of those studies need to rely on programming knowledge, and in removing programming as a component, it would be possible to study the degree to which coding literacy influenced students’ thinking in the assignment I describe. There are other applications available that require less programming knowledge to create branching narrative structure\(^7\), and while those applications may close the potential benefits of programming as a form of writing, they do opens up opportunities to engage more deeply with procedural rhetorical choices, and furthermore could help isolate the influence that thinking in nonlinear ways influences students’ writing.

**Recommendations for Future Research**

Video games are a relatively new medium (in comparison to, say, alphabetic text or film) and, although many are stunning artistic (and rhetorical) achievements, the medium as a whole continues to mature. Similarly, scholarly understanding of and treatment of games is still in its infancy – not because game studies as a field has failed to produce scholarship (indeed, it is difficult to keep up with the volume of scholarship is has produced) but because the medium itself is so varied and continues to grow so much. As such, the scope of research in composition studies surrounding video games is broad. Although I present some ideas for such research below, there are hundreds of possible studies and theoretical directions that compositionists

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\(^7\) For example, Ren’Py Visual Novel Engine: http://renpy.org/wiki/renpy/Home_Page - which allows authors to track variables, insert images, and manage multiple-choice menus.
could take in using video games. The ones I advocate here are simply what occurred to me throughout the course of this project.

Even though I see an enormous amount of potential for research involving video games in composition, there is a potential barrier for video games in terms of what Stuart Selber (2004) called “functional literacy.” In a recent graduate seminar course on new media, my classmates and I played Oligarchy alongside several other video games. Although all students in the course had some experience playing video games, several of them had difficulties playing Oligarchy successfully. Some of my classmates were unable to play the game to completion, some were unsure as to what the goal was, and some simply didn’t understand the interface. Selber argued that functional literacy is often undervalued from an institutional standpoint, although it is important because it positions students “to control technological resources,” “evaluate the efficacy of computers,” and “to compete for rewarding work in a digital age” (p. 35) Selber also recognized the need for functional literacy to exist alongside critical and rhetorical literacies: “Students who are not adequately exposed to all three literacy categories will find it difficult to participate fully and meaningfully in technological activities” (p. 24) In other words, students may need to be taught how to play (and write with/for/in video games) at a functional level in the classroom. Once I demonstrated Oligarchy to my classmates (though admittedly my demonstration was brief, and should have been more hands-on), they were able to critique it more thoughtfully, and to better contextualize its arguments.

I recognize functional instruction of video games as an impediment, but I also view it as a potentially productive space to discuss the problems inherent in technological application in the classroom. Although Selfe (1999) cautioned us to pay attention to technology, video games are a particularly thorny issue because of their potential problems for access. In addition to material considerations (video game consoles are expensive, with the PlayStation 3 having just dropped in price to $325 as of this writing, and major commercial games costing upwards of $50 each), there are limitations in player ability, a sort of limit to functional literacy that, while it may not be able to be overcome in the classroom, can at least be understood in functional literacy terms through discussing effective navigation of game rules. The place of functional literacy instruction of video games in the classroom merits more attention.

Similarly, in English studies, we often focus on difficult and challenging texts, with the understanding that they can sometimes produce more thoughtful and reflective reading and
writing. Why should games be any different? The difficulty in playing a game can in itself be a tool to think about the rhetorical significance of design choices, considerations of audience (for instance, the recent game *Demon’s Souls* (2009) has been almost universally praised for its unforgiving difficulty, due to its target audience being a “hardcore” gaming crowd), and the interface used to interact with the game. Obviously there are considerations, in terms of student time and ability (and potentially interest), but as with my above discussion of failure, the failure of certain video games to appeal to a wide audience deserves further investigation.

Other theories of classification for games, and other ways of theorizing the relationship between player(s) and games, also seem necessary. Jones (2008), for instance, linked video games to Gerard Genette’s theories of transactional reading (theories which were also addressed by Julia Kristeva and Louise Rosenblatt). The idea of video games as transactional objects which draw on a wealth of player experiences and create a variety of paratexts (similar in some ways to Jenkins’s idea of transmedia storytelling) is a potentially useful one for composition. However, while Jones’s approach is innovative, it falls squarely in a theoretical (and literary) realm, so should be further explored from the unique pedagogical perspectives of composition instructors.

Jones recognized the rhetorical value of the game-as-text in relationship to other texts, and in the previous chapters I have also made this argument. However, I have also argued that a game-as-system approach is necessary to fully understand the relationship between player, designer, and culture, and the ways each makes meaning. More work needs to be done to relate and complicate the relationship between video games as static texts and as working in relationship to other media.

