

Ethical Reasoning and Reflection as Supported by Single-Player Videogames

Jose P. Zagal

DePaul University, USA

ABSTRACT

Ethically notable games are those that provide opportunities for encouraging ethical reasoning and reflection. This chapter examines how games can encourage rational and emotional responses. By examining ethically notable videogames, I illustrate a few of the different design choices that can be used to encourage these responses and the effects they have on players. I also identify five challenges toward creating ethically notable games and examine each in the context of commercially released videogames. Each of these analyses serves as a framework not only for reflecting upon and understanding ethics and morality in games but also for outlining the design space for ethically notable games.

KEYWORDS

ethics, ethical dilemma, videogame, game, framework, ethical reasoning, ethical reflection, case study, *Ultima*, *Manhunt*, *Fire Emblem*

INTRODUCTION

As recent work in moral psychology has shown, emotions (e.g. Greene, Sommerville, Nystrom, Darley, & Cohen, 2001) as well as moral rules, each play a critical role in moral judgment (e.g. Nichols & Mallon, 2005). These findings echo, in some sense, the fundamental qualities of games: activities prescribed by rules to elicit and create emotionally meaningful experiences in their participants (Salen & Zimmerman, 2004). It would seem that games provide an ideal medium for providing players with experiences that make them reflect on their ethics and moral reasoning. In practice, this potential has been elusive.

Ethical reasoning is reasoning about right and wrong human conduct. It begins with the identification of a moral or ethical issue. A game that afforded ethical reflection would also, among other things, encourage players to assess their own ethical values, the social context of issues identified, and consider the ramifications of alternative actions. I call games that provide opportunities for encouraging ethical reasoning and reflection ethically notable. In this chapter, I aim to explore some of the ways in which games can be ethically notable as well as the challenges in achieving this.

Citation information:

Zagal, J.P. (2011) "Ethical Reasoning and Reflection as Supported by Videogames", Schrier, K. & Gibson, D. (Eds), *Designing Games for Ethics: Models, Techniques and Frameworks*, pp. 19-35 IGI Global: Hershey, PA

In the first part of the chapter I discuss what I mean by games that encourage ethical reasoning and reflection. I focus principally on two aspects that I call the rationalized and emotional responses. Games that encourage rationalized responses typically engage players' critical thinking and problem-solving skills in moral contexts or situations. Games that elicit emotional responses often encourage players' investment in the narrative and fictive elements of a game while simultaneously facilitating their reflection on their in-game choices and decisions.

In the second part of the chapter, I closely examine three videogames I propose are ethically notable. First, I analyze the fantasy role-playing game *Ultima IV* (Garriott, 1985) and explore how it attempts to make the player feel personally invested or responsible for their in-game decisions. I also examine the ethical system it encodes and describe how it requires the player to learn and follow it in order to succeed. More specifically, I look at how it encourages rationalized responses by providing players with dilemmas or situations in which their understanding of the ethical system is challenged. Next, I analyze the controversial action/stealth game *Manhunt* (Rockstar North, 2003). I argue that different design elements in *Manhunt* create moral tension between the game's rewards structure and the motivations of the characters as defined by the narrative. Via an emotional response, *Manhunt's* design helps the player question the motivations behind their actions, especially when they run counter to the game's narrative. Finally, I examine tactical role-playing game *Fire Emblem: Radiant Dawn* (Intelligent Systems, 2007). In this game, by cleverly manipulating the way the narrative is presented and by forcing the player to control a variety of characters as its multi-faceted plot unfolds, the game helps create moral tension between the player's goals and those posed by both the narrative and the gameplay. The analysis of each of these ethically notable games highlights some of the different ways that ethical reasoning and reflection can be encouraged through gaming environments.

In the final section, I shift focus from success stories to concentrate on the challenges faced when attempting to create ethically notable gameplay experiences. My analysis, grounded in examples from multiple games, identifies five challenges for creating ethically notable games. The first challenge lies in helping the player understand when, and why, certain actions or moments in a game are morally relevant. For example, if a game encodes a particular moral framework, the player should be able to understand why given actions are right or wrong and be able to deduce the moral consequences of his actions. The second challenge lies in achieving the proper focus of the moral tension. For instance, many games attempt to achieve an emotional response from their players, by showing characters troubled by moral situations. It is often the case, however, that the player becomes detached from the emotional impact of these moments because the focus of the moral tension is on the character, rather than the player. The player may simply be a witness to a moral situation and lack the agency to guide the decision made by the player's character. Third, I examine how games that challenge their players to make moral choices often see these goals subverted by gameplay. For example, a moral choice may be understood by the player as one of play style or choice of gameplay. Fourth, I ponder the desirability and possible ethical limitations in providing strong emotional responses in gameplay experiences. Finally, I wonder whether the design goal of providing meaningful consequences is, in fact, shared by players. I conclude with a discussion of the main issues presented. The discussion highlights how our analyses serve as a framework not only for reflecting upon and understanding ethics and morality in games but also for outlining the design space for ethically notable games.

Ethically Notable Games

Games can be an ideal medium for providing players with experiences that make them reflect on their ethics and moral reasoning by helping players identify moral or ethical issues, encourage them to assess their own ethical values and the social context of issues identified, and also consider the ramifications of alternative actions. Not all games encourage ethical reasoning and reflection. I call those that do ethically notable. I am not referring to those games that have been controversial or subject to extraordinary media attention. Nor do I mean those games with ethical frameworks that are consistent or complete (more on that later). Rather, by ethically notable I mean games that, using a variety of design elements including narrative, gameplay, and more, create opportunities for their players to think about ethics.

Ethical reflection can occur for a variety of reasons. These may be related to the game, or may simply occur due to the player's personal circumstances (e.g., an in-game scenario may remind the player of something unethical he did outside of the game). However, it can be productive to focus on two perspectives when exploring ethical reflection: the ethics of the activity of play and the ethics of actions in games as defined by the games themselves.

