Ethics and Game Design: Teaching Values through Play

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Situating Ethics and Games

Chapter 1
Values between Systems: Designing Ethical Gameplay......................................................................... 1

Miguel Sicart, IT University of Copenhagen, Denmark

This chapter defines ethical gameplay as a consequence of game design choices. The author proposes an analytical model that defines ethical gameplay as an experience that stems from a particular set of game design decisions. These decisions have in common a design method, called ethical cognitive dissonance, based on the conscious creative clash between different models of agency in a game. The chapter outlines this method and its application in different commercial computer games.

Chapter 2
Video Games for Prosocial Learning .................................................................................................... 16

Gene Koo, Berkman Center for Internet & Society at Harvard University, USA
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In this chapter, the authors consider the capabilities video games offer to educators who seek to foster prosocial development, using three popular frameworks: moral education, character education, and care ethics. While all three of these frameworks previously considered literature and film as helpful tools, the chapter suggests that video games are unique from these other media in the multiple levers through which they can influence the worldview, values, and behaviors of players. Similar to literature and film, video games possess content—plot, characters, conflict, themes, and imagery—with which participants interact. Unlike other media, however, video games scaffold players’ experiences not only via narrative and audio-visual content, but also by the rules, principles, and objectives governing what participants do. Moreover, many video games possess an ecosystem that impacts players’ interpretation of the game itself—for example, on-line hint guides and discussion groups as well as the opportunity to play in the
company of peers in either physical or virtual proximity. The chapter considers opportunities and challenges presented by each of these unique facets of video games for fostering the prosocial development of participants.

Section 2
Cognitive and Social Psychological Perspectives

Chapter 3
Videogames and Moral Pedagogy: A Neo-Kohlbergian Approach

Dan Staines, The University of New South Wales, Australia

The Four Component Model of Moral Functioning is a framework for understanding moral competence originally developed by James Rest and subsequently revised with Dacia Narvaez. It posits that moral competence can be broken up into four distinct components: moral sensitivity, moral judgment, moral motivation, and moral action. The purpose of the present chapter is to demonstrate, via an examination of three commercial off-the-shelf (COTS) videogames, Ultima IV, Fallout 3, and Mass Effect, and how this model can function as a blueprint for the design of moral content in games intended for pedagogy and entertainment.

Chapter 4

Jaroslav Švelch, Charles University in Prague, Czech Republic

This chapter presents a theoretical model for analyzing the challenges inherent in the implementation of moral choices in single-player avatar-based video games. Based on previous research in moral psychology and game studies, the chapter investigates the relationship between the player’s moral emotions and the events brought about in the fictional world of a video game. The author finds two factors that govern the identification with the moral content of the game’s fiction: the implementation of moral agency into the game through two basic scenarios (fixed justice and accumulation of deeds), and the style of gameplay the player chooses to follow. Numerous examples, from interviews, on-line discussions and gaming press, are offered as instances when players feel moral emotions about im(moral) actions they have taken in a video game.

Chapter 5
Playing with Ethics: Experiencing New Ways of Being in RPGs

David Simkins, University of Wisconsin-Madison, USA

Role playing games are good spaces for ethical play. Participants can take on roles very different from their own and experience the world through a variety of social contexts. This form of play can be encouraged by good game design principles including the balanced use of consequence, mirroring, social context and freedom. This chapter examines the structure of ethics in role playing games and uses case studies of expert role players and analysis of game design to explore the effective use of the four design principles in popular games.
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   Roger Travis, University of Connecticut, USA

Plato’s cave, when read with attention to its ludic element, provides a model for the way video games can teach ethics. This chapter describes the cave-culture-game, the interactivity of the prisoners of the cave with the shadow-puppet play. It argues that on its own, the cave-culture-game gives insight into the standard reproduction of dominant ideological ethics by most games that have frameworks of ethical choice. The attempted disruption of this cave-culture-game by the philosopher, however, gives additional insight into the ethical potential of video games. To explore this, the chapter provides a close reading of 2K’s Bioshock, which shows how video games can teach ethics through disruptive gestures such as the forced killing of a major character.

Chapter 7
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   John Nordlinger, Microsoft Research, USA

Many of the opportunities in the virtual world are not available in the physical world, others open our eyes to real world opportunities we couldn’t imagine and teach us vocabulary and skills applicable to the real world. This chapter explores some of the connections between virtual decisions and real consequences, as envisioned in thought experiments of early philosophers from both eastern and western traditions.

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   Erin Hoffman, Philomath Games, USA

The interactive medium is often discussed as being possibly the ultimate in “meta” studies, touching virtually every discipline, and yet it is rarely discussed in serious terms of one of the most comprehensive of humanities: philosophy. Correspondingly, philosophy and the traditional humanities have historically distanced themselves from games, relegating them to some curious and inconsequential sub-study of cultural anthropology, if they are studied at all. Yet it is the very human foundational compulsion to contemplate death—as the chapter shows through the works of philosophers Søren Kierkegaard and Ernest Becker—that drives much of the violent content that makes the video game medium a lightning rod for cultural scrutiny and controversy. The chapter explores a number of games, including the controversial Super Columbine Massacre RPG!, through the lens of existential death-anxiety to show how video games represent contemplation of fundamental ethical concerns in the human experience.

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What Videogames have to Teach Us about Screenworld and the Humanistic Ethos ......................... 125
   David Phelps, Indiana University, USA
Recent societal critiques air concerns about the pervasiveness and ubiquity of screen-based technology, charging that screens place the development of imaginative, relational, reasoning, and appreciative faculties at stake. Many of these critiques suffer, however, from a sensational and moralistic formulation. To move forward the ethical investigation into videogames, a value system, the Humanistic Ethos, is introduced and articulated in terms of observable qualities along four dimensions—the Poetic Imagination, Dialogic Relations, Systemic Thinking, and Existential Vigor. A survey of videogames along with two case studies develop these dimensions within their technical, social, and personal contexts revealing the delicate interplay between designer, game and player. Design principles compatible with the Humanistic Ethos are discussed. Limitations and future directions are also considered.

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**Chapter 10**

Ethics at Play: Patterns of Ethical Thinking among Young Online Gamers................................. 151

*Sam Gilbert, The GoodPlay Project, Harvard Graduate School of Education, USA*

This chapter discusses how young people think about ethical issues in online games as seen in the GoodPlay project’s interviews with fourteen online gamers, ages 15 to 25. After providing background on the GoodPlay project and relevant moral psychology and video games research, the chapter describes individualistic, interpersonal, and communal models of ethical thinking that young players hold. These observed models suggest that online games are encouraging players to practice sophisticated ethical thinking skills and therefore might be valuable tools for fostering ethical thinking. The chapter concludes with a discussion of future directions in the study and use of games to foster ethical thinking.

**Chapter 11**

Family Fun and Fostering Values ....................................................................................................... 167

*J. Alison Bryant, PlayScience, USA*

*Jordana Drell, Nickelodeon/MTV Networks, USA*

This chapter looks at the interplay between video and computer games and values discourse within families. It focuses on the theoretical models for values discourse within families; the role that video games can play in values discourse within the family; the role that both research and design have in the game creation process; and the future opportunities for engaging values and ethics discourse within the family context through gaming.

**Chapter 12**

Cognitive Science Helps Formulate Games for Moral Education...................................................... 181

*Neha Khetrapal, University of Bielefeld, Germany*

This chapter emphasizes that cognitive science can play a significant role in formulating games for moral education. The chapter advocates an encompassing approach where games should be developed by concentrating on the interaction of users with their contexts. Ethics entail moral principles and ethical
decision-making is dependent upon developing cognitive structures. Therefore, while designing games one needs to consider developmental trends and information processing models. The framework developed here further emphasizes the need to develop moral games based upon principles of good games in general. There should also be stringent criteria to gauge the success of the game in real world contexts, especially if these games function as part of a school curriculum for moral education. Finally, the chapter concludes with issues surrounding the implementation of such technologies.

Chapter 13
Moral Development through Social Narratives and Game Design .................................................... 197

Lance Vikaros, Teachers College, Columbia University, USA
Darnel Degand, Teachers College, Columbia University, USA

Morality originates in dispositions and attitudes formed in childhood and early adolescence. Fantasy play and both the perspective taking, and interpersonal negotiation of conflicts that it affords, have been causally linked to the development of moral reasoning and a theory of mind. A closer examination of the self-regulated processes involved implicates a number of contributing factors that video games and virtual worlds are well suited to encourage. The chapter presents recommendations suggesting the ways in which such technology can facilitate moral development by supporting and simulating diverse social interaction in ways leading to the promotion of self-efficacy, critical thinking, and consequential decision making.

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Chris Swain, USC Games Institute and University of Southern California School of Cinematic Arts, USA

Humans learn through play. All games are learning devices—though most teach the player how to play the game itself and do not strive to communicate information with utility in the real world. This chapter is for designers seeking to design game mechanics to communicate learning objectives, values, and ethical messages. The term “mechanic” describes both (a) the actions a player takes as she interacts in the context of a game (e.g., run, jump, shoot, negotiate) and (b) the response of the system to player actions. When the mechanics of a game align with the values the game’s designer strives to communicate, then the player is learning those values experientially. Learning science shows us that this type of experiential learning is a powerful and natural type of learning for humans. The chapter includes six best practices for achieving success, which are supported by case study examples from leading designers in the field.

Chapter 15
Applied Ethics Game Design: Some Practical Guidelines ................................................................. 236

Rudy McDaniel, University of Central Florida, USA
Stephen M. Fiore, University of Central Florida, USA
This chapter presents case studies of two original games entitled Veritas University and Knights of Astrus. Through these case studies and a review of relevant literature, the authors explore the content creation of, and theoretical rationale for, the design and development of ethics games. Both games use the Adobe Flash® platform and are geared toward an undergraduate student audience as casual games to be completed in a few hours of gameplay. To ground the development of these games, the chapter reviews contemporary research on identity, cognition, and self in relation to video game environments; and argues for the need for further research and development in this area. From this literature base and applied design experiences, the authors offer six guidelines as practical suggestions for aspiring ethics game developers.

Chapter 16
Using Mission US: For Crown or Colony? to Develop Historical Empathy and Nurture Ethical Thinking
Karen Schrier, Columbia University, USA
James Diamond, Education Development Center/Center for Children & Technology, USA
David Langendoen, Electric Funstuff, USA

In this chapter, the authors describe Mission US: For Crown or Colony?, a history game for middle school students that we collaboratively designed, developed and tested. The chapter argues that empathy is an important component of ethical thinking, and that history games, if well designed, can support the practice of empathy. The authors analyze how they designed Mission US: For Crown or Colony? to encourage the development of historical empathy and ethical thinking skills. They also relate their design challenges, and the ethics of representing the past in games. The chapter concludes with real world results from classroom implementation of the game, and design recommendations for creating games for historical empathy.

Chapter 17
Reacting to Re:Activism: A Case Study in the Ethics of Design
Colleen Macklin, Parsons the New School for Design, USA

This case study of the big urban game Re:Activism examines moments where failures in the game’s design revealed how the design process itself is a set of ethical choices and actions, illustrating specific strategies for integrating more interesting choices into games. Ethics in a game is not inherent; it is enacted through rules, mechanics and play. The chapter presents a “thick description” of the first time Re:Activism was played in which the losing team paradoxically had the kind of engaging experience the designers sought to create.

Chapter 18
Reality from Fantasy: Using Predictive Scenarios to Explore Ethical Dilemmas
Stephen R. Balzac, 7 Steps Ahead, USA

A major difficulty with teaching ethics is that it is relatively easy for participants to state the “right” thing to do when they have no personal stake in the outcome. One way of dealing with this problem is to teach ethics through engrossing, immersive, predictive scenario games in which players are forced to deal with ethical issues as they arise, where they have a personal stake in the outcome, and where there
is not always a clear right answer. Predictive scenario games are a form of serious live-action roleplay-
ing in which participants take on the roles of people involved in complex situations. In these games, knowledge of the game world is distributed among the players through overlapping and conflicting goals, and in which ethical dilemmas emerge naturally, without fanfare, much as they would in the real world. There is a high level of tension between cooperation and competition among the players. This structure creates the opportunity for players to experience the consequences of their own judgment in realistic, ethically fraught situations, to receive feedback, and to engage in constructive discussion, within a relatively short time period.