Although Jones has begun this analysis, he has also focused more on the agency of fan communities and players than on the collaborative process of game-making itself. While I agree that there is a place for the study of the culture surrounding games in game studies as well as in rhetoric and composition, there is also room to examine the nature of authorship in video games themselves. The authorship process of video games is comparable to film-making, with a staff of dozens (or hundreds) not uncommon in major design studios. Even nominally organized under a director, the process of creating a game with the input of graphic artists, writers, programmers, testers, animators, and in some cases even actors is impressive. Because of the variety of people working on games, they present a good opportunity studying rhetorical strategies used for creation of a larger work, and additionally are a place to study construction of ethos. Where
responsibility for a game’s creation gets distributed, for instance, whether to one person (as in the case of *Metal Gear*’s Hideo Kojima) or a relatively faceless company (as in the case of many other games) raises questions about the understanding of creating a sense of connection to a player.

However, much more work also needs to be done to situate the video games themselves (including serious games), and the value of play as an idea, in rhetoric and composition. Although respected educators from classical times to more recent ones have recognized the productive power of play, we can forget those lessons (and often have). In current university settings, we need a more comprehensive curricular account of where games fit in the discipline – what do we “own” when it comes to games? Should our definitions of reading and writing include interactivity and examining rule systems? Many of these questions have been asked about new media as a whole – and the debate about how much we should teach video composition, for instance, is ongoing.

Writing with and through games is also an area that is significantly underdeveloped in composition research. The study I undertook in Chapter 4, based on a weeks-long project with students as game designers, should be expanded and refined to further determine what benefits might be conferred on students seeing games as writing spaces. Obviously, students in composition classrooms should not be held to the standards of professional game designers, but student ideas about game design – the constraints of rule systems and the role of narratives – seem particularly important in approaching interactive media from rhetorical perspectives. As with my above discussion of the potential role of composition students in designing a serious game, I see student game design as an opportunity to allow students to practice procedural (and other types) of rhetoric and to potentially connect with departments outside of English (and to entities outside the university).

Ultimately, there are innumerable research directions for video games and composition. In this thesis, I have chosen to focus on video games as objects of analysis and writing production, and even that avenue – perhaps the approach that best suits composition’s continuing emphasis on student understanding and implementation of rhetorical strategies in media – has quite a bit more to be said about it.
Final Reflections

Many of the scholars I have cited throughout this thesis have worked in the interdisciplinary field of game studies. While I believe compositionists are more than capable of drawing conclusions about video games and applying them as educational tools (and many whom I cited have), I have drawn much of the inspiration for my methods and approaches from the field of game studies not only because it is influential in dealing with the medium I’ve examined here, but also because it provides a different perspective than rhetoric and composition scholarship. Scholars in game studies have helped me to think more analogically about video games than I might otherwise do. In other words, I am indebted to game studies scholarship for allowing me to see composition scholarship in a new light. At the same time, the pedagogical focus of composition has provided a new lens to view game studies scholarship. These sorts of cross-field conversations hold an enormous potential. Just as composition scholarship has, for the most part, neglected video games, so has game studies neglected thinking about the writing process. I believe that these two fields can benefit from an ongoing conversation.

The direction that conversation should take, and particularly the initiatives that compositionists should take in it, need to be negotiated. Video games are a continually emerging and evolving medium; that much is clear. They also provide new perspectives on critical reading and writing that are invaluable in composition. If I were to direct the conversation, ideally, composition programs would undergo a dramatic change in the next few years to accommodate video games as ways to deepen students’ understanding of rhetorical strategies. I could envision students playing single-player and massively multiplayer games to better situate themselves as readers and writers in an increasingly mediated world. I can imagine (administration-supported) curricula developed around video games as cultural and persuasive forces, incorporating interface design and critique, alphabetic text writing of game scripts, and social action in the world, with students taking an active role in the public discourse of the games industry and beyond. I imagine a generation of students leaving composition classrooms with a deeper understanding of the systems that act on their lives, and using that capacity for systemic critique to combat unjust laws, policies, and attitudes. Furthermore (and not inconsequentially), I can hope that students who see the persuasive nature of video games can elevate them from the immature power fantasies that they often are, turning their content more in a direction that
provides players with a sense of their place in relation to their fellow human beings, the nature of
the human condition, and the power of symbolic systems to affect real change in the world.
Finally, I imagine compositionists studying and learning from these activities alongside students,
continuing to talk and write about video games outside of specialized journals such as *Computers
and Composition* and *Kairos*.

Perhaps this change isn’t all that far off. As my work in this and previous chapters has
demonstrated, video games and writing classrooms *do* complement each other in numerous
ways. Composition scholarship that articulates an appreciation for what video games can provide
for students, and what composition can provide that enables students to be critical of video
games’ arguments, is multiplying. However, putting aside my vision of a composition
curriculum that puts games alongside alphabetic text as an equal (likely a far-off, or even
unattainable, goal), my hope is ultimately this: that the heuristic I’ve provided, the analysis of
serious games as valuable for citizenship education, and the description of the changes in student
attitudes about writing that can result from text-based games have left readers with a better
understanding and appreciation of the unique potential of video games in composition
classrooms than they had before. If that is the case, then perhaps my imaginary classroom may
someday become a productive reality.
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