What does it mean to examine the ethics of play? Games create spaces that mediate our understanding of the ethics of players' actions. Therefore, actions considered unethical in an out-of-game context may be expected or even demanded while playing a game. A good player may be one that best exploits his opponent's weaknesses or deceives his fellow players most effectively. Is this behavior unethical? Similarly, what does it mean to play fairly? What are the values of good or bad sportsmanship? These are just a few examples of play issues that may lead to ethical reasoning. In fact, research has been done to explore some of these. For example, Taylor explores the importance that informal (or unwritten) rules have in supporting positive play experiences (Taylor, 2008). Consalvo, on the other hand, explores cheating, or how players negotiate how, when, and for what reasons to subvert a game's rules (Consalvo, 2007). Woods notes how board game players often negotiate the integrity of the social fabric during competitive game playing: oftentimes, such as when playing a learning game or when the enjoyment of the game by all participants is more important, not playing to win is the correct choice (Woods, 2009). More generally, the ethics of play is often an issue when examining the interaction between two or more players. Multiplayer games, such as alternate reality games, live action role-playing games, MMOs, social games, and board games, have design elements that often make them ethically notable. However, their analysis is beyond the scope of this chapter and left for future work.

What does it mean to examine the ethics of actions in games as defined by the games themselves? When playing games, players often engage rich narrative storylines and employ complex discursive practices and problem solving strategies in order to understand and master underlying game mechanics (Gee, 2003; Shaffer, 2006). In practice, the narratives, symbols, and rules that make up a game constitute an ideological framework (Frasca, 2004). The player participates in a simulated environment with its own rules and narratives. What happens when some of these rules are normative? In videogames, certain behaviors and actions are often rewarded while others are not. Those behaviors that are encouraged can be considered desirable or good while the opposite holds for those that are discouraged. By coupling the evaluation of in-game actions with the

narrative framework that contextualizes them, a videogame can both represent as well as enact an ethical framework. For example, in the first person shooter *Unreal*, the player was often rewarded for not shooting the benevolent aliens called Nali. If a player helped and protected them, they often led the player to secret areas with valuable supplies. Consider also the fantasy role-playing videogame *Fable* whose ethical system is one of its core elements of gameplay (Molyneux, 2004). In *Fable*, some of the actions performed by the player are categorized by the game's narrative as good while others are evil. Actions are assigned points that determine the characters alignment. This, in turn, determines the player character's physical appearance and how non-player characters will respond. The player, by learning and understanding which (and when) actions are considered good or evil, can begin to understand the ethical framework that is procedurally encoded in the game, and also reflect on ethics more generally.

These two perspectives, the ethics of play and the ethics of in-game actions, work together in helping players reflect on ethical issues. However, it is also useful to consider the perspective of the player regarding such reflection. After all, players should also assess their own ethical values as they play. What kinds of responses do players have with respect to ethical issues of play or in-game actions? In the next section, we examine some of these responses.

Emotional Responses: Guilt, Shame, and Moral Dilemmas

Much research has been conducted to explore player's emotional responses as they play games. Players are often asked to self-report their emotional responses, defined in terms of joy, pleasant relaxation, anger, fear, depressed feeling, and sense of presence (Ermi & Mayra, 2005; Ravaja, et al., 2004). Physiological responses such as heart rate or skin conductance, are also often measured directly while players play a game (Ravaja, Saari, Laarni, Kallinen, & Salminen, 2005). These measures, and the sense we make of them, are valuable for understanding the experience of gameplay. For the purposes of this chapter, our focus will be somewhat broader as I will be referring to emotions like guilt, shame, and embarrassment that are not usually measured and are perhaps more challenging to observe in laboratory settings.

Emotional responses that are ethically motivated, so to speak, are usually triggered when the player realizes that they have, or are about to, violate a moral standard. For instance, a player may feel shame or guilt for something they did in a game such as shooting an innocent alien in *Unreal*. In the case of shame, the objectionable in-game behavior is seen as reflecting, more generally, an objectionable self ("I did a bad thing, therefore I am a bad person"). The case of guilt is similar, although the focus is on the thing that was done, rather than the individual (Tangney, Miller, Flicker, & Barlow, 1996). Games that encourage emotional responses often encourage players to become invested in their narrative and fictive elements of a game while simultaneously highlighting the role that the player has in guiding the choices and decisions made in a game. Sometimes, like in *Chrono Trigger*, the player is not aware that choices he makes in the game are interpreted by the game as a reflection of his values and ethics. Early in the game *Crono*, the player-controlled character is falsely accused of kidnapping and taken to a courtroom to face trial. The trial's outcome depends on a series of seemingly irrelevant actions and interactions that *Crono* may (or may not) have had earlier in the game during a town festival. If *Crono* picked up an unattended package of food, its rightful owner appears at the trial. "Him! He ate my lunch right off the table!" he accuses. On the other hand, doing the right thing leads to witnesses

testifying in Crono's favor. "This nice man.... He brought me my kitty. Thank you for being so kind!" says a little girl whose cat was recovered. Each of the witnesses comments on Crono's morality as reflected by his actions. As the trial unfolds, the player is often shocked to realize that the things he did earlier reflect his moral character. Sicart describes a similar example from *Metal Gear Solid 3: Snake Eater*, when during a trip up a river, the player is reminded of all the needless deaths he has caused. If the player hasn't killed more than those required to progress in the game, he faces few ghosts and the trip is short. If he killed soldiers who needn't have died, the trip is much longer and tortuous (Sicart, 2009).

It is also sometimes the case that misunderstandings can lead to powerful emotional responses. In the following example, interactive fiction author Emily Short has been playing *Fable II* with a female character when she meets a male non-player character:

"I saw the symbol of a ring on the meter of how much he liked me. I reasoned that this meant, if I made him like me more, he'd give me a ring. So I spent a little time with him, doing dances and falling over afterward, because he seemed to get a big kick out of this buffoonery. I made faces. I gave him the thumbs-up sign. I flirted a little, just to butter him up.

But when he'd fallen in love with me and wanted to get married, I was startled and not at all pleased. I realized what the ring on his meter indicated then, when it was too late and I'd led him on. I had no intention to get married, but when he started to follow me around (a mistake thanks to more confused socialization on my part), I let him.