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Brenda Brathwaite, Savannah College of Art and Design, USA
John Sharp, Savannah College of Art and Design, USA

This chapter provides two entry points into Brenda Brathwaite’s series The Mechanic is the Message, a group of six non-digital games that explore difficult topics. Brathwaite writes from the perspective of the game’s designer, covering the inception of the series, its inspirations and the challenges inherent in working with content one might deem questionable in the game space. Sharp, on the other hand, writes from the perspective of a game designer and an art historian and critiques the game’s entry and reception into both the world of art and games.

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Foreword

“What a videogame does at heart is teach you how, in the midst of utter chaos, to know what is important, what is not and act on that” -- Colonel Casey Wardynski

“I’m reviewing the situation. Can a fellow be a villain all his life?” or so asks Fagin, the scheming and ruthless mastermind of an army of thieving young boys, at a key moment in Oliver!, the musical based on Charles Dickens’s Oliver Twist. Fagin’s “situation” may be an odd place to start in thinking about the potential role of games in providing ethical and moral instruction—after all, Dickens used Fagin to embody the negative influences that besieged young men when society turned their backs on them—but bear with me.

In Oliver!, through the song, “Reviewing the Situation,” we have a character digging deep into his own goals, values, and place in the world, and openly proclaiming that his experiences as a “villain” make him ill-suited to most of the trappings of a “normal life.” Fagin’s self-reflection leads him to construct and test a series of scenarios (marrying, joining respectable society, getting a job, living alone, freeing the young men in his employee, reaching old age), each embodying an alternative version of himself. Fagin plays out their consequences as a series of thought experiments, before pulling back and deciding to “think it out again.” In the course of “Reviewing the Situation,” Fagin engages in a range of different cognitive processes—projecting alternative versions of himself, and speculating about possible choices and anticipating their consequences—all in a particular kind of mental space that has no immediate consequences for his current social situation, though it has the potential to reshape the way he sees himself and his place in the world. Here, for example, he explores what it would be like to work for a living: “Is it such a humiliation for a robber to perform an honest job? So a job I’m getting, possibly, I wonder who my boss’ll be? I wonder if he’ll take to me...? What bonuses he’ll make to me...? I’ll start at eight and finish late, At normal rate, and all ...but wait! ...I think I’d better think it out again.”

Now consider a typical adolescent, seated in front of her computer screen, beginning to construct a character for a role playing game, and facing the same range of questions about her potential identities and goals. Should she join the dark horde, embrace a life as a villain, commit atrocities on other players, and in the process, begin to experiment with and potentially exorcise the darker side of her own personality? Or, should she become one of the good ones, going out to do heroic deeds, sharing the loot with others in her party, rescuing those in distress and helping newbies learn to play, and developing a sense of responsibility and accountability to others in her guild? Should she design an avatar that reflects the way she sees herself or should she embrace a fantasy radically different from her real world personality or situation and in so doing, see what it might be like to walk in a different set of moccasins?

Like Fagin, she can try on different personas, test different scenarios, and imagine alternative moral codes through which she might navigate the challenges of her day-to-day existence. She has the option of taking risks, dying, rebooting, and exploring another course of action: “I think I’d better think it out
again.” While young people have often found it difficult to anticipate the future consequences of their current actions, the game offers her a powerful tool through which to accelerate life processes and thus play out in the course of an afternoon several different scenarios and their consequences. And through in-game cameras that allow players to record and replay their actions, she can literally review the situation, going back to key choice points and retrospectively evaluate where she went wrong and how bad decisions led to negative consequences. Seen in this way, the computer game constitutes an incredible resource for self-reflection and personal exploration, one with rich potentials for moral and ethical education. No other current art form allows such an intense focus on choices and their consequences; no other art form allows us this same degree of agency to make our own decisions and then live through their outcomes.

Shortly after Columbine, while the news media was full of sensationalistic speculations about whether video games constituted “murder simulators” and whether they deployed operative conditioning to brainwash otherwise normal young men into school shooters, MIT’s Comparative Media Studies program was approached by a group of business men who had plans to construct a Christian-themed amusement center. They had taken at face value the prevalent misconception that games were a magic device that could turn good kids into bad people. They wondered if it might be possible to reverse engineer existing games and design play experiences that could transform the bad kids into good ones (or at least into better ones) through reinforcing pro-social values. Thankfully, we were able to convince the group that what they were proposing relied on a reductive model of the educational value of games, though that critique left open the prospect that games might nevertheless be an appropriate platform for exploring ethical issues. And it is this terrain that is so well explored by the various contributors to this volume.

While these contributors approach the ethical value of games from many different theoretical and disciplinary perspectives, I am happy that none of them start from the premise, widespread less than a decade ago, that games were programs that programmed their players. Thankfully, games are now being discussed through a language of media ethics, which emphasizes what the player does with the game, rather than a language of media effects, which stresses what the game does to the player.

Instead, most chapters in this volume start from a scenario similar to the one involving Fagin illustrated above. That is, games represent tools that enable personal reflection and ethical exploration, often through the construction of what James Paul Gee (2007) calls Projective Identities. Gee uses the word, Projective, here in two senses. First, the player projects aspects of herself onto the game avatar, maintaining an emotional relationship with this fictive identity that is intense and intimate and yet at the same time, preserving some degree of separation and distance from the game character, who is like us and yet not us, even if we are able to control the character’s actions. Second, the player, in embracing the character, also embraces their “project”: the game constructs a set of goals and roles that motivate, and to some degree constrain, our actions and determine what the costs and rewards may be for different choices we make during our play experience. Taken together, these two conceptions of “projection” explain what allows games to serve important ethical functions. Such a balance between intimacy and distance, between free will and pre-articulated rules, roles, and goals, allows us to embrace a particular stance toward the represented events, allowing players to speculate and explore ethical alternatives. The game thus supports both embodied/situated and abstract moral reasoning, often at the same moment. Our agency over the character pushes well beyond the empathy we might feel for a fictional figure in any other medium, and yet we hold onto the recognition that the character lives in a world that operates on fundamentally different principles than our own.

Much like Fagin, who discovers that he cannot change who he is, even at what seems to be a turning point in his life, the player controls a character and yet also faces fundamental constraints in the character’s programming that restricts what she can do with them. One gamer/filmmaker (Jenkins and
Bertozzi, 2007) once described to me that the process of making movies using *The Sims* is like working with trained animals: you can try to get them to do what you want but you can’t prevent them from peeing on the floor. Fagin, like Jessica Rabbit, isn’t bad; he’s just drawn that way, or rather, he is the product of a lifetime of choices that determine that he may indeed be a villain all his life. The game character is not altogether bad, but it is really difficult (though rarely impossible) for a player to override its basic programming. You can play *Grand Theft Auto*, going around rescuing people, rather than bashing them in the head with a baseball bat, but what’s the fun in that? The player who makes that choice faces a penalty, pays a cost, which, in the end, suggests just how challenging it can be for an ex-con to change their situation.

The game designer, Will Wright (*The Sims, Spore*) (Personal Conversation, 2006), has said on more than one occasion that games are the only medium that allows us to experience guilt. Think about it. If a character in a novel or a film does something we find morally reprehensible, we can always pull away from the character; we can blame the author for making immoral or amoral choices; or we can critique the character as a “villain” who does not deserve our moral sympathy. Yet, in playing a game, should our protagonist make a choice that has reprehensible consequences, we as players are always partially to blame. We mashed the button; we moved the stick; we made the choice that put the character into that situation in the first place, even if we rarely made the choice from a position of total control. Confronting such a situation, we learn something, potentially, about ourselves and we learn something, potentially, about the rule system of the game itself.

I say the player “potentially” learns something through the rule system because there is no guarantee that either the game design or the player’s mental attitude will yield meaningful ethical reflection. Such a moment of reflection is only as powerful as the ethical model underlying the game allows it to be. The game as a system simulates certain processes according to pre-coded principles; the designer makes choices about what kinds of consequences might emerge in the course of the game play; the designer often frames the choices the character confronts and determines what possibilities are available to the player at any given moment of play. A powerful game design can embody and dramatize certain core ethical debates; it can provide resources that encourage us to ask certain questions and enable us to explore their ramifications. The game designer can arbitrarily narrow the range of potential responses, so that in confronting an ethically-charged situation, we may have no options but to shoot or flee. Yet, throughout the history of the medium, there have been designers—Peter Molyneux (*Fable, Black And White*), Brenda Laurel (*Purple Moon*), and Wright himself come to mind—who recognized and realized some of the potential games offer as ethical systems. Game designers talk about “possibility spaces” to describe the range of potential actions built into the game, yet we might also talk about the “probability space” to reflect the likelihood that a player will chose one set of options over another, much the way a magician may “force a card,” making it harder for the rube to foul up the trick. The ethical system of a game emerges both from what the game allows the player to do and from what the game doesn’t support or actively discourages.

And I say that the player “potentially” learns something about themselves because the potential for self-reflection rests also on the mental framing and social context the player brings to the experience. Again, assuming we reject the brainwashing or conditioning or programming metaphors, then we have to assume that the player takes active agency over what they do in the game and over what they bring from their game play experience back with them into the world. For reflection to occur, the player has to invest enough of themselves—intellectually, emotionally—into the game to be willing to ask hard questions about the events that occur and their relationship to their own everyday experiences. They have to engage in what various people have called “hard fun” or “serious play,” rather than dismiss the game play as inherently frivolous and meaningless. The Good Play project at Harvard University (James
et al., 2008), for example, has found that many young people do not apply their emerging ethical understanding to online experiences because they have been taught by their teachers and parents that what happens on line doesn’t really matter. They often ignore the humanity of the actual people with whom they interact online and aren’t always projecting ethical questions onto the bytes and pixels with whom they interact in a computer game. Yet there is some hope that pedagogical interventions may teach players new ways to deploy games as vehicles for self exploration, and may give them the ethical frameworks through which to ask questions about and through their play which might not emerge elsewhere in their everyday lives. As players review their situation, they may do so in an opportunistic or formalistic way, seeking only to best the game’s system and enhance their opportunities to win. But they may also do so on a deeper level, seeking to use the game as what Sherry Turkle (2007) might describe as “a tool to think with,” asking themselves why they are drawn toward certain kinds of characters or why they favor certain options in their play over time.

I am often reminded of one of my former graduate students—a young mother who had gotten divorced just before she left Europe to come to our program. She was spending time in the evening playing The Sims and using her fictional persona to imagine what it would mean for her to re-enter the dating scene. What she did not know was that her preteen son was playing the same game, entering the same reality, and seeking to construct for himself the perfect family. As fate would have it, her more seductive character lured away the husband from her son’s idealized family, shattering the illusion he had constructed for himself. When the mother discovered what she had done, she was horrified by the implications of her own choices and soon mother and son were playing together, doing what they could to heal the rift in the fictional marriage, only to discover that what had been done could not be undone. The game, thus, became a tool for them to talk through the dramatic changes that were rewriting the terms of their relationship to each other, allowing the mother and son to share some of their emotional experiences and to better understand how choices they were making impacted each other’s lives. They could do so both because the game’s programming opened up or foreclose certain options in a way that offered a particular model of the moral universe and because the players were receptive to the possibilities that there might be meaningful connections drawn between their game world and real life experiences. The two had conversations through their game play that they had found emotionally difficult to confront on a more literal terrain.

Of these two challenges (encoding a moral vision into the game, developing a moral framework around the game play experience), the first requires an intervention on the level of design, or encouraging the people who make the games to take seriously their potential as a medium for exploring ethical issues. The second requires an intervention on the level of education, or fostering a mode of play that encourages players to use games to perform meaningful thought experiments and using them as a vehicle through which to explore and refine their own emerging ethical perspectives. Here again, we are well served by this collection, whose contributors seek both to understand specific games as sites of ethical exploration (and thus to focus us on design issues) and seek to place games in their larger social context or discuss ways that games can be deployed pedagogically to encourage ethical reflection. Keep in mind, as you read them, that games are still an emerging medium, which is still trying to find and achieve its fullest potential. Game studies as a discipline is at an equally formative stage; each new book helps to expand the range of theoretical paradigms and methods that will shape the work of future generations. In recent years, we’ve seen a growing body of scholarship that explore games as a space for aesthetic expression and experimentation, as a form of political rhetoric that models the world it seeks to change, as a set of pedagogical practices that encourages a new epistemic understanding, as a model of economic relations that allow us to suspend or reshape the rules governing human commerce, and as a set of geographic practices that encourage us to see the urban landscape through new eyes and engage with the community.
around us on new terms. It is exciting to see this book expand these discussions to consider more fully what games might teach us about morality and ethics and as importantly, how they may do so.