I let him follow me out into the wild, and when we were set upon by bandits I didn't give him a second thought, just assumed he'd look out for himself or have the sense to hide behind a rock. My dog never got killed, after all. But then the battle ended and he wasn't following me anymore. I actually couldn't tell what had just happened: did he run away? Or — it seemed more likely — did he fight and die because I was too absent-minded to attend to him? I felt guilty about that. It was the first thing in the game that made me feel like I'd done something wrong. [...] I'd cold-bloodedly ignored some guy, toyed with his affections and then led him to his death. That felt culpable." (Short, 2009)

Emotional responses can also be triggered through the use of moral dilemmas. Moral dilemmas occupy an important part of our history both as a central topic of philosophical discussion as well as the substance of much of our creative and expressive work. The power of drama, as witnessed in theatre, literature, and film, often relies on placing characters in seemingly irresolvable moral situations. Using a variety of rhetorical devices and strategies, the spectator, reader, and viewer not only witness the emotional turmoil of the characters but are captivated by it. We empathize with the characters and share their pain and turmoil. Computers, however, allow their users to play equivalent roles to both the drama performer as well as the audience member (Laurel, 1991). Pohl (2008) argues that it is the emotional involvement that characterizes computer games. She distinguishes two forms of emotional involvement: the instantaneous (we play because we want to win) and the spontaneous (we continue to play because we identify with and care about the story). The narrative frame draws us in and makes us care about the game character's fate. We feel for him, we identify with his concerns and want to know how the story turns out for him and for us (Pohl, 2008). Theatre, film, literature and games can all present troubled characters facing

moral dilemmas and, hopefully, emotionally involve the spectator, reader, or player. However, games are particularly well-suited to directly present the player with a moral dilemma. This is not the same as presenting the player with a dilemma faced by a character. I call this the distinction between the character's dilemma and the player's dilemma. The dilemma faced by the character is, by definition, one step removed and thus potentially less powerful or effective for eliciting ethical reflection. Our case studies in the following sections illustrate various forms of moral dilemmas observed in videogames.

Rational Response: Puzzles and Simulations

Games that encourage rationalized responses typically engage players' critical thinking and problem-solving skills in moral contexts or situations. In these instances, moral situations are perceived as problems or puzzles to be explored and solved. It is often the case that figuring out the morally "optimal" solution is part of the fun. For instance, in the PC game *Star Trek: Starfleet Academy*, the player must face a scenario called the Kobayashi Maru. This scenario is well-known in *Star Trek* canon as a test given to Star Fleet Academy cadets. It is a no-win scenario designed to test a cadet's character in the face of impossible odds. In the videogame, the player is given the choice to reprogram the simulator (to cheat) prior to the test. Three different cheating options are provided. Players well-versed in *Star Trek* lore would presumably recognize the scenario and try to determine what the correct course of action should be. Should they cheat in the same way as Captain Kirk from the original TV show did, by reprogramming the simulator so that the enemy captains fear and respect the player? Or, should they honor the spirit of the test and try to do their best? Perhaps the best situation is to cheat at the test in a novel way? In this case, meta-knowledge of the *Star Trek* universe creates an interesting ethical situation in which the player must try to figure out the "ideal" solution.

In other cases a player may want to explore the limits of the ethical system. What sorts of actions are morally significant in the game and which ones aren't? How are certain actions evaluated? Someone playing *The Sims* may want to see how damaging certain actions are to the relationships between characters in the game. Is it possible to abuse a Sim-guest so much that they commit suicide? Will a Sim character try to prevent another from causing harm? What kinds of amorous relationships can Sims enter into? The designer of *The Sims*, Will Wright, notes how: "In some sense, when you're playing the game you're trying to reverse-engineer the simulation in your head (quoted in Sieberg, 2000)." In essence, players exploring these situations are crafting experimental situations to test both the limits of the game's encoded ethical framework as well as the design space of the game.

Games also encourage rational responses when they present procedurally encoded ethical systems such that playing a game can be seen as a means of engaging with a particular ethical perspective. In these cases, players often "experiment with ethics" as a sandbox in which they may examine the consequences of certain kinds of behavior as well as the reasons for those consequences. Games that allow players to play as "good" or "evil" often encourage these kinds of responses. In this case, the ethical choices don't determine overall success at the game (you can "beat the game" regardless of whether you played as an evil or good character). For example, PC role-playing game *Baldur's Gate* has an alignment system that reflects in-game character's morality using two axes (good/evil and lawfulness/chaos). Depending on your character's alignment (and

also their reputation), other characters may choose to join (or leave) your party, you may receive greater discounts or markups in stores or temples, and certain gameplay options become available. Playing an “evil” character is usually not all that different in terms of how the game’s storyline unfolds compared to that of the “good” character. In the context of the game both are considered valid.

CASE STUDIES

Earlier I discussed what I mean by games that encourage ethical reasoning and reflection. I examined two lenses for considering ethics in games: the ethics of play and the ethics of in-game actions. I then examined two types of responses players often have when reflecting in ethical issues in games: the rationalized and emotional responses. Games that encourage rationalized responses typically engage players’ critical thinking and problem-solving skills in moral contexts or situations. Games that elicit emotional responses often encourage players’ investment in the narrative and fictive elements of a game while simultaneously facilitating their reflection on their in-game choices and decisions. In the following sections I will analyze three games focusing on their narrative, gameplay, the interaction between them, and ultimately how they are perceived and understood by the player. Each of these examples provides a case study for ethically notable games.

The Virtues of *Ultima IV*

Ultima IV: The Quest of the Avatar (UIV) is perhaps the earliest videogame to explicitly encode an ethical system and require its players to discover, learn, and adhere to it to win the game. *UIV* was designed by Richard Garriott and was released in 1985 for the Apple II computer (Garriott, 1985). After creating the first three *Ultima* games, Garriott noted how the narratives of computer RPG games were simplistic and player actions were mostly devoid of consequences. The storyline of these games was essentially “here’s some money, here’s some weapons, here’s some monsters, go kill them and you win.” (Spector & Tyler, 1999) *UIV* was different. It attempted to use gameplay as a means to build a story and a message with philosophical and ethical implications (Mäyrä, 2008). In doing so, it helped develop the computer role-playing game genre to another level of maturity by emphasizing social and cultural conflict over “hack ’n’ slash” (Barton, 2008; CGW, 1996; Halford & Halford, 2001). Garriott explained how “the idea I’m trying to put forth is more philosophical than religious—that in a society where people have to interact with each other, there are certain kinds of rules whose rationale you should be able to understand.” (Addams, 1990) Scorpia’s review of *UIV* explains the goal of the game:

“You, an ordinary person, are called upon to make the long and arduous journey that will culminate in your becoming an Avatar, a perfect mortal. There is no central evil to defeat here; no Mondain, no Minax, no Exodus awaits you [Note: Scorpia refers to the villains in the earlier games in the series]. Rather, this is a quest where you seek to perfect your inner being, to become enlightened in the eight virtues of Compassion, Valor, Honor, Justice, Humility, Sacrifice, Spirituality, and Honesty.” (Scorpia, 1986)

Success in *UIV* required players to learn about, and adhere to, the eight virtues listed above. Failure to follow the requirements for each virtue resulted in a setback. In gameplay terms, acting in a virtuous manner would result in positive progress toward achieving enlightenment in a particular virtue. For example the virtues of compassion and sacrifice could be “increased” by donating gold to beggars and blood to healers respectively (Addams, 1990). Conversely, fleeing from combat would result in a loss of progress toward valor. Also, what mattered was the net effect over a multitude of independent actions. It was not enough to do one good deed; you had to do enough of them.

Garriott felt it was important that *UIV*'s players feel a degree of personal and social responsibility toward their actions in the game. His reasoning was that “in most of these games you are the puppeteer running this puppet around the world. If this puppet is doing bad things, it's not you, it's the puppet.” (Spector & Tyler, 1999) So, rather than create a character by choosing from available options or using random dice-rolls, the character in *UIV* was supposed to be “the essence of you as an individual.” (Spector & Tyler, 1999) In the introductory sequence of the game the player meets a gypsy woman who asks the player to answer seven questions:

“On the table before you lie two cards, one representing the virtue of Valor, the other representing the virtue of Justice. As though from a distance, the gypsy's voice floats across to you, saying: ‘Consider this: Thou halt been sent to secure a needed treaty with a distant lord. Thy host is agreeable to the proposal, but insults thy country at dinner. Dost thou: a) Valiantly bear the slurs or b) Justly rise and demand an apology?’” (Scorpia, 1986)

Each question posed a moral dilemma with two possible answers. Since each response represented a particular virtue in the game, answering the dilemma was interpreted as favoring one virtue over the other. In the example above, answering “a) Valiantly bear the slurs” meant favoring the virtue of valor over that of justice (option “b” in example above). The purpose of this sequence of dilemmas was to determine which of the eight virtues was favored by the player. Since each of the professions embodied a specific virtue, the player's character would thus, in some way, represent their values in the game. Garriott describes how, anecdotally, when people were asked to rank the eight virtues in order of importance, their responses were almost exactly the same as what was determined by the game (Spector & Tyler, 1999). The character used in the game was thus determined by the players' personal ethics, rather than simply choosing, or randomly generating, a character at will. (Scorpia, 1986) The character creation process encourages a rationalized response from the player that invites them to reflect on their personal ethics and establishing priorities between different virtues.

UIV's use of moral dilemmas was a novel approach to character creation. It was not, however, the only time players faced them. One of Garriot's design goals was to make sure the game was full of ethical tests (Massey, 2007). He describes one of the tests as follows:

“One of the things that I was very proud of in Ultima IV is a room I had created in the final dungeon and the room included a lever in middle of the floor and when you threw the lever it opened the gates on some cages that were in the corners of the room and the cages were full of children. The children were in fact really monsters, because that is all they could be at that level of technology, and the children would attack you in the center of the screen next to the lever.

You'd be surrounded by these children who were attacking you and since you were the Avatar at this point and you were at the very end of the game, I knew—or I hoped—that players would be very worried about what to do about the situation. They wouldn't want to kill the children because they'd be in fear of losing their compassion or their honor or a wide variety of other metrics that the game really was watching. I assumed players would struggle over what to do in this room” (Massey, 2007)

The goal of the “children’s room” in *UIV*, as explained above, was to elicit an emotional response, make the player uncomfortable and question the game. Is the game really asking me to slaughter children? What should I do? The dilemma is twofold. First, the game apparently requires an action that is morally repugnant in the real world. Second, the game appears to require the player to do something that contradicts the stated goals of the game. Virtuous people do not kill children. Fortunately, there were multiple ways around the dilemma. Player’s could cast a sleeping spell, force them to run away, and so on. While there is no formal evidence of the effectiveness of the “children’s room” in promoting ethical reasoning, issues with its design did come up during playtesting.

“A few weeks prior to us publishing Ultima IV, my brother [Robert Garriott] came into my office with a letter that he'd received from one of our QA testers and the letter basically read: 'I refuse to work for a company that so clearly supports child abuse.' And they referred to this room as a game design that encouraged child abuse because I had forced the players into harming these children in this room. My brother came to me up in arms and going like, 'Oh my god Richard, how could you have included such a horrible thing in your game?' To which I responded and said, 'First of all, the fact that someone would take it that seriously and be so emotionally moved by this incredibly simple thing that I put in this game, I find is a statement of success’” (Massey, 2007).

While the QA tester’s reaction was perhaps unwarranted (after all, there was a way to solve the dilemma), it serves to illustrate how games can make players feel personally invested or responsible for the decisions they make in a game. Thus, I argue that *Ultima IV* is an ethically notable game because:

- It attempts to make the player feel personally invested or responsible for the decisions they make in the game. (emotional response)
- It encodes an ethical system and requires the player to learn it and follow it to succeed. (rational response)
- It provides players with dilemmas or situations in which their understanding of the ethical system is challenged. (rational and emotional)

MANHUNT: THE DILEMMA OF VIOLENCE

Manhunt is a videogame developed by Rockstar North and originally released for the Playstation 2 in 2003 (Rockstar North, 2003). In the game, the player controls the character James Earl Cash, a death row criminal who is rescued from his execution and coerced into starring in his kidnapper’s snuff film productions. The kidnapper, known as “The Director,” witnesses and records Cash’s carnage through a network of security cameras. The Director also goads, threatens

and provides instructions via an earpiece worn by Cash. The player controls Cash in a third-person perspective and the gameplay is best described as requiring both elements of action and stealth. Cash is outnumbered and must carefully and quietly make his way through a gauntlet of dilapidated environments to surprise and execute his victims using a variety of items including plastic bags, shards of glass, bats, and other weapons.

Manhunt is in many ways the opposite of *UIV*. The player-controlled character, through the game's mechanics and narrative context, is not encouraged to be good or carry out good actions. It actively encourages the opposite. As I will show, however, the game is also capable of creating an emotional experience in the player .

Manhunt created a media controversy when it was released due to the graphic nature of the violence it depicted. The most notorious element of violence in the game is the execution system. Executions are perhaps the most effective way to eliminate opponents and are, on occasion, required to progress in the game. The player, however, is responsible for deciding how brutal an execution should be. For example, let's say Cash sneaks up behind a gang member with a plastic bag. Pressing the attack button will result in Cash yanking the bag over the victim's head and suffocating him. If the player holds down the button for a few seconds, the execution is more violent and Cash might punch the victim in the face in addition to suffocating him. The third, and most brutal, type of execution is carried out by holding down the attack button even longer.