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September 2009

REFERENCES


Preface

*Ethics and Game Design: Teaching Values through Play* is the first book in a two-volume series addressing an emerging field of study: ethics and games. In it, we challenge scholars and researchers to answer the following questions: How do we better design and use games to foster ethical thinking and discourse? What are the theories and methodologies that will help us understand, model, and assess ethical thinking in and around games? How do we use games in classrooms and informal educational settings to support moral development? This publication is the first academic collection to address these questions.

Ethics is a culture’s system of choices and moral judgments that are thought to achieve the life of a good human being (Sicart, 2005), as well as an individual behavior; the process of making choices according to one’s own conception of how to be a “good” person. Digital games, while highly varied in form and function, are rule-based systems with “variable and quantifiable outcomes; where different outcomes are assigned different values; where the players exert effort in order to influence the outcome … and the consequences of the activity are optional and negotiable” (Juul, 2005). When we put these two resources together—ethics and digital games—the result is more than the sum of the parts. The field can be broadly defined as the study of using games to support ethical thinking, reasoning, and reflection, as well as the ethical implications of game development choices, design possibilities, and distribution methods. The scholarship that is emerging to address these intersections touches on a great many disciplines—philosophy, game design, learning theory, cognitive science, psychology, and social theories. As we delve deeper into the new field, it ultimately invites us to reevaluate what it means to be human and gain insight into our own humanity.

Digital games are particularly well-suited to the practice and development of ethical thinking, since, for example, the computationally rich media platform offers the ability to iterate and reflect on multiple possibilities and consequences. Games also provide a virtually authentic content within which to practice and experience ethical dilemmas and decision making. They enable players to reflect on their decisions and outcomes, and allow them to consider the implications of their choices, without many of the risks of real-world consequences (Schrier and Kinzer, 2009).

The notion that games can help people reflect on values is both innovative and as old as humankind. Play has always been a way to allow people to experiment with other perspectives, to reenact scenarios and possibilities, to practice collaborating and competing, and to try out different roles. Some scholarship today focuses on whether video games are too violent, or if they too powerfully influence the creation of bad values. We seek to look beyond whether games are inherently good or bad, and instead think about how people negotiate values, and how play might foster reflection on one’s own, society’s or a particular game’s ethics. The authors in this collection want to understand the potential for digital games to motivate and develop thought on ethics and values.

Ethical reasoning and discourse has always been an essential component of nurturing a healthy, diverse citizenship. As new forms of cultural expression emerge and access expands to new participatory
(and global) cultures, both young people and adults need to be adept at negotiating ethical dilemmas in ever-changing environments and communities. More and more young people are becoming media producers, as well as consumers, yet they may not understand how to manage and negotiate ethical dilemmas, or how to behave in participatory communities (Jenkins, 2006). With these cultural changes occurring, educators are struggling with how to teach these essential skills to their students and integrate them into curricula (Schrier and Kinzer, 2009). Simultaneously, media practitioners and developers are increasingly interested in creating games and other media that consider and respond to ethical and social issues. Game publishers, parents, journalists, players, and creators are also searching for ways to talk about ethical issues surrounding games, such as the representation of violence, gender, race, and sex in games. And game developers are integrating ethical choices into commercial off-the-shelf games, such as the Fable, Fallout and Mass Effect series, to enable players to grapple with real-world complexities within the fictional game world. As games become more embedded into everyday life, understanding the ethics of their creation and development, as well as their potential for learning ethics, becomes more and more relevant.

The new discipline invites, and even requires, a variety of different perspectives, frameworks, and critiques—from computer science, education, philosophy, law, media studies, management, cognitive science, psychology, and art history (Gibson and Baek, 2009). A major goal of this collection is to bring together the diverse and growing community of voices and begin to define the field, identify its primary challenges and questions, and establish the current state of the discipline. Such a rigorous, collaborative, and holistic foundation for the study of ethics is necessary to appropriately inform future games, policies, standards, and curricula.

Each author in this volume uses a unique perspective to frame the problem: some implement cognitive or social psychology methodologies, others come from a design background, some focus on pedagogical theories, while others employ a philosophical angle. Some are game designers and practitioners, others are researchers, and still others theorists; many are hybrids of all three. We hope this multidisciplinary approach will serve readers who want to view ethics and games from other perspectives, and use those perspectives to inform their own research directions. We also hope the collection will inspire further interdisciplinary dialogue and research, and continue to build the ethics and games community. The following is an overview of the chapters in this first volume of the collection:

In Chapter 1, Values between Systems: Designing Ethical Gameplay, Miguel Sicart begins to define the notion of ethical gameplay as a consequence of game design choices. He uses games, such as Fallout 3, Braid, Call of Duty 4, and Shadow of the Colossus to explore this definition and to help him devise a new methodology for designing ethical gameplay, called ethical cognitive dissonance. Using this, he also describes how this model can be applied, and what types of challenges and questions it exposes.

Chapter 2, Gene Koo and Scott Seider’s Video Games for Prosocial Learning sets the stage for thinking about how to better foster prosocial development through games. The authors give a detailed overview of theoretical frameworks from moral education, character education and care ethics. They consider the unique characteristics of games, using research from games and media studies. In doing this, they seek to move the discussion from thinking about games as messages transmitters, to thinking about how players interact with games and the ecosystem around games, using as examples Zoo Tycoon and the Grand Theft Auto series. In conclusion, they provide a list of questions to frame future research.

After setting the stage, the next chapters provide perspectives from the cognitive sciences and social psychology fields. In Chapter 3, Dan Staines, in his Videogames and Moral Pedagogy: A Neo-Kohlbergian Approach, provides a detailed overview of cognitive theories related to moral development, with particular attention to Lawrence Kohlberg and neo-Kohlbergian models. He uses Kohlberg’s Four Component Model to critique the moral content in three COTS videogames, Ultima IV, Fallout 3, and
Mass Effect. Through a detailed account of these games, and their relationship to Kohlbergian theories, Staines investigates the extent to which those approaches can inform moral content in games.

In Chapter 4, Jaroslav Švelch’s The Good, The Bad and The Player: The Challenges to Moral Engagement in Single-Player Avatar-Based Video Games, he develops a theoretical model to unpack design challenges related to incorporating moral choices in games. His novel model is based on moral psychology and game studies theories, as well as examples from interviews, and online discussion transcripts. His model incorporates the relationship between the player’s emotions and the moral events in the video game, as well as the player’s style of game play and the moral content of the game. Svelch then provides detailed accounts of how his model informs moral engagement in single-player avatar-based games, including Fallout 3, Fable II, Mass Effect, Bioshock, and Baldur’s Gate II.

In Chapter 5, Playing with Ethics: Experiencing New Ways of Being in RPGs, David Simkins focuses on role-playing games. He argues that they are particularly amenable to ethical play, and uses philosophical, psychological and game studies frameworks to review good design principles for encouraging ethical play. He uses Final Fantasy VI, Elder Scrolls IV: Oblivion, and Fallout 3 to tease out his frameworks and base his design recommendations.

In the next section, the contributors look at the question of games and ethics from a philosophical perspective. In Chapter 6, Bioshock in the Cave: Ethical Education in Plato and in Video Games, Roger Travis provides a close reading of Bioshock through the lens of Plato’s Cave, and through this analysis, provides insight into the potential for games to teach ethics.

Chapter 7, John Nordlinger’s Virtual Ethics: Ethics and Massively Multiplayer Online Games, discusses how characteristics such as emergent populations, virtual economies, and other affordances of new media, allow digital games such World of Warcraft and Everquest, to offer a fresh and dynamic way to pose and answer philosophical questions that have arisen for hundreds of year but hitherto have not had an interactive, virtual venue for exploration and discussion.

Erin Hoffman, in Chapter 8, uses philosophical frameworks to delve deeper into an important topic: the meaning of death in games. In her Sideways into Truth: Kierkegaard, Philistines, and Why We Love Sex and Violence, she uses Kierkegaard and Becker to understand the function of death in videogames throughout history, including Super Columbine Massacre RPG, Zork, Death Race, Grand Theft Auto, and World of Warcraft. She unpacks the rise of controversy surrounding games, and reflects on the role that death plays in our lives.

David Phelps reverses the question of how we can use games to teach ethics, and uses philosophical and media studies frameworks to investigate what we can learn from games about human ethics. Chapter 9, his What Videogames have to Teach us about Screenworld and The Humanistic Ethos details the model of Humanistic Ethos and uses the case studies of Rock Band 2 and Portal to elucidate how the theory functions in today’s games.

In the next section, the contributors focus on youth, family and play, and how people interact with games and each other. In Chapter 10, Sam Gilbert, a researcher at the GoodPlay Project at the Harvard Graduate School of Education, gives us insight into youth’s ethical play styles. In his Ethics at Play: Patterns of Ethical Thinking among Young Online Gamers, he investigates how young people, age 15 to 25, think about ethical issues in online games. He describes three different models of ethical thinking and play styles, including individualistic, interpersonal and communal. By analyzing these models, Gilbert posits that we can better design games to support ethical thinking and different ethical play styles.

J. Alison Bryant and Jordana Drell don a researcher-practitioner hat, and review the interaction between games and values discourse in families. In Chapter 11, Family Fun and Fostering Values, the authors review family interactions with games, and discuss how to better foster values discourse in the family context using games.
In Chapter 12, Neha Khetrapal, in *Cognitive Science Helps Formulate Games for Moral Education*, proposes a synthesis of cognitive science, developmental psychology, and principles of good game design with theories of moral behavior to help guide the design of games for moral education. She carefully considers research related to children’s moral and cognitive development, and uses this to recommend curricula around the use of ‘ethics games in the classroom.

In Chapter 13, *Moral Development through Social Narratives and Game Design*, Lance Vikaros and Darnel Degand offer the perspective of developmental psychology and argue for the importance of social narratives in moral development. They consider how fantasy play can facilitate moral judgment in children. They provide an in-depth review of relevant theories, relate them to current games such as *World of Warcraft* and *The Sims*, and use this to provide recommendations of designing games to support fantasy play and moral development.

Finally, in the last section, the contributors provide practical accounts of the challenges of designing games for ethics. In Chapter 14, *The Mechanic is the Message: How to Communicate Values in Games through the Mechanics of User Action and System Response*, Chris Swain focuses on the mechanics of games and their relationship to ethics learning. To elucidate his points, he interviews leading practitioners in the field, and uses it to develop a set of best practices.

In Chapter 15, *Applied Ethics Game Design: Some Practical Guidelines*, Rudy McDaniel and Stephen M. Fiore detail accounts of two novel games, *Veritas University* and *Knights of Astrus*, which they designed. These two Flash games are targeted toward undergraduate students. Based on the authors’ reflections and implementation experience, they offer six practical guidelines for improving the design of ethics games.

In Chapter 16, *Using Mission US: For Crown or Colony? to Develop Historical Empathy and Nurture Ethical Thinking*, James Diamond, David Langendoen, and Karen Schrier describe their design experience collaboratively creating and researching a game for middle school social studies students. They argue that historical empathy is a key component of ethical thinking, and that games such as Mission U.S. can help support the practice of empathy. The game, *Mission US: For Crown or Colony*, developed by Channel 13, Electric Funstuff and EDC, serves as a backdrop for discussing issues of ethical game design and designing for ethics.

In Chapter 17, Colleen Macklin provides a “thick description” of an urban game, which mixed real world and digital elements. In her *Reacting to Re:Activism: A Case Study in the Ethics of Design*, she details the first time her game was played, and uses the player’s experiences to explore the ethics of game design. She discovers that sometimes failures and disruptions can inspire novel game ideas.

Stephen Balzac offers us a break from the digital with his case study of live-action role playing games for teaching ethics. In Chapter 18, *Reality from Fantasy: Using Predictive Scenarios to Explore Ethical Dilemmas*, he describes a series of predicitive scenario games, a form of live-action roleplaying games, in which participants need to reenact complex scenarios, such as a major health crisis. His research has implications for digital and non-digital games alike, and based on his design experiences, he recommends other avenues for future research in predictive scenarios.

In Chapter 19, Brenda Brathwaite and John Sharp also write about non-digital games in *The Mechanic is the Message: A Post Mortem in Progress*. In this unique chapter, Brenda Brathwaite provides a personal account of her design of *Mechanic is the Message*, a series of non-digital games. John Sharp, her colleague, then takes the reins and analyzes her games from a curatorial and art historian perspective. In it, they ponder the ethics of game design from their different points of view.