The premise and violence in *Manhunt* are undeniably gory and brutal. From an ethical perspective, however, this game is not notable due to the violence of the executions. It is notable because of the position in which the game places the player. As mentioned, the brutality of an execution is a choice made by the player. *Manhunt* forces the player to question and evaluate her actions and motivations for how to play the game. The player is forced to examine the role of successful play as a moral dilemma itself. There are no intrinsic (in-game) benefits for carrying out executions in the most brutal way. Extrinsicly, players are rated at the end of each area and, by obtaining high ratings (three or five stars, depending on the difficulty level), they can unlock bonus features and codes. This only applies to five of the twenty areas and there is no discernible benefit for getting five stars in all the areas (Rodoy, 2003). So, why should the player choose to execute Cash's opponents in the most brutal way possible? The player is tasked with reflecting on how far they are willing to go in carrying out the executions. Not only are the executions brutal and sickening, but they are also unpleasant to watch.

Manhunt's player-based (rather than character-based) moral dilemma is made all the more intense through the use of a USB headset. Using the headset allows the player to use his voice to distract enemies in the game. It also enables the player to hear The Director's instructions directly via the earpiece. Both elements narrow the cognitive and emotional distance between the player and the grotesque world of *Manhunt*. The microphone does this by allowing a more direct form of agency while the headset heightens the tension by channeling The Director's wishes and desires directly to the player's ear. In this way, The Director assumes the role of the "evil conscience." As a player, you hear him inside your head. His voice goads, taunts, and cheers you on when you cave in to his desires. There is nothing more sickening and disturbing than hearing The Director cackle maniacally as Cash murders a gang member. As expected, The Director derives more pleasure from the more gruesome executions.

Let us examine the narrative and gameplay context the player is provided with when deciding if he should execute gruesome executions instead of “regular” ones? Can the player shift his moral responsibility by placing it on the character whose role he is simply playing? The answer, from the position of the narrative, is no. Cash is a convicted death row criminal and it is reasonable to assume that, when placed in a kill or be killed situation, Cash would not hesitate to kill. The Director wants Cash to be as brutal as possible since his illegal snuff-film operation demands it. Cash, however, has no motivation to perform the most brutal types of executions. The Director is the antagonist, what reason would Cash have to want help him? Also, executions are risky to execute. While the player keeps the attack button pressed, Cash is exposed and vulnerable to attack. We might expect Cash to reason that a solution to his predicament might be to kill as few enemies as possible and to do so in the least gruesome way (thus not allowing himself to further The Director’s desires). From the context of the narrative, the player has no reason or motivation to opt for greater brutality in executions. Role-playing Cash does not exculpate the player from Cash’s actions.

From a game design perspective, the context for deciding the dilemma is the opposite. In a macabre twist, the player is awarded “extra points” for completing more gruesome executions. As mentioned, higher ratings serve no function or purpose within the context of the game. The player is not rewarded with anything that makes playing the game any easier. The non-player characters don’t know or care that the player got a five-star rating in the previous area. The only purpose of the rating system seems to be to tempt the player. To force the player to question how much he really values a meaningless measure of achievement. How far would you go for the five-star rating? As a game player, how do you value your competitiveness and achievements as a player (get the most points and unlock the most extras) versus doing the right thing in the context of the narrative? The juxtaposition of the games’ reward structure and its narrative highlights the true moral dilemma of *Manhunt*. I argue that *Manhunt* is an ethically notable game because:

- It creates moral tension between gameplay rewards structure and the motivations of the characters as defined by the narrative. (emotional response)
- It encourages players to assess their own ethical values with respect to both the gameplay and narrative contexts of the game.

FIRE EMBLEM: RADIANT DAWN

While *UIV* encodes a virtue ethics framework that is arguably positive, it would seem that everything about *Manhunt* is negative. Is it possible to create a player’s dilemma without a salient ethical framework or morally repugnant gameworld?

Fire Emblem: Radiant Dawn (FE:RD) is a tactical role-playing game for the Nintendo Wii console (Intelligent Systems, 2007). It features a multi-faceted storyline in which the player follows (and controls) characters from different factions that occasionally intersect. It is at these intersections that the game becomes ethically notable.

FE:RD is divided into four sections. In the first section, the player controls a group of characters led by a character called Micaiah. In section two, the player controls two different groups of

characters from earlier versions of the game. In the game's third section, the player controls each of the three groups separately. In the final chapter of the third section, the player controls a group of characters led by Ike who faces an enemy force led by Micaiah. Micaiah's force includes many characters the player has, until recently, been controlling and improving. Totilo describes how in this chapter:

"[The goal] was to annihilate every character on the other side. Was I reading this right? I had to slaughter all of the enemies? All of Micaiah's forces? [...] I could not believe what the game was asking me to do. I sat dumbfounded. Really? I have to destroy all of those characters I spent all that time improving? Zihark, and all the rest, had to bite the bullet?" (Totilo, 2008)

Faced with the dilemma and his unwillingness to blindly accept the missions' goals, Totilo ventured online to see if there was a way out. He discovered that instead of annihilating enemies he cared about, he "only" needed to ensure that 80 enemy combatants perished. Totilo's solution to the dilemma was to ensure that the characters he cared about remained as far from each other as possible, regardless of whether or not they were labeled by the game as "the enemy."

"And as soon as I did it, I felt a bit sick. Video games always require you to value some characters' lives over others. Goombas' lives don't matter. Mario's does. But here I was deciding that some of my enemies should die and that others shouldn't. It got more twisted. After a few turns of action I noticed that the kill-counter in the upper right hand corner of the screen was counting deaths of enemy soldiers and unnamed partner soldiers who were fighting alongside Ike as part of the same total. That meant I could reach my goal of 80 battlefield deaths not just through the slaughter of certain enemies but through the death of my own allies.

Is it creepy that I took this as good news? This meant the mission would end sooner, that my chosen people on both sides would be out of harm's way faster. I began to root for my 'enemy' Zihark when he strode out into the battlefield again and started chopping down my allies" (Totilo, 2008).

Totilo realizes that he is subverting not only the game's narrative, but also the established game goals. Micaiah views Ike as the enemy and the gameplay goal is consistent with that. Why should he not do as instructed? Totilo was clearly uncomfortable with the dilemma and how he responded.