*Karen Schrier*

*David Gibson*
REFERENCES


Acknowledgment

It’s not easy to pull together a cohesive, holistic collection of research to serve as a foundation for a new field of study. To do so, we need to bring together the appropriate voices, contextualize the relevant theories and methodologies, and frame the right questions. The effort must acknowledge the many complexities of the field, while also keeping the content accessible to a wide audience. Moreover, the study of ethics and games has additional challenges—it requires practitioners, researchers, and theorists from diverse disciplines to help define the field. Yet it is the very need for multidisciplinary lenses that makes the field of ethics and games so interesting and appealing. I believe this study—and the perspectives it brings—will truly innovate our thinking about what it means to be human in the 21st century.

Currently, there are numerous disparate centers, organizations, individuals, departments, consortia and labs that, despite their different origins, are working to better understand the question of how to use games to support ethical thinking and values discourse. I thank them for their groundbreaking efforts in approaching these complex questions. I am inspired by their enthusiasm, and motivated to continue to bring together this community. I am eager to see what they discover about ethics and games, and what it tells us about our humanity.

I want to thank my parents, Janet and Steven Schrier, and my brother and sister-in-law, David and Tracy Schrier, for providing endless encouragement, lots of love and humor, and moral support. My interest in games and ethics comes from the values and passions they continue to share with me. I would like to thank my grandparents, Anne and Bernard Berner, who were always happy to play card and board games with me. I also want to thank my friends and colleagues in the games industry, including the members of the International Game Developers Association (IGDA), who continually reinvigorate my passion for developing, writing about, and playing games. Their insight and enthusiasm helps me remember why games are so meaningful to me.

A huge thank you to my co-editor, David Gibson, a leader in the field of ethics and games, who provided enormous help with everything from envisioning the book’s themes, to shaping each author’s contribution. Ever since he was editor of my first published chapter, he has provided a huge amount of support and encouragement. I would not have been able to conceive of and then accomplish this book without him.

I want to thank my past and present graduate advisors, who have helped shape my ideas and inspired me to continue to pursue this field of study. Henry Jenkins III, my mentor while I was a graduate student at MIT, generously offered to write the preface to this book. Chris Dede, from the Harvard Graduate School of Education, has provided tons of encouragement and advice throughout the years. My current doctoral advisor, Charles Kinzer, at Columbia University, is extremely supportive of my endeavors in school and beyond. He served on the editorial board of this publication, and was my co-author on the chapter where I first began to imagine the possibilities for delving into the field of ethics and games.

I am very grateful to the editors and staff at IGI Global for their professionalism, encouragement and care. I truly enjoyed working with the editors, including Tyler, Jan, Christine, Kristin, and Katy and I look forward to working with them on Volume II of this collection.
I would like to thank the members of the editorial advisory board—Mia Consalvo, Nathaniel Croce, Drew Davidson, Stephen Jacobs, Charles Kinzer and Jose Zagal. They helped immensely in judging and reviewing the contributions, and are themselves inspirational leaders in the field of games. Finally, I want to thank all the contributors to this volume, who each worked tirelessly to write thoughtful and unique chapters, and whose research will help to shape this exciting new field.

Karen Schrier
Section 1
Situating Ethics and Games
Chapter 1

Values between Systems:
Designing Ethical Gameplay

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ABSTRACT

In this chapter the authors define ethical gameplay as a consequence of game design choices. The authors propose an analytical model that defines ethical gameplay as an experience that stems from a particular set of game design decisions. These decisions have in common a design method, called ethical cognitive dissonance, based on the conscious creative clash between different models of agency in a game. This chapter outlines this method and its application in different commercial computer games.

INTRODUCTION

It all begins in the Middle East. Two militiamen drag me to an old car. I am powerless. I can only look around, wonder when my time for revenge will come. I am thrown in a car. I am hit. I think: my time will soon come. The car drives through narrow streets plagued with troops. It is clearly the aftermath of a recent uprising. The car stops. I am knocked out. I wake up in what seems a market place. I am being dragged to the centre of a square. There is a pole there. It is waiting for me. I can hear the roaring crowds. I see him, my enemy. I think: my time shall soon come. I am tied to the pole. Time slows down. He approaches. He shoots. I die.

The introductory sequence to Call of Duty 4 (Infinity Ward, 2007) is a brief narrative masterpiece that combines player agency and a highly effective narrative. At all times, the player is free to look around while she is being driven around the fictional Middle Eastern city where part of the action takes place. But looking around is the only possible action: at this point in the game, players are still unarmed and at the mercy of their enemies. Since the game is a conventional first person shooter, players may await eagerly the time where they are given weapons and a chance for revenge. But that time never comes: the introductory sequence concludes with
the execution of the character the players were controlling. After that, the game starts, but for many, what came afterward could not be played like any other FPS games.

*Call of Duty 4* uses game design techniques to convey a gameplay experience of deep moral dimensions. The introductory sequence gives agency to players, but only so much that they can feel helpless and disempowered. This design breaks the conventions of the genre, suggesting a critical interpretation of the game itself. *Call of Duty 4* can be enjoyed as just an action game, but many of its design elements are encouraging players to take a critical stance toward what they see and experience. The critical experience of simulated modern warfare is what makes *Call of Duty 4* a moral game.

But, what constitutes a moral game? In this chapter I will explore the nature and design of ethical gameplay, understood as the moral experience of a computer game. Introducing an ethical dimension in computer games is not a new aspiration: *Ultima IV* (Origin Systems, 1985) already included a basic morality system as part of the core gameplay. Ethics-based decision making, however, has more recently become a unique selling point in many commercial titles, from *Neverwinter Nights* (BioWare, 2002) and *Knights of the Old Republic* (BioWare, 2003) to the *Fable* (Lionhead Studios, 2004, 2008) saga or *BioShock* (2K Games, 2007).

Most of these titles understand ethical gameplay design as the elaboration of narrative-based decision trees that the player has to follow to complete the game. These decision trees are articulated accordingly to an often binary good/evil moral system. Ethics, however, is more than just making choices (Tavani, 2004). Ethics describes the rationale for the moral systems with which we live. In the case of games, then, ethics should be understood as the systems by which we take choices and experience the gameworld in which we are voluntarily immersed.

This understanding of ethics in computer games has already been introduced in the work of practicing game designers (Hocking, 2007) and in the field of Value Sensitive Design (Flanagan, M. & Nissenbaum, H., & Howe, D. & Belman, J. 2007). In this chapter I am specifically looking at the tradition of design reflections on the ethical capacities of game design, or how to create games that convey ethical experiences. This chapter focuses on game design as a general practice, and in computer games as valuable means for creating mature moral experiences.

I propose a model that explains the structure of computer games as creative objects that can generate ethical experiences in their users. The model is based on game design research (Juul, 2005; Järvinen, 2008), adapting the concept of Levels of Abstraction (Juul, 2007) to provide a conceptual framework for the understanding of ethical gameplay. This model is an abstraction of the structure of a game system, deconstructed into the elements that are relevant for the design of ethical gameplay. With this model I suggest that we need to understand games both as systems and as gameworlds, and that each of these levels requires a different, yet complementary player model who experiences the game in a morally relevant way. Based on this model, I will propose a definition of ethical gameplay that will lead to the suggestion of a design principle for the creation of ethical experiences in players. This design principle should be understood as an ideal that should inform different design approaches that can be applied to the creation of ethical gameplay.

This chapter uses knowledge and theories from game design, user interface design and user experience, and philosophy, in order to develop the aforementioned design model and principle that guide my understanding of what ethical gameplay design is, and how it can be practiced. All the examples in this chapter come from my own reading and interpretation of the mentioned games. I have built narratives around my moral experience
of the game that illustrate in context how ethical gameplay has been successfully developed in those games. For those readers interested in empirical data, I can only point them to future work – this is a reflection on game design as a practice, in an attempt of systematizing design methods that can repeat the successes already present in some ethically relevant computer games.

Even though this chapter should be read as a theoretical argument in the crossroads of philosophy and design research (Schön, 1983; Lawson, 2004; Cross, 2007), there is an immediate application of both the model and the general design principle for developing ethical gameplay in the context of concept development and game design. Practicing game designers will find in this chapter a source for inspiration, as well as a practical tool for formalizing their approach to the design of ethical gameplay.

All Games Are (Moral) Systems

*Call of Duty 4* is a visceral experience that throws players into well-paced action and deadly modern warfare environments where death is a common outcome. Most of the missions are based around hectic maneuvers, ambushes, or panic-lead combat situations. Unlike many other contemporary games, *Call of Duty 4* succeeds in communicating the deadly pressure and chaos of modern warfare.

Nevertheless, one of the most interesting missions in the game, “Death from Above,” is an absolute opposite to the game’s general design principles: it is not fast-paced, players are not outnumbered or in a hostile environment, and there is no “death.” “Death from Above” places players at the control of the cannons of an A-130 gunship, with the goal of clearing the way to a ground commando that needs to escape from a compromised location.

Players look through a computer screen at the geography of the space, and shoot at the underpowered enemy troops. It is a break in the pace of the game, a time to reflect on our actions, seeing them from above. The experience is completed by the graphics, inspired by footage from real A-130 gunships, and the background chatter of the other crewmembers. The level is experienced both as a break in the rhythm of the game, and as a commentary on the clinical, professionalized aspects of modern warfare, where death comes from above, clean and precise and bodiless.

A much different experience takes place in Tempenny Tower, a key location in *Fallout 3* (Bethesda Softworks, 2008), the post-apocalyptic role-playing game that takes place in the wastelands of a devastated Washington, DC. When players first arrive there, they will meet a ghoul who is denied entry to the tower. The tower itself is a safe haven, a fossilized memory of a time long gone. In Tempenny Tower, a few human survivors enjoy pleasures while fearing the ghouls that surround the tower. The owner of the property has carefully created an atmosphere of fear around the ghouls. However, the player may have experienced that these ghouls are just like any other citizens of the wasteland, and that Tempenny’s racist practices are, like everything else in his tower, vestiges of an old world.

The player is then given a quest with three possible outcomes: either killing the ghouls, killing the humans, or negotiating an uneasy truce by which everybody, ghouls and humans, can live in the Tower. Both initial options are clearly unethical on some degree, while the third one ought to be the moral one. However, the ghouls will exterminate all humans as soon as the player leaves, breaking the negotiated truce. Morals in *Fallout 3* are relative, and players have to learn to live with their own choices in a collapsed, amoral society.

Both *Call of Duty 4* and *Fallout 3* are examples of successful ethical gameplay, requiring players to ethically reflect about the meaning of their actions. These games can be enjoyed without reflecting on their meaning, but they are imbued with a layer of moral choices and discourses that appeal to the players’ ethical capacities.
Since I will present the concept of ethical gameplay with more detail in the next section, for now it is sufficient to establish that both these computer games are designed to enhance the moral interpretations of their gameplay and gameworld. These elements can be described if we look at their structure from a game design theory perspective, that is, by applying a model of what a game is as relevant for the understanding of ethical gameplay. Even though the literature on game design is abundant (Rouse III, 2005; Rollings and Adams, 2003; Schell, 2008), there are only a handful of references focused on abstract modeling of game design as a process and practice (Hunicke, LeBlanc, Zubek, 2004; Björk and Holopainen, 2004; Koster, 2005; Cook, 2007). I will approach abstract modeling from a different perspective, appropriating key game research concepts such as rules, fiction, and levels of abstraction.

A Modest Proposal on the Structure of Games

What make Call of Duty 4 and Fallout 3 ethically relevant are the relations between what Juul (2005) would call the fictional world and the rules. According to Juul, all games are half-real, that is, they have real rules communicated to the player by means of a fictional world. This distinction between the formal aspects of games and their fictional aspects is also present in the work of Järvinen (2007), for whom the fictional elements of games are means to translate to players the state of the game, as well as possible instructions as to how to proceed and what strategies are available. In this chapter, I adopt a similar approach. I argue that all games can be analyzed from two different perspectives, or levels of abstraction (Juul, 2007; Floridi, 2008): a semantic level, and a procedural level.

The procedural level of a game is the system of rules and game mechanics (Sicart, 2008), that is, the formal elements that constitute a game structure. The semantic level comprises all those elements that require an epistemic agent (Greco, Paronitti, Turilli, Floridi, 2005) to be interpreted. I am using the term “semantic” as in the “general study of the interpretation of signs” (Honderich, 1995, p. 820). More precisely, the semantic level of a game requires an agent that can translate the game world using both her history as player, or repertoire, and her own presence in the world, her cultural being outside of the game.

In the case of Call of Duty 4, the procedural level is a version of the classic FPS game as established by Doom (id software, 1993) and Quake (id software, 1996). The semantic level comprises the audiovisual and metaphorical elements that situate those rules in the context of modern warfare. The semantic level communicates to the player the state of the game, through game tropes such as energy bars or ammunition count, as well as those items that contextualize the game world in the late 2006, and the worldview on Middle Eastern conflicts that was present during that time.

In short, the procedural level comprises the game as system, while the semantic level communicates the state of the game to the player by means of culturally relevant metaphors. This distinction between a semantic and a procedural level should not be read as an absolute ontological position. I am using these two levels of abstraction to describe the fundamental aspects of a game design. This model is a tool for abstracting the most important creative concerns a game designer should have in mind when designing a game. In this sense, game design is the craft of coherently merging a balanced and engaging game system with a semantic domain that communicates both effectively and emotionally to the cultural being who plays the game.

Each of these levels of abstraction is matched by a player model, an idealization of the user that will interact with that level of abstraction, and to whom the design should appeal, inform, and engage. Player models should be understood here in the sense of literary theory and semiotics.
Values between Systems

(Eco, 1978, 1989). A player model provides an insight toward a design type, that is, a foreseeable abstraction of a general user.

The player model dominant in the procedural level focuses on interacting directly with the rules of the game, experiencing the game as an exchange of inputs and outputs with the state machine (Juul, 2005). This player, whom I shall call the mechanical player or reactive agent, focuses on understanding the game system and creating gameplay strategies. The reactive player is a strategist concerned with directly interacting with a system regardless of the actual meaning of her actions.

One example of the reactive agent can be found in Quake III players who, according to research by Retaux and Rouchier (2002), downgrade the quality of the graphics to gain advantage in multiplayer games. In the case of Fallout 3, the reactive player is concerned with gameplay elements such as leveling up, ammunition counts, the tear and wear of the combat gear, or even the allocation of resources to specific abilities. The reactive player is not directly interested in interpreting what the resources mean—managing them is a task enough to fulfill her expectations as a player.

The procedural layer and the reactive agent are not devoid of moral concerns. Theorists like Latour (1992) and Winner (1986) have argued that technologies can have embedded values, and thus we should take into consideration their technical construction as a source of value-creation. Post-phenomenologists like Ihde (1990) and Verbeek (2005) have taken this position one step forward, claiming that the design of an object, as an initial generation of both practices and modalities of being, can be claimed as moral. If we were to analyze the procedural layer of a game, we could find that a game as an object can have embedded values in its design. However, this approach is limited: it implies that players will mindlessly follow the morally charged instructions of the game, and will not question them. But players are moral beings (Sicart, 2009), and they will approach and appropriate these ethical affordances with their own values and goals. Hence, we need to understand the semantic layer of the game.

A Model for Understanding Games (as Moral Systems)

The semantic layer of a game can be defined as that level of abstraction that translates the formal system of the game into a series of metaphors (Lakoff and Johnson, 1980) designed to communicate the abstract system in a way that can be understood and emotionally adopted by a player. I am using the term metaphor here to convey the culturally based translation of meaning from the formal, abstract system of the game, to a form that is both easy to understand and adapt by players, and adequate for evolving into emotional outcome. This semantic level, constituted by metaphors, often takes the shape of a gameworld and/or a narrative, that is, a series of elements that need to be interpreted in light of cultural, historical, and logical frameworks.

The semantic level is comprised of units of meaning like health bars or scores, as well as by compound systems for interpretation like overarching narratives, or the architecture and geography of the simulated space. The semantic level is designed to communicate to the player the state of the game, as well as the need for emotional attachment to the outcome of her actions. In the case of Fallout 3, for instance, the semantic level comprises everything from the design of the Wasteland to the user interface of the PipBoy 3000. The semantic level of a game comprises everything we perceive with our senses, and everything we interpret with our cultural presence as players with a repertoire (Juul, 2005).

The player that interprets this semantic level of abstraction is an agent capable of reflecting upon the meaning of the content presented to her in terms of wider cultural concerns. The reflective agent interprets the semantic contents of the game and puts them into the perspective of an
individual, social, and cultural domain. By doing so, the reflective agent becomes an ethical agent: playing is interpreting the world and who the agent wants to be in its context; playing is understanding the values of the gameworld and developing an ethical persona that is at the same time coherent with the in-game world, and with the external values of the player as an ethical being.

In abstract terms, then, the design of a computer game consists of two different levels of abstraction that communicate with each other with the use of metaphors and game-specific usability conventions such as health bars or particle effects. Each of these levels of abstraction has a dominant agent, a player model who engages in meaningful, ludic interaction with the system according to different epistemic requirements. Please see Image 1 for an abstract model of a game design.

Image 1: A Model for Understanding the Ethical Structure of Games

From this design-oriented perspective, playing a game is both an act of interpreting a system (the procedural level as experienced by a reactive agent) and interpreting the meaning of that system as communicated to a reflective agent. Game design, then, would be the craft of creating a system that is engaging in terms of strategy and balance, and communicate it in an emotionally and ethically compelling way to a player who will experience the game as part of her culture.

It is in this dual perspective where understanding how games create ethical experiences is possible. As said, the design of a game should consist in the finding the harmonious equilibrium between the systemic needs of the game as explored by the reactive agent, and its communication by means of aesthetic elements to the reflective agent. If the design of successful gameplay consists in the harmonious balance of the two domains, then how can we define within the perspective of this model the design of ethical gameplay? In the next section, I will introduce the ethical domain to the model.

**Designing Ethical Gameplay**

To understand what ethical gameplay means, let’s revisit the opening sequence of *Call of Duty 4*. Bound and subject to the will of his enemies, the player starts this action game in an absolutely powerless state. The memories of *Half-Life’s* (Valve Software, 1998) opening sequence appeals to the seasoned player, who expects a seamless transition into action. However, *Call of Duty 4* kills the player avatar before any action is possible. If we analyze this sequence under the perspective of the design model we can explain the ethical implication of this sequence. Reactive players wait for the gameplay cues that will trigger full agency in the world, even though their initial agency is limited to observing. The reactive player understands agency as a vital element for developing strategies, and voluntarily reconstructs ideal gameplay systems based on the hints given by the system. That full agency mode, however, is never completed, and we are punished with death before we can even start playing the game. The game breaks the reactive players’ expectations.

The reflective agent will interpret this sequence and its gameplay implications, in the light of her cultural being. *Call of Duty 4* is a game developed and published during the Iraq War, and it is not adventurous to claim that the developers knew the game would need to relate to those events. The opening sequence appeals to the reflective player, who will place the meaning of her actions in a larger cultural framework, and it probably does so as a commentary on its own relation with actual modern warfare. *Call of Duty 4* stretches the relations between the reactive agent and the reflective agent, and in doing so it creates ethical gameplay.

Ethical gameplay can be defined as the moral experience created by games in which there is a conflict between the requirements of the procedural level and the information provided to the reflective agent. In other words, there has to be a contradiction between what to do in terms of
gameplay, and the meaning and impact of those actions, both within the gameworld and in a larger cultural setting. Ethical gameplay forces the reflective agent to take strategic decisions based on the semantic information provided by the game. These decisions will be conflicting with the optimal patterns of behavior presented to the reactive agent.

In the case of the opening sequence of Call of Duty 4, the tension is generated by the manipulation of player agency: the reactive player is tempted with agency, only to be abruptly deprived of it. This deprivation appeals to the reflective agent, who will have to reflect about the meaning of not being able to play the game just yet, based on the cultural semantics of the game.

In terms of the model, ethical gameplay takes place in the semantic layer, as a resource to engage and challenge the reflective agent. This forces a reconsideration of what play is, and the role of the semantic layer in that activity. To play a game is to interact with a system communicated by metaphors that afford a certain interpretation of that system. The semantic layer of a game, then, should be understood as a facilitator for player interaction with the game system. If we abstract the semantic layer of Call of Duty 4 we will find a complex system of actions and reactions designed to encourage agent competition by simulating a conflict. If we abstract chess we will find a formal system of possibilities, probabilities, and choices. The semantic layer is designed to communicate these abstracts systems and make the dry emotionally engaging: it’s the designer process from functional design (Norman, 2002) to emotional design (Norman, 2005).

Gameplay for the reactive agent is a matter of strategies, of predicting the future feedback and behaviors of the system, and adapt to them with the possibilities afforded by that system. The reflective agent, on the other hand, will interact with the system as mediated by the semantic layer, taking into account both the need for strategy and what that strategy means in a broader personal and cultural sense. Play is a hermeneutical process (Gadamer, 2004; Aarseth, 2003), an interpretative loop by which players create strategies and relate to them emotionally and ethically. Playing is the interpretation of the reactive agent by the reflective agent.

Designing successful gameplay requires making possible that interpretation process. The procedural and the semantic layers need to be coupled so playing is both strategically and culturally pleasurable. This process is often seen as easing the understanding of the procedural layer by creating a compelling semantic layer, comprised of metaphors that are well known and understood by players. Any game that resorts to a story based on the hero with a thousand faces paradigm (Campbell, 2008) is using a well-known narrative to communicate both the system, and the reasons why the player should care about the action in the game.

In classic design theory, the need for harmony between the semantic and the syntactic justified the interest in usability aspects of objects (Norman, 2002). The goal of a good design, according to this perspective, is to communicate its use without breaking the practices of use, that is, to be coherent, concise, and precise in how to interact with an object. The goal of all good design is to avoid cognitive friction (Cooper, 2002), that is, the breakdown of the coherence between the actions and the way they are represented to the user. In terms of the game design model, cognitive friction takes place when the coherence between the procedural and the semantic layers of a game break down, and the player cannot bridge it by appealing to her knowledge as player or as cultural being. Good design reduces the cognitive friction of learning a new system by appropriately wrapping it up in a set of metaphors that afford player agency and emotional attachment. Good design seamlessly traverses the procedural and the semantic, creating a coherent experience of meaningful strategies.

Ethical gameplay operates on a different procedure. Since ethical gameplay arises from the tension between the procedural and the semantic, the
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design of ethical gameplay should not rely on the conventional approach to design based on reducing cognitive friction. If anything, ethical gameplay should increase cognitive friction, forcing a split between the actions of the reactive agent and their interpretation by the reflective agent. To design ethical gameplay, I suggest that the game should create a tension of meaning and actions between the procedural and the semantic layers.

Players are ethical agents whose experience of the game consists of interpreting the metaphors laid out by the semantic level of the game, which interpret what the purpose of the game system is, communicating it to the player. Players engage with a system that generates particular, morally relevant behaviors. But that engagement is mediated through a layer of semantic content that appeals to the ethical agency of the player. Players reflect about the meaning, significance, and degree of required emotional attachment that the semantic level requires.

In conventional computer games, there is synergy between the procedural and the semantic levels: the best strategies are often suggested and encouraged by a number of semantic metaphors, from sound effects to narrative developments. Players tend to be guided through the “correct” and optimal ways of playing a game. This synergy also implies ethical synergy: by convention, we empathize with the characters or actions we embody or perform, and their values and behaviors. In conventional games, players are encouraged not to doubt of the ethical meaning of their actions, and they are so by a design that merges the values of the procedural and the semantic levels of the game.

However, ethically significant gameplay experiences tend to disconnect or directly contradict the procedural actions from their semantic meaning. Ethical gameplay is created by conflicting the two domains of the game, by breaking the convention by which players ought to be perfectly informed of the meaning of their actions, and ethically and emotionally attached to the behaviors that the procedural layer creates. The basic principle of successful ethical gameplay design is to insert values between systems, to pitch the player as ethical agent against the meaning of their actions in the game.

Conventional game design literature insists on a model of game design that aspires to eliminate cognitive friction so the player can always take informed choices to overcome challenges (Fullerton, 2007). In this sense, conventional game design is suggesting similar requirements to those proposed by usability research. The goal of designing a game, according to game design literature, is challenging a player in appropriate ways, making sure that there is just enough challenge so they feel compelled to improve their skills while not giving up.

As a consequence of this approach, most game design literature suggests that players ought to be informed about the meaning and logic of their choices at all time. Not doing so is perceived as a poor practice (Bateman and Boon, 2005), since players ought to know why their actions have the outcomes they have. This principle has also informed the design of ethical decision making in games: *Knights of the Old Republic* and *Fable* present an interface element that translates the morality of the actions taken into an interpreted morality system. Since in these games ethical choices affects gameplay progression, it seems like designers felt compelled to inform the players about the ethical meaning of their actions. Whenever a player takes a choice in a morally relevant situation, her actions are computed by the game system and translated to a system of values that provides adequate feedback to the player. In these games, players can check their moral status via an interface item that places them in a pre-established moral continuum. In other words, they eliminated cognitive friction by providing a computable morality system that evaluates the player, regardless of her own values or understanding of their actions.