"I had made quite a judgment of gameplay-based morality. I had decided that some characters, some who were with me and some who were against me, deserved to live. I'd judged that others, some with me and some against me, were better off dead. I'd chosen favorites. Essentially, the characters with names, the ones I had trained—they deserved life. The unnamed grunts both helping and harming me? Expendable. I'd cheered for the deaths of supposed friends and allies and was relieved when they failed to kill enemies I had once trained. I refused to assist some allies in need. I'd transgressed traditional battle lines. Like I said above, I felt a twist in my gut. What kind of battlefield general had this game made me? What kind of commander of men and women?" (Totilo, 2008)

We could argue that Totilo's solution to his dilemma was an unethical one. However, that would miss the point: Totilo was emotionally invested to such a degree that he was willing to forgo the context of both narrative and gameplay. Unlike *UIV* and *Manhunt*, he faced an ethical dilemma that, while intended by the game's designers, wasn't about a particular in-game ethical framework. Thus, I argue that *FE:RD* is an ethically notable game because:

- It creates a moral tension between the player's goals and those posed by both the narrative and the gameplay.
- It encourages players to assess their own ethical values with respect to the narrative context of the game.

DISCUSSION

In this chapter, I argued that an ethically notable game is one that provides opportunities for encouraging ethical reasoning and reflection. I have also shown how games can achieve this by creating different kinds of moral tension. By examining three games, I have shown different ways that games can accomplish this. However, it can also be valuable to consider the following questions to analyze and better understand the ethical reasoning potential of a particular game.

Is the Ethical Framework Discernible and Consistent?

The effort that goes in to creating an ethical framework in a game will ultimately be for naught if the player is not able to discern right from wrong (according to the game's values). More importantly, the player should understand why given actions are right or wrong and be able to deduce the moral consequences of his actions. Ethical systems that are opaque to their players risk becoming perceived as morally irrelevant: if there is no way to understand, why bother. Ethical systems that are inconsistent face an even greater risk: confusing the player. Confusion subverts the efforts of establishing an ethical framework by making the evaluation seem arbitrary. I note that it is not necessary for the framework to be both comprehensive (consider all actions in the game as ethical in some sense) and complete (ethically consider all possible intentions and/or goals behind player actions). Rather, the ethical rules must apply when the player expects them to, and when they do not it must be possible for the player to understand why. For example, in many adventure games players steal or loot objects with no apparent consequences; it does not matter if the object came from a treasure chest found in the woods or if it came from a chest located inside the house of a friendly neighbor. Other games discriminate if the item was from an urban location (e.g., the rule that it's not okay to steal from a villager's home) or from the wilderness (e.g., the rule that it's okay to loot a chest in the woods). Rauch notes how *Fable* can often seem inconsistent "since 'examine' and 'take' use the same key, I have often found myself 'stealing' items by accident. At moments like these, the rules of both Albion and Fable itself can seem alarmingly random, and this randomness interferes with player experience by frustrating both the ability to grasp the intricacies of the rule system and the ability to maintain suspension of disbelief and become emotionally involved in the narrative." (Rauch, 2007)

Who Faces the Moral Dilemma?

The power of moral dilemmas in games is that they can require the player to participate (rather than simply to be a spectator). However, it is easy to fall into the trap of assuming that simply because there is a moral dilemma in the game, the player will become personally invested. Many games, especially those with well-developed storylines, involve characters in moral situations. It is often the case that the player is merely a witness to the moral situation and lacks the agency to guide the decision made by the player's character. Earlier, I referred to these cases as character-based moral dilemmas and now I will describe a few examples. One of the most-often remembered and discussed moments in *Final Fantasy VII* (Square, 1997) is the death of the character Aeris (Edge, 2007; Lopez & Theobald, 2004). Aeris, who is at certain times a player-controllable character, chooses to sacrifice herself to save the planet. Her decision is one that is made by the game's designers. It's a dilemma the character faced and was troubled by, although the player had no real say in the matter. Similarly, in the third person-shooter game *Max Payne* (Remedy Entertainment, 2001), although the character Max is depicted as troubled by his situation and many of the decisions he makes, the player does not participate in any of those choices. Should Max ally with a known criminal to gain equipment and resources that will let him take out another mob boss? Max decides, not the player.

Is the Dilemma Moral?

Difficult decisions are not always moral decisions. A player wracked by the decision of how to spend a limited number of points on character upgrades is arguably more concerned with gameplay than ethics. It is not hard to realize that these situations are not moral dilemmas. The danger lies when dilemmas are presented as moral but, for some reason or another, are not regarded as such by players. In the first-person shooter game *Star Wars Jedi Knight: Dark Forces II* (JK) (LucasArts, 1997), the player controls Kyle Katarn. The game follows Katarn as he journeys to confront his father's murderers, while simultaneously discovering (and developing) his latent abilities in The Force (a metaphysical power in the *Star Wars* universe). Over the course of the game, the player earns points that can be used to increase a variety of (Force) abilities categorized into three groups: dark, light, and neutral. The player can, for the most part, spend the points on any of the abilities he fancies. Once the player is approximately two-thirds of the way through the game, "Kyle finally decides on the light or dark side of the Force, and acts accordingly. (This decision is determined both by the powers you've taken, and how you've treated civilians throughout the first parts of the game)" (Thomas, 2004). The decision to embrace evil (or not) is arguably one that should not be taken lightly. However, two things conspire against considering this a moral dilemma. First, the player is not allowed to make the decision at that specific moment in the game. This is because the result (join the Dark/Light side of the force) happens as the result of an accumulation of many decisions that have been made over hours of gameplay. Second, and perhaps more importantly, there are no real consequences to the decision. As Dulin noted in a review, "many [players] will also be disappointed to learn that the distinction between the Light and Dark sides, once the choice has been made, is not as striking as one would hope" (Dulin, 1997). Dulin continues, noting that "The Light Side is obviously the path you are supposed to take—you get more cut-scenes and more narration throughout the last few levels. But apart from this and the different Force powers at your disposal, choosing the Dark Side only leads to one really shocking plot element, a slightly altered level, and a completely different ending (which is, in many ways, far more satisfying)." (Dulin, 1997) When faced with what is perhaps the game's key moral dilemma, the player must choose between light and dark side based on

what content they want to experience and what force powers they would like to use for the rest of the game. Evil and good are understood by the player at a procedural level, a state in the machine, rather than at a semantic one (Sicart, 2008, 2009).

Is There a Need for Emotional Distance?

I have argued for the importance of creating emotional responses, such as guilt, for encouraging ethical reflection. However, should we assume that players do, in fact, desire and value these kinds of experiences? Dow, et al. (2008) studied player's reactions to an augmented reality version of the interactive drama *Façade*. In this version of the game, players interact by walking around a physical stage modeled after the 3-D world of the desktop-based version of *Façade* (Mateas & Stern, 2003). Players interact with the game by wearing a video-see-through pair of goggles, and speaking directly to the characters (Dow, et al., 2008). The game's narrative revolves around a social situation where the player has been invited by a couple to a dinner party only to quickly realize that their "marriage is falling apart, and the couple is looking to the player to help them settle their grievances" (Dow, 2009). Dow notes that many players exhibited genuine emotional reactions during their experience, however, many of those players preferred the desktop version of the game (Dow, 2009). This was "because being in the same space with an arguing couple was too physical and intense. The less immersive interface of the desktop version allowed players to feel free to 'goof off,' 'decide how they wanted to feel,' and enjoy the experience from a safe distance rather than constantly feeling 'on the spot'" (Dow, 2009). So, if we create games designed to make players feel awkward, guilty, or generally uncomfortable, how do we know that players will, once the experience has concluded, actually get something positive out of it? Perhaps more importantly, and this was not an issue with Dow's experience, what are the ethical limitations we face as game designers and creators? Is it ethical to create a situation designed to make a player feel bad about him or herself? What are the potential (negative) long-term effects?

How Meaningful Should In-Game Consequences Be?

The designers of the *Fable* videogame series have prided themselves on the role that moral choices play in the game. *Fable's* ad-copy promised "For every choice, a consequence," while *Fable II* refined this idea ensuring that choices and consequences were especially meaningful. Sometimes, this was not possible. For example, early in the game there is a quest in which the player needs to decide whether to give warrants to a criminal to dispose of, or turn them over to a guard. In an interview with Simon Carless, *Fable II's* lead designer Peter Molyneux noted how "there was 'a big mistake that we made' to not convey that this small task had very significant meaning for your good or evil status later in the game. As Molyneux said: 'If you don't tell people ... the significance of the choice that they are making, you can run into trouble'" (Carless, 2009). At other times, the game was successful in creating meaningful consequences. At the end of the game, players must make a difficult decision. They have to decide whether to choose the needs of the many (resurrect thousands of characters), the needs of the few (resurrect their slain dog, sister, and family), or the needs of the one (obtain a massive monetary reward). After the game was released, "Molyneux said that he 'did have hate mail from people' who could not bring themselves to sacrifice the multitudes, and chose the other path [the few]" (Carless, 2009). They were angry because they could not choose to save the many and at the same time save their dog,

an in-game companion that joins the player early in the game and follows them around for the duration. These players were closely attached to their canine companion and were not willing to accept the consequence of their choice. “Apparently these complaints ‘got to such a furor’ that the first *Fable II* downloadable content pack was changed to enable the return of the dog, a particularly faithful companion [this was apparently implemented in the 2nd downloadable content pack rather than the first]. But, quipped Molyneux: ‘Don’t expect us to be as merciful as that in the future’” (Carless, 2009). Similarly, in *Fallout 3*, the player could gain an animal follower (a dog called Dogmeat) who was not replaceable once deceased. The downloadable expansion *Broken Steel* allowed for a workaround by providing an in-game perk called “Puppies!” By choosing this perk players can regain a canine companion, explained by the game’s narrative as one of Dogmeat’s puppies (Huijboom, 2009). These examples highlight a tension between the desire for games to provide ethically meaningful choices and consequences, and our willingness as players to live with those choices. Players seem to want it both ways.

CONCLUSION

Delwiche argues that videogames have affordances that can shape attitude and behavior (Delwiche, 2007), Bogost argues they can persuade (Bogost, 2007), and Gee holds that games can provide valuable opportunities for learning (Gee, 2003). Does this mean we can use games to make moral demands of players by encouraging them to reflect on ethical issues? I have shown how games can achieve this. Specifically, my analyses of *Ultima IV*, *Manhunt*, and *Fire Emblem: Radiant Dawn* highlight a variety of ways games can make the player feel personally invested or responsible for the decisions they make in the game. They can also encode an ethical system and require the player to learn it and follow it to succeed. Sometimes games may present players with dilemmas or situations in which their understanding of an ethical system is challenged. We can also create moral tension between the player’s goals and those posed by both the narrative and the gameplay. But there is still much work to be done to fully explore the potential for ethical reasoning and reflection through gaming. As recent work in moral psychology has shown, both emotions (e.g. Greene, et al., 2001) as well as moral rules play a critical role in moral judgment (e.g. Nichols & Mallon, 2005). If ever there was a perfect test-bed for helping people learning about ethics and ethical reasoning, games would be it. After all, these findings from moral psychology echo, in some sense, the fundamental qualities of games: activities proscribed by rules to elicit and create emotionally meaningful experiences in their participants (Salen & Zimmerman, 2004). I believe that the medium has only just begun to scratch the surface and we wonder what other mechanisms we can develop to foster ethical thinking. In what additional ways can we use games to help explore ethical questions?

REFERENCES

- Addams, S. (1990). *The Official Book of Ultima*. Radnor, Penn: COMPUTE! Books.
- Barton, M. (2008). *Dungeons and Desktops*. Wellesley, Mass: A K Peters.
- Bogost, I. (2007). *Persuasive Games*. Cambridge, Massachusetts: The MIT Press.