While in general it is a wise design choice to eliminate cognitive friction, in terms of designing
ethical gameplay, it becomes a more problematic approach. In ethical gameplay situations, the player has to evaluate the morality of her actions and take decisions based not only on their strategic value, but on their moral value, or, more precisely, on the value those choices have in the development of the ethical being the player wants to be in that particular gameplay experience. Playing a game, and being a player, is not only being effective and efficient in overcoming challenges, it is also creating values and morals that affect the way the game experience is interpreted. By introducing system-driven, computed ethical feedback, game designers are reducing cognitive friction at the expense of blackboxing (Salen and Zimmerman, 2004) the system values, hence alienating the ethical capacities of players to reflect on the ethics of their actions. In this sense, designers are depriving players from ethical agency, treating their values as another element that can be computed by the system.

Ethical gameplay requires a different player model, one that is not based on the classic conceptions of players merely interested in the pleasures of play, regardless of the ethical meaning of their actions. There are values in play, and those need to be experienced by a player who is not a subject to a system that decodes morality and translates into yet another game subsystem. Ethical gameplay needs to be built from the assumption that players interpret their being in the game, the strategies and choices taken to overcome challenges, in a moral way. Players do so by creating in-game values that are harmonious with their values as cultural beings (Sicart, 2009). Ethical gameplay challenges the process of creating in-game relevant values. An ethically successful game pitches players against their own values, and lets them evaluate the morality of their actions and their influence on who they are in the game.

I am arguing here against a certain version of the procedural rhetoric paradigm (Bogost, 2007) that claims that the values of a game experience are first and foremost created in the procedural level of a game. I argue that the ethics, and politics, of a game, is created in the dialogue between the procedural and the semantic, between the reactive and the reflective agent. Ethical gameplay is a dialectic process of interpretations, a hermeneutics of play in which a player examines their experience of a system in the perspective of their own cultural interpretation of that system as translated by a semantic set of operations. Playing Call of Duty 4 is not only playing an action game, is playing an action game set in the Middle East, developed in times of controversial wars. Adding a layer of ethical gameplay to a classic FPS implies translated the morally ambiguous time of war in which the game was developed to the full experience of the game.

To trigger that type of cultural interpretation, game designers need to make more explicit the need for players to apply their ethical thinking to the experience of the game. So far, the dominant design methods have been rather primitive: branching narratives or decision-making nodes evaluated by the game rules, with an embedded, computable morality system. I want to call here for a more nuanced, deep approach to creating ethical gameplay, one based in triggering the ethical capacities of players to reflect about the meaning of their actions.

The explicit, designed creation of cognitive friction between the choices given to the player, and their meaning and value in the game experience is the central element of this approach. In more formal terms: ethical gameplay arises from the cognitive tension between the game system and the game world. For ethical gameplay design, cognitive friction operates in a radically different fashion: players are informed about their state in the game, in terms of what information is required to take the appropriate choices, and build the required strategies to overcome challenges. However, there is no semantic interpretation of that status: the game is not translating the player’s performance into a set of value-based feedback messages. The player only receives enough infor-
mation to progress in the game, and the meaning of that progression is delegated to the interpretation of the reflective agent.

This approach, which I shall call ethical cognitive dissonance, does not mean a lack of value-based statements in the semantization of the game world—in fact, there is a translation, but it is up to the player to decide what those values mean as related with her understanding of the game world, and her own stances as ethical agent. In other words: there are values embedded in the system, but those are not transparent to the player, there are no interface elements that communicate them to players. This leaves players with the task of translating the meaning of their actions in the game within their own moral being. The game world, like any other designed, aesthetic object, has ethical meanings; however, it is up to the player to translate those meanings and appropriate them to her own ethical being.

Designing a game with ethical gameplay implies a conscious breakdown of the metaphors used to convey the meaning of the game and in-game agency to players. Players are informed about their state in the game, but they are not informed about the ethical meaning of that state. The transition between levels of abstraction that the communication of the ethical meaning of the players’ actions is obscured, so the player has to actively reconstruct and interpret the meaning of her role as agent in the game.

As I’ve already argued for, classic game design models tend to privilege the importance of the reactive over the reflective agent, providing sufficient information so that the actions of both overlap with no cognitive friction. This approach to ethical gameplay design operates in an opposite way: by breaking the mapping between the two levels of abstraction and creating an ethical cognitive dissonance, the meaning of the game as an ethical experience is no more a matter of computation, but a matter of the active interpretation of a reflective player.

**Call of Duty 4: Ethics in War Times**

This approach can be used to interpret successful instances of ethical gameplay. *Call of Duty 4*, for example, creates an ethical gameplay experience by applying the method to very particular instance of the game: the cut scenes that mark narrative transitions between landmark scenarios. The outcome of this design is, as seen from an interpretational perspective, to question the discourses regarding modern warfare as heroic. The ethical cognitive dissonance was applied to the dialectic between agency and storytelling: in conventional cut scenes, narrative is predetermined and players have no agency—they are mere spectators of the actions that are happening. In *Call of Duty 4* players have limited agency in two critical cut scenes: the intro sequence I have already described and a mid-game narrative turning point. At that stage in the game, the player has already seen some action as an American soldier in the streets of a Middle-Eastern city where there is a nuclear device. While evacuating the city, the bomb is detonated. The player seems to be safe, but then the helicopter crashes. It appears that, just like with the initial cut scene, death is also a part of what the player has to experience in *Call of Duty 4*. Yet, there is an extra twist: the player’s avatar awakes in the remains of the helicopter. The soldier is badly wounded, and can barely move, but it is still possible to crawl outside of the crash. There may be hope, until the character dies shortly after witnessing the desolation of a nuclear blast. There is, again, only death awaiting the player.

*Call of Duty 4* applies ethical cognitive dissonance to player agency and the usual game design conventions around it. In some cut scenes, players can move for a short period of time, but they have no influence over the outcome of the narrative. In the “Death from Above” scenario, players are given absolute power over the game. This is a level designed to be easy, almost trivial, so that the player can focus on the detachment that modern warfare technology can create by
mediating between the action and its consequences through a computer representation. *Call of Duty 4* is a reflection about agency in modern warfare, and it is so not by telling a moral story, but by forcing players, with design tools, to ethically reflect about their role in the simulation.

**Fallout 3 and the Ethics of the Wasteland**

*Fallout 3*, on the other hand, takes a different approach to ethical cognitive dissonance. We are told, by means of an in-game menu, that our actions have a certain moral value. However, players can never know, in the collapsed societies of the Badlands, what good or evil means. Of course, on occasions there are clear decisions to be taken, but most of the choices offered by *Fallout 3* fall in a grey zone, an area in which players have to decide what kind of heroes they want to be, and what the overall meaning of their actions will be. The quests the player has to complete are most of the times ethically ambiguous—in the world of *Fallout 3*, there are no absolutes, no moral compasses that guide what a good life may mean. The player is alone in her task of translating her choices into a coherent moral system.

Ethical cognitive dissonance is applied in *Fallout 3* to the gameworld design: instead of mapping actions, quests and characters to the requirements of a computable ethical system, *Fallout 3* creates a moral universe that has to be interpreted by the player. The evaluation of that universe by the game system is not clearly communicated to players—there are general intuitions about how some actions take a moral turn in either direction, but there are no overarching moral references the player can take. In this sense, the player is alone in a world with no other moral guide than herself, and her interpretation of her being in that world. By eliminating moral compasses from the world, *Fallout 3* succeeds in creating a complete moral universe to play in.

**Shadow of the Colossus or the Ethics of Tragedy**

*Shadow of the Colossus* (Team Ico, 2006) took a significantly different approach. While *Call of Duty 4* and *Fallout 3* are games built around an idea of morality, thus setting the player’s expectations (Juul, 2005) regarding the experience of the game, *Shadow of the Colossus* proposes an oblique narrative, a story that is the player who has to interpret and give sense. In that process, its constitution as an ethical gameplay experience is revealed.

*Shadow of the Colossus* gives the player control of a young man in vast, empty land, where a god promises the resurrection of a young woman in exchange of the death of 16 wandering colossi. These colossi are phenomenal beasts, and the only living beings of that land. The player faces an overwhelming, classic challenge: to defeat 16 bosses. However, killing these creatures is an ambiguous act: the colossi are not moral creatures, they are just animals who defend themselves against predators. And once they die, there is no success screen. When a colossus is killed, a non-interactive sequence is triggered, in which the player’s avatar is hit and rendered unconscious by what seems to be the dark souls of the killed beasts. When the avatar regains consciousness, he looks progressively sicker. The end of the game, the death of the last colossus, marks also the death of the player avatar. Victory is death.

The ethical cognitive dissonance applied in *Shadow of the Colossus* operates not at a narrative level, and not at a procedural level, but precisely in the intersection of both. As said, every time the player kills a colossus, the avatar loses consciousness and wakes up to appear sick and dying. However, in terms of gameplay, there is a clear progression in the abilities of the avatar: the stamina meter that determines for how long a player can hold on while climbing, is slightly increased after each dead colossi. In terms of game design, the player has more power the more
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she progresses into the game. The cognitive dissonance at play here is clear: while the gameplay system is telling the reactive player that defeating the colossi is a good thing, since it increases her chances of overcoming challenges, that progression is interpreted by a metaphor of disease and death. It is an example of increasing cognitive friction to create ethical gameplay, based on the tension between the two levels of abstraction that constitute any game.

Braid and the Ethics of Gameplay, Revisited

Finally, a last example can be drawn from the game Braid (NumberNone Inc, 2008). Braid’s main gameplay mechanic is time control: the player can control the flow of time, which behaves itself in different ways depending on which of the six playable worlds the player is in. Braid is a platform game in dialogue with the long history of computer games. The main character, Tim, is looking for a princess, who is always in another castle—and so the references to the Super Mario tradition, as well as Donkey Kong and other landmarks of game history influence the narrative and gameplay of the game.

Braid’s story, or semantic layer, is consciously designed to be obscure; it’s a tale that the player has to piece together, reflecting on how the game mechanic affects the interpretation of the different texts that constitute the main story. In this sense, Braid’s overall idea is to provide a constant feedback loop between the main mechanics of the game and how it interprets the narrative; or, in other words, how the procedural can inform the semantic. As an instance of ethical gameplay, Braid succeeds when that design goal is fulfilled, namely, when Tim finally finds the princess.

That gameplay sequence, close to the end of the game but not quite its conclusion, is a masterfully designed space and time puzzle. At the beginning of the stage, Tim sees the princess captured by a monster. Tim has to progress from left to right of the screen, helping the princess along her path away from the monster. However, when the end of that path is reached, and Tim is finally about to reunite with the princess, the game deprives players of controls, and rewinds the whole sequence, much like the player has rewind time throughout the game. At that moment, and using the dominant procedural rhetoric trope of the game, the meaning of the players’ actions is redefined. The princess is not running away from the monster, but from Tim.

Braid is a game about, among other things, the meaning and permanence of actions in time, about regret and impossible redemption. These themes, of unquestionable ethical depth, are also transmitted by means of ethical gameplay. That experience of the game is achieved by applying ethical cognitive dissonance to a system-oriented interpretation of the semantic level, a radically innovative take on creating ethical experiences by means of game design.

Designing Ethical Gameplay: From Conventions to New Approaches

Ethical gameplay is the outcome of the interrelation between the procedural and semantic layers of a game, as well as the result of the different agency requirements that each layer imposes over players. In order to design ethical gameplay, the most successful approach is to focus on the presence of an ethical agent that interprets from a moral perspective the semantic meaning of the game, and by extension the procedural requirements that the game demands from her.

Conventional game design intends to reduce the difference between the two models of agency, and the two levels of abstraction, following the usability principle of eliminating cognitive friction by informing the player about her state and progress in the game in a coherent, comprehensive way. I claim that ethical gameplay is created by
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following the opposite procedure: by increasing cognitive friction, by creating what I called ethical cognitive dissonances, players become the bearers of the ethical experience of the game, unmediated by a game system yet related by the values embedded in that system. Ethical gameplay is, then, the outcome of a designed tension between actions and strategies and their meaning.

The design of ethical gameplay is, in this perspective, an unconventional approach to the dominant design discourses in game development, as well as a radical reinterpretation of the widespread understanding of players as limitedly creative agents. Designing ethical gameplay challenges conventional wisdom, requires a reinterpretation of design as an aesthetic process, and more importantly, puts players as the centre of a moral universe created with the sole intention of challenging who they are, and who they want to be, as players, but also as moral beings.