- Carless, S. (2009). In-Depth: Peter Molyneux On The Importance Of Choice Retrieved February 12, 2010, from http://www.gamesetwatch.com/2009/08/indepth_peter_molyneux_on_the.php
- CGW (1996). 150 Best Games of All Time. *Computer Gaming World*, 64-80.
- Consalvo, M. (2007). *Cheating: Gaining Advantage in Videogames*. Cambridge: MIT Press.
- Delwiche, A. (2007). From The Green Berets to America's Army: Video Games as a Vehicle for Political Propaganda. In J. P. Williams & J. Heide Smith (Eds.), *The Players' Realm* (pp. 91-107). London: McFarland and Company.
- Dow, S. (2009). Damn It Jim, I'm a Gamer Not a Therapist. *Ambidextrous*, June.
- Dow, S., MacIntyre, B., & Mateas, M. (2008). *Styles of Play in Immersive and Interactive Story: Case Studies from a Gallery Installation of AR Façade*. Paper presented at the ACM SIGCHI Conference on Advances in Computer Entertainment (ACE'08).
- Dulin, R. (1997). Jedi Knight: Dark Forces II: Review Retrieved March 17, 2009, from <http://uk.gamespot.com/pc/action/jediknightdarkforces2/review.html>
- Edge (2007). Final Frontiers. *Edge Magazine*(177), 72-79.
- Ermi, L., & Mayra, F. (2005). *Challenges for pervasive mobile game design: examining players' emotional responses*. Paper presented at the Proceedings of the 2005 ACM SIGCHI International Conference on Advances in computer entertainment technology.
- Frasca, G. (2004). Videogames of the Oppressed: Critical Thinking, Education, Tolerance, and Other Trivial Issues. In N. Wardrip-Fruin & P. Harrigan (Eds.), *First Person: New Media as Story, Performance, and Game* (pp. 85-94). Cambridge, Massachusetts: MIT Press.
- Garriott, R. (1985). *Ultima IV: Quest of the Avatar*. Austin, TX: Origin Systems.
- Gee, J. P. (2003). *What Video Games have to Teach us about Learning and Literacy*. New York: Palgrave-McMillan.
- Greene, J. D., Sommerville, R. B., Nystrom, L. E., Darley, J. M., & Cohen, J. (2001). An fMRI investigation of emotional engagement in moral judgment. *Science*, 293(5537), 2105-2108.
- Halford, N., & Halford, J. (2001). *Swords and Circuitry: A Designer's Guide to Computer Role-Playing Games*. Roseville, CA: Prima Publishing.
- Huijboom, S. (2009). Fallout 3: Broken Steel: Broken Steel Walkthrough version 1.01. Retrieved February 12, 2010, from <http://www.gamefaqs.com/console/xbox360/file/959299/56480>
- Intelligent Systems (2007). *Fire Emblem: Radiant Dawn*. Redmond, WA: Nintendo
- Laurel, B. (1991). *Computers as Theatre*. Reading, Massachusetts: Addison-Wesley Publishing.
- Lopez, M., & Theobald, P. (2004). Case File 28: Is Square Enix Milking the Final Fantasy VII Franchise? Retrieved March 12, 2009, from <http://www.gamespy.com/articles/551/551742p2.html>

- LucasArts (1997). *Star Wars Jedi Knight: Dark Forces II*. San Francisco, CA: LucasArts.
- Massey, D. (2007). Richard Garriott Interview, Part #2 Retrieved March 2, 2009, from <http://www.warcry.com/articles/view/interviews/1436-Richard-Garriott-Interview-Part-2>
- Mateas, M., & Stern, A. (2003). *Facade: An Experiment in Building a Fully-Realized Interactive Drama*. Paper presented at the Game Developer's Conference: Game Design Track, San Jose, CA.
- Mäyrä, F. (2008). *An Introduction to Game Studies: Games in Culture*. London: SAGE.
- Molyneux, P. (2004). *Fable*. Guildford, United Kingdom: Lionhead Studios.
- Nichols, S., & Mallon, R. (2005). Moral dilemmas and moral rules. *Cognition*, 100(3), 530-542.
- Pohl, K. (2008). Ethical Reflection and Involvement in Computer Games. In S. Günzel, M. Liebe & D. Mersch (Eds.), *Conference Proceedings of the Philosophy of Computer Games 2008* (pp. 92-107): Potsdam University Press.
- Rauch, P. E. (2007). *Playing with Good and Evil: Videogames and Moral Philosophy*. Massachusetts Institute of Technology, Boston.
- Ravaja, N., Saari, T., Laarni, J., Kallinen, K., & Salminen, M. (2005). *The Psychophysiology of Video Gaming: Phasic Emotional Responses to Game Events*. Paper presented at the Changing Views: Worlds in Play, DIGRA 2005.
- Ravaja, N., Salminen, M., Holopainen, J., Saari, T., Laarni, J., & Jarvinen, A. (2004). *Emotional response patterns and sense of presence during video games: potential criterion variables for game design*. Paper presented at the Proceedings of the third Nordic conference on Human-computer interaction.
- Remedy Entertainment (2001). *Max Payne*. Espoo, Finland: Gathering of Developers.
- Rockstar North (2003). *Manhunt*. New York, NY: Rockstar Games.
- Rodoy, D. (2003). Manhunt: Hardcore 5-Star Level FAQ Retrieved April 2, 2009, from <http://www.gamefaqs.com/console/ps2/file/915100/27381>
- Salen, K., & Zimmerman, E. (2004). *Rules of Play: Game Design Fundamentals*. Cambridge, Massachusetts: The MIT Press.
- Scorpia (1986, Jan-Feb). Ultima IV: Quest of the Avatar. *Computer Gaming World*, 12-14.
- Shaffer, D. W. (2006). *How Computer Games Help Children Learn*. New York: Palgrave Macmillan.
- Short, E. (2009). Homer in Silicon: Communicating Character Retrieved February 1, 2010, from http://www.gamesetwatch.com/2009/10/column_homer_in_silicon_commun.php
- Sicart, M. (2008). *The Banality of Simulated Evil*. Paper presented at the iEnter.

Sicart, M. (2009). *The Ethics of Computer Games*. Boston: MIT Press.

Sieberg, D. (2000). The world according to Will Retrieved May 25, 2010, from <http://www.salon.com/technology/feature/2000/02/17/wright/print.html>

Spector, C., & Tyler, M. (1999). Interview with Richard Garriott. In C. McCubbin & D. Ladyman (Eds.), *Ultima IX Ascension: Prima's Official Strategy Guide* (pp. 246-297). Rocklin CA: Prima Publishing.

Square (1997). *Final Fantasy VII*. Foster City, CA: Sony.

Tangney, J. P., Miller, R. S., Flicker, L., & Barlow, D. H. (1996). Are Shame, Guilt, and Embarrassment Distinct Emotions? *Journal of Personality and Social Psychology*, 70(6), 1256-1269.

Taylor, L. N. (2008). Gaming Ethics, Rules, Etiquette and Learning. In R. E. Ferdig (Ed.), *Handbook of Research on Effective Electronic Gaming in Education*.: Information Science Reference.

Thomas, D. (2004). Jedi Knight: Dark Forces II FAQ Retrieved March 17, 2009, from <http://www.gamefaqs.com/computer/doswin/file/24354/18837>

Totilo, S. (2008). An Ethical Dilemma Like I've Never Played Before — “Fire Emblem” Beats “BioShock” At Its Own Game? Retrieved Mar 19, 2009, from <http://multiplayerblog.mtv.com/2008/02/05/an-ethical-dilemma-like-ive-never-played-before-fire-emblem-beats-bioshock-at-its-own-game/>

Woods, S. J. (2009). (Play) Ground Rules: The Social Contract and the Magic Circle. *Observatorio (OBS*) Journal*, 3(1), 204-222.