Creating ethical gameplay by increasing cognitive friction should be understood as a design technique, a form of inspiration for game designers who want to engage their players in morality-based experiences beyond the conventions digital games have already explored. There is still much work to do to consolidate this technique. For example, there needs to be collected empirical data regarding the validity of some of the assumptions posed in this chapter. There is also a need to reflect about some of the implications of digital games as a medium in the perspective of ethical gameplay—for instance, how to design games that can be replayable, yet morally deep and unique.

This chapter proposes a perspective, a way of looking at the potential of games and play to create ethical experiences. We as designers and scholars need to take advantage of this potential beyond what has been tried—we need to explore the values between systems, and contribute to the development of games that will appeal to players as ethical beings.

CONCLUSION

In this chapter I have outlined a way of understanding ethical gameplay as a consequence of game design choices. I have proposed a model that, starting from a new take on the structure of games and the role of agents, defines ethical gameplay as an experience that stems from a particular set of game design decisions. These decisions have in common a design method that I have defined as ethical cognitive dissonance, based on the conscious creative clash between different models of agency in a game.

This domain requires much more work—the immediate step will be to identify in which aspects of a computer game, from the game world to the narrative, whether this technique be applied, and how it will affect our conventional knowledge of game design. But still, the method proposed in this chapter can immediately be used by game designers in their daily practice, since it can be used to question the meaning and effect of choices given to players, with a more nuanced and challenging approach than what wisdom and convention allowed.

The design method I have suggested here can be applied to different gameplay structures. The challenge is now to create games that systematically, and consciously, take advantage of the possibilities of games as a medium. Paraphrasing Kafka, if the games we play do not wake us, why then do we play them?

REFERENCES


Cooper, A. (2002). *The inmates are running the asylum*. Indianapolis, IN: Sams Publishing.


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GAMES


NumberNone Inc. (2008). *Braid*.


Chapter 2

Video Games for Prosocial Learning

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ABSTRACT

In this chapter, the authors consider the capabilities video games offer to educators who seek to foster prosocial development using three popular frameworks: moral education, character education, and care ethics. While all three of these frameworks previously considered literature and film as helpful tools, the authors suggest that video games are unique from these other media in the multiple levers through which they can influence the worldview, values, and behaviors of players. Similar to literature and film, video games possess content—plot, characters, conflict, themes, and imagery—with which participants interact. Unlike other media, however, video games scaffold players’ experiences not only via narrative and audio-visual content but by the rules, principles, and objectives governing what participants do. Moreover, many video games possess an ecosystem that impacts players’ interpretation of the game itself—for example, on-line hint guides and discussion groups as well as the opportunity to play in the company of peers in either physical or virtual proximity. The authors consider opportunities and challenges presented by each of these unique facets of video games for fostering the prosocial development of participants.

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INTRODUCTION

Video games, writes linguist and educator James Gee, are “good for your soul” (2005, p. 1). This is a sweeping claim, not just because video games sometimes occupy a vulgar position in public perception, but also because edifying the “soul” is not something often investigated methodically. Gee’s bold assertion motivates the present chapter. We consider what it might mean for video games to be “good for your soul,” specifically from the perspective of learning and education. Video games, we believe, have the capacity to deepen moral reasoning, open players to new perspectives, shape
or reinforce positive behaviors, and provide a field for practicing cooperation. To structure our exploration of these possibilities, we will draw upon the contemporary understanding of moral and character development as well as of video games as media and learning environments.

How can a video game—or any experience, for that matter—be “good for your soul?” This question has been central to teaching and learning across many cultures and epochs. The philosopher Socrates is said to have stated that the mission of education is to help people become both smart and good (Ryan & Bohlin, 1999). Likewise, civil rights activist Martin Luther King, Jr., asserted that, “Intelligence plus character—that is the goal of true education” (Carson & Shepard, 2001). At the risk of oversimplifying a complex issue, over the past several decades, American educators in agreement with Socrates and King have generally fallen into two camps: moral educators and character educators. Moral education emphasizes reasoning and reflection, while character education focuses on providing models and shaping habits. For example, when Gee (2005) argues that “good video games are good for your soul when you play them with thought, reflection, and engagement with the world around you,” he adopts the language of moral education (p.1). But Gee, and other game researchers also highlight how video games model behaviors by example. We will use the terms “moral education” and “character education” as shorthand for two modes by which people are believed to deepen their capacity for moral behavior as individuals and members of society. To prevent confusion between the broader concept of moral development and the specific approaches of moral educators, we use “prosocial learning” as an umbrella term that includes both moral and character education.

What, then, is a “video game?” For the purposes of this chapter, we stipulate that video games are games substantially instantiated through electronic computation. What constitutes a “game” is controversial (e.g., Salen & Zimmerman, 2003; Juul, 2005), and we are inclined to define the concept broadly as a human practice bounded by rules, requiring some human input, and with variable outcomes related to the inputs (such as, but not limited to, “win” / “lose” conditions). This definition of “video game” is broad and flexible enough to include the following phenomena:

- Commercial products such as Peggle, World of Warcraft and Grand Theft Auto, both single- and multi-player, whether played on a dedicated game console (e.g., Nintendo Wii), PC, mobile phone, or other digital device;
- Experiences and interfaces that reach outside the boundaries of the computer (e.g. “augmented reality games” like World Without Oil);
- Games deployed for non-entertainment purposes such as job training (e.g. Stone Cold Creamery’s Stone City1).

Ultimately we are less interested in drawing lines around what constitutes a “video game” than we are in considering the possibilities that video games and video game-like experiences offer to prosocial learning. Because this chapter serves as a preliminary survey of the field, we prefer to leave our definitions open-ended so as not to overlook promising avenues for later research.

This chapter begins by describing in greater detail these two competing schools of thought—moral education and character education—within the general project of prosocial learning. We then consider various means by which video games might advance the goals of either or both approaches to prosocial development. Finally, we conclude with recommendations for researchers, game developers, and educators for utilizing video games to foster prosocial development among gamers.
Key Frameworks of Prosocial Learning

In this section we offer synopses of three frameworks through which educators often approach the project of prosocial development, or what Socrates described as helping people become good. While we focus here upon the key differences among these frameworks, all three share the same fundamental belief that people’s capacity to act in moral, ethical, and civil ways can be deepened or strengthened. And, in fact, even moral psychologists like Haidt (2001) and Greene (2003), who argue that moral judgments are largely based on intuition, do not suggest that these intuitions must be the final word on a particular moral or ethical issue. Rather, as K. Anthony Appiah (2008) has observed, even if our moral beliefs are a “fixed feature of our psychologies, then learning when and how they mislead us will help us to overrule them we should” (p. 99).

Moral Education

Building on the constructivist stage theory of Piaget, Harvard psychologist Lawrence Kohlberg (1981, 1984) developed a stage theory of moral development in the mid-1970s that asserted that individuals could deepen their moral reasoning skills (and thereby their moral actions) through both experience and education. Kohlberg assessed people’s moral reasoning ability by gauging their reactions to a series of vignettes which described moral dilemmas. The most famous of these vignettes is the Heinz Dilemma. In this vignette, Heinz’s wife is diagnosed with cancer and desperately needs a particular medication; unfortunately, Heinz cannot afford, and the local druggist will not sell it to him at a reduced price. Kohlberg questioned individuals about how Heinz should react to this dilemma and characterized participants’ stage of moral development across a six-point scale based upon the reasoning they utilized in coming up with a response. Because Kohlberg believed that morality was a trait that could be nurtured and deepened through reflection and learning that engages individuals in higher order thinking, he also conceived of moral dilemmas as educational tools that could be used to engage individuals in reflection to promote prosocial beliefs and behaviors.

Character Education

The character education movement took off in the mid-1980s led by policymakers such as Bill Honig and William Bennett and academics such as Kevin Ryan and James Wilson. The cornerstone of the character education movement—for which Bennett was perhaps the most public spokesman—was the teaching of virtue through inspirational stories, both fictional and biographical. Character education advocates criticized developmentalists like Kohlberg for overemphasizing moral reasoning and questioned Kohlberg’s underlying premise that heightened moral reasoning would lead to heightened moral behaviors. Instead, the character educators conceived of morality (or, in their terms, “virtue”) as a habit formed through modeling, direct instruction, and practice.

Care Ethics

Care ethics represents a third approach to prosocial development championed by philosopher Nel Noddings. According to Noddings (2002), “Care theorists rely more heavily on establishing conditions likely to encourage goodness than on the direct teaching of virtues” (p. 1). While moral educators utilize moral vignettes and character educators rely on fables and parables, care theorists advocate the use of powerful literature. As Noddings explains, great literature allows for “broader, more diffuse conversation—discussion that will locate problems, not just attempt to resolve dilemmas” (p. 2).

Philosopher Martha Nussbaum (1995, 2001) also recommends great literature as a powerful...
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tool for prosocial development, particularly in its ability to foster and deepen an individual’s capacity for empathy. Specifically, Nussbaum asserts in *Upheavals of Thought* that stories and novels “exercise the muscles of the imagination, making people capable of inhabiting for a time the world of a different person, and seeing the meaning of events in that world from an outsider’s viewpoint” (p. 431). She asserts that literature can deepen an individual’s identification, understanding, and empathy for others in a way that the mere presentation of facts or statistics cannot.

Clearly, there are substantive differences in the approaches to prosocial development of the moral educators, character educators, and care theorists. As noted above, however, all three frameworks assert that a person’s prosocial development can be shaped and encouraged. The dissension across these three frameworks focuses, instead, on the most effective pedagogical mechanisms for doing so. In the section that follows, we consider the use of the relatively young medium of video games as a mechanism for prosocial development through the lenses of these various frameworks.

Video Games as Prosocial Interventions

If a person’s prosocial capacity can be strengthened, how might video games play a role in that development? As a touchstone to ground this question, we begin with an observation recorded by Stevens, Saticz, and McCarthy (2008) that exemplifies a key puzzle facing video games as potential prosocial learning spaces. These researchers describe a teenager, Rachel, playing the video game *Zoo Tycoon*:

*In her everyday life, Rachel and her family cared for stray and abandoned cats awaiting adoption through a local animal shelter. We often observed her readily pause her game play to monitor a cat’s health or attend to its needs. In-game however, Rachel’s decisions about the animals she was caring for as zookeeper were driven by monetary gain rather than the happiness or well-being of the animals. For example, while creating a zoo for different types of cats (e.g., tigers, lions, and leopards), Rachel learned of a new birth in her zoo and responded by selling the newborn animals immediately. When queried about her actions, Rachel (age 15), responded, “In real life? I would not ... manage a zoo like this. I would be much more caring. But in this game, I’m more greedy. But that’s okay” (pp. 59-60).*

This vignette vividly illustrates one key dilemma facing video games as a potential prosocial intervention: the wall between a player’s in-game actions and real-world values. A strict separation between the two seems desirable with video games that are rife with violence, sexual innuendo, and bigotry. However, such a separation would also block effective pro-social interventions. If gamers compartmentalize their in-game actions from their real-world values—if, in Rachel’s words, it is “okay” to behave one way in the game and another way in real life—then maybe video games are actually a poor vehicle for prosocial learning.

A similar divide between the real and the fictional prompted literary scholar Elaine Scarry (1989) to express her doubts about literature’s capacity to shape readers’ attitudes or beliefs, contrary to the care ethicists’ claims.

We argue that video games do hold the potential to foster prosocial learning, whether by inculcating new habits as envisioned by the virtue theorists, by deepening moral reasoning per the moral educators, or by stimulating reflection and perspective-taking in the manner characterized by Nussbaum. However, Rachel’s approach to *Zoo Tycoon*, and its seeming disconnect from her everyday life, demonstrates that promoting actual attitudinal and behavioral changes may be more complex than simply extrapolating from a player’s in-game actions to her real-world behavior.
Learning by Seeing: Video Games as Message Transmitters

The most straightforward mechanism whereby video games might instigate prosocial learning is by conveying prosocial messages in their plot, character, graphics, sound, or some combination—in short, what can be called a game’s “content.” The basic conclusion might be, as Prensky (2001) suggests, that kids will learn whatever themes are embedded in the game. By this analysis, a game in which the player controls a mobster who shoots civilians for sport might encourage antisocial, violent, or even criminal behavior, while one in which the player portrays a doctor who saves lives might instead instill more noble attitudes. The game industry’s own rating systems, such as that of the United States’ Entertainment Software Review Board (ESRB), assumes games’ direct-messaging power in its evaluation of the age-appropriateness of game titles. For example, realistic and bloody depictions of violence put games in ESRB’s “Mature” (17 or older) category, while “cartoon mischief” can rate as appropriate for “Everyone.”

Researchers have attempted to validate popular worries that games can influence prosocial development through their messages, most of them focusing on clearly visible negative messages relating to violence, misogyny, and racism. Worries about games’ antisocial messages are often heightened by the fact that games enable players to not only witness but enact, at least virtually, violent behaviors. A prevalent concern, for example, is that “shooter” games teach children to become killers, a nostrum that became conventional wisdom after the perpetrators of the Columbine massacre were found to have played Doom, an early first-person shooter (FPS) game.2 These accounts generally assume a causal mechanism involving a straightforward and literal transmission of ideas and values. For example, games that portray stereotypical characters within believable urban environments are hypothesized to transmit stereotypes or cultural assumptions about race and class (Everett and Watkins 2008). A multitude of studies suggest that playing violent games correlate with negative behaviors, both in the laboratory and in real life (Carnagey, Anderson, & Bushman, 2007; Anderson et al, 2004; Bushman & Anderson, 2002; Anderson & Bushman, 2001). Laboratory studies of video games have generally found that video games can have some small, short-term effect on subjects’ affect (Giumenti and Markey, 2007). However, it is hard to validate research carried out in artificial settings to predict more lasting, real-life effects.

Kutner and Olson’s (2008) research offers rare statistical analyses of the relationship between playing “Mature” or “M” rated games (containing “content that may be suitable for persons ages 17 and older”) by the ESRB and actual “problem” behaviors among the 1,200 middle school students they surveyed. They found that children who regularly play M-rated games were “more likely to get into physical fights, to hit or beat up someone, to damage property for fun, or to steal something from a store” (p. 99). In addition, as the frequency of M-rated gameplay increased, so too did the correlation with aggression and bullying (pp. 101-2). These findings echo earlier, smaller-scale research that found a similar correlation between playing violent games and self-reported delinquent behaviors (Anderson & Dill, 2001). While these results are provocative, it is important to underline Kutner and Olson’s statement that their research identifies correlation, not causation; it is quite possible that youth who already exhibit behavioral problems are attracted to M-rated games, or that the two statistics are co-morbid with some other root cause such as permissive or absent parents.

While researchers work to establish a more definitive link between game content and actual behavior or attitude change—and especially a mechanism for such—the preliminary findings we’ve summarized may provide some ideas to educators interested in video games for prosocial...
interventions. Social learning theory suggests that people—children in particular—imitate what they observe (Bandura, 1977). As we noted earlier, video games give players the opportunity not only to observe but enact behaviors, at least virtually. Character educators, who rely heavily on this mechanism of observed and imitated behavior, can look at video games as opportunities to condition desirable behaviors. *Nintendogs*, for example, demands that the player regularly walk, feed, and brush a virtual puppy to keep it happy and healthy. The experience shares much in common with high school health programs in which students nurture a doll as a lesson (or warning) about parenting. While one cannot really “win” *Nintendogs*, similar games might directly reward virtuous (albeit virtual) behavior, and indeed commercial games like *Fable* and *Fallout* do offer players “morality points” or “karma” for making “good” choices. Such a point system might be considered analogous to a character education program that rewards participating students for behaving in ways that exemplify the “value of the week” or the good deeds upon which the program focuses.

Very little research has evaluated whether games can psychologically condition pro-social attitudes or behaviors. In one of the few studies on games’ possible positive effects, Narvaez and Mattan (2006) found that subjects who played a game involving a helping scenario were more likely to later offer prosocial responses to a narrative-completion test than subjects who played violent or neutral games. Consistent with dominant theories of character education, these researchers suggest that the prosocial game effects they found might stem from role adoption, exposure, and repeated practice. However, Narvaez and Mattan also reported that participants in their study who played the prosocial video game were just as likely to offer “aggressive” responses as “prosocial responses” on the ensuing narrative-completion test. Thus, the thin research that currently exists does not demonstrate that playing a video game with an obvious prosocial message reliably leads to a player’s prosocial response.

Therefore, simply replacing violent content from video games with positive messages offers only limited value to prosocial learning. First, as we’ve noted, the behavioral effects of game content appear to be limited, whether that effect leans in the pro-social or anti-social direction, and we know little about validity out of the laboratory. Second, those in the moral learning tradition would assert that controversial subject matter may be vital to an effective educational experience, especially if the goal is moral reflection rather than behavioral inculcation. As Hogan and Strasburger (2008) point out in the context of television, “A less than savory adult-themed program may offer a key opportunity for coaxing a child or teen to think creatively about a controversial topic—if a co-viewing adult seizes the moment.” And perhaps most importantly, games are not merely the sum of their narrative or visual messages. The story with which we introduced this chapter—Rachel playing *Zoo Tycoon*—reminds us that content, at least the way we’ve understood it in literature and film, is only part of the picture. Why would Rachel, who in real life is so devoted to the welfare of animals, behave so callously in a game that ostensibly involves the care of zoo animals? In the following sections we look at other theories that may better explain Rachel’s game experience and better inform efforts to use video games as prosocial interventions.

**PLAYING BY THE RULES: VIDEO GAMES AS INTERACTIVE SYSTEMS**

Video games, like film and literature, use “content” (story, characters, imagery, and audio, etc.) to engage their audience. But video games also feature another property that these non-interactive media lack: systems of rules. In other words, video games scaffold experiences not merely by presenting narrative and audio-visual content
but also by the rules, principles, and objectives governing what participants do—that is, the gameplay. Gameplay analysis suggests that someone like Rachel might experience *Zoo Tycoon* as a collection not of lions and tigers, but of rules. Players may choose to completely abstract a game’s underlying rules away from its imagery and story—what’s colloquially known as “gaming the system.” Indeed, some theorists have argued that narrative elements are largely exogenous to video games, much as the names of chess pieces add little more than flavor to an actual chess game (Aarseth, 2004; Juul, 2001). To go to the extreme position: if rules were all that mattered, Rachel’s commodification of virtual animals would have as little to do with her real-life behavior as a chess player capturing an opponent’s queen would have to do with a propensity for regicide.

But because video games comprise both content and rules, we find more persuasive Bogost’s (2007) description of how video games’ narrative and gameplay elements can support each other to make claims about how the world works. He terms this expressive marriage of content and rules “procedural rhetoric.” The unique characteristic of computational media like video games, Bogost observes, is their ability to represent real or imagined systems that, properly coupled with content, describe real-world experiences in a metaphorical way. We can illustrate this concept using the familiar board game *Monopoly*. The game models capitalist economics largely through its rules, some explicit (investing in owned property enhances their revenue potential) and some implied (in the long run, owning rent-generating capital is more lucrative than earning a paycheck). The content enables *Monopoly* to assert its procedural rhetoric about a specific realm of human activity (the acquisition and development of real estate) through its Atlantic City names and iconic houses and hotels. To some degree, changing the content of the game, as in *Monopoly* editions set in other cities, does not change the game’s basic activity of acquisition and investment. If players garner insights about real estate investment through *Monopoly*, it is through making choices within and then experiencing the outcomes of rules, a very different way to learn about the subject than reading a book or watching a film.

The concept of procedural rhetoric underlines the importance of evaluating or designing prosocial games with attention to both content and gameplay / rules. For example, changing the symbolic content of *Space Invaders* so that players shoot litter rather than aliens does not convey a very powerful message about mindful disposal of trash, because the in-game action of shooting litter doesn’t tell the player very much about how to deal effectively with litter in real life. To exploit the full prosocial potential of video games, we need to look beyond gamers’ assumed interactions with surface content and support those messages with well-executed procedural rhetoric. Rather than put a new skin on old game mechanics, developers of prosocial video games should build new models, paying attention as much to how the game is played as to what it portrays (Flanagan & Nissenbaum, 2007). Rusch and Weise (2008) suggest that to offer these new experiences, games need to shift their focus away from physical actions like “jumping” and “shooting” to concepts like “hope,” “love,” or “sacrifice.” We believe that a bottom-up re-thinking of video games’ affordances will better serve practitioners of both the character education and moral learning traditions—the former by foregrounding better behaviors through gameplay, not merely content; the latter by creating the space possible for sophisticated and relevant reflection.

One specific way procedural rhetoric can support prosocial learning is by giving players the opportunity to play the role of a different person, as advocated by Nussbaum and other care ethicists. Many games enable players to take on personas different than they inhabit in daily life and thus make it possible to see the world from a different perspective. Shaffer (2007) calls certain role-playing opportunities “epistemic games” when...
they articulate a process for acquiring the “skills, knowledge, identities, values, and epistemology” of a particular professional practice. For example, Gee (2008) describes how one commercial game, S.W.A.T. 4, conveys both the goals and the norms of a particular profession, police officer, through coherent procedural rhetoric—not just by dressing the player’s avatar in an appropriate outfit and putting him in law enforcement scenarios, but also through how the game rules work. While many of these rules describe physical affordances or limitations (characters cannot fly), others enforce S.W.A.T. 4’s interpretation of professional law enforcement values. For example, shooting a suspect when he poses no immediate threat to civilians or fellow officers results in lost points or even failure.

In epistemic games, players make their own choices, but within constraints set by the games’ design. To succeed at games with powerful identity frames, a player must discern, understand, and act upon the game’s values, merging their own goals with the choices the game affords them (Gee 2007). The player can choose to ignore those values, to varying degrees (in S.W.A.T. 4, the player can sometimes kill a suspect and still “pass” the mission). However, successful game play typically requires a player to at least be conscious of the game’s implied values because these values serve as a “perspective and resource” for solving the game’s problems and puzzles (Gee 2007, 79). In S.W.A.T. 4, understanding the circumstances under which it is acceptable to shoot a suspect is critical to advancing the game—shooting carelessly can trigger failure, but so too can not shooting when necessary to protect yourself or bystanders. While successful epistemic games like S.W.A.T. 4 don’t teach players to “be” any particular profession, they do articulate rules that reflect the values system attached to such identities (doctor, police officer, Japanese villager, etc.) that obligate the player to play within the rules or else consciously thwart them. One could quite easily imagine other epistemic games that articulate prosocial values embedded in other professions such as medicine and social work. Or, to hew more closely to the care ethicists’ concerns, games like Ayiti: The Cost of Life can make poverty more visible to players by presenting the choices among competing values that struggling Haitian families face.

Understanding how procedural rhetoric can help instantiate a game’s epistemic frame gives us yet another way to understand Rachel’s choices in Zoo Tycoon and their contrast with her real-world behavior. While the surface content of the game appears to involve the care of animals, the dominant identity its rules articulate is that of a businessperson, as the title advertises. Zoo Tycoon is predominantly a business simulation in which the player manages an enterprise with the implied goal of amassing wealth, or at least maintaining solvency. The player manages a pot of money with which to build exhibits and stores, purchase animals, or maintain the park; she replenishes that money when visitors buy admission tickets and concessions, or by selling baby animals. Whatever the subject matter of the game on the surface—amusement parks, railroads, or even prisons (as in other games within the “tycoon” genre)—the core gameplay remains investing capital in income-generating assets, and taking in more income than expenses. Rachel happens to enjoy playing a title in which the assets are zoo animals rather than railroad lines. One can see how the epistemic frame that structures Zoo Tycoon—and the values embedded within it—might influence how someone plays the game as much as the content of the game itself. (Contrast this, for example, a hypothetical game about being a zoo keeper).

Thus, character educators need to consider not just how the content of a video game models desired values or behaviors, but also what values the rules of the game articulate. One limitation of the experimental games designed by Narvaez & Mattan (2006) we referenced earlier is that, despite their varying content (shoot bandits, gather gold, heal the sick), all three games seem to involve iden-
tical gameplay: click on target objects efficiently. None of these games appears to offer gameplay that capture the dynamics of greed or charity, rather than merely symbolizing each concept. In other words, beneath the games’ surfaces, healing the sick is essentially the same activity as picking up a bag of gold. If, rather than merely portraying the action of “healing,” a prosocial game dramatically modeled the actual mechanisms whereby someone (a doctor, a passerby) might administer aid to the injured, including the risks and costs such activity might entail, it would likely have a more profound impact on the player. Paying attention to both content and gameplay, character educators might find epistemic games an ideal way to instill “virtuous” behaviors through both modeling and practice.

Meanwhile, educators who emphasize moral reasoning would also do well to recognize that video games are more than story-deep. Instructors can encourage students to also consider whether a game’s rules, and not just its plotline or characters, are fair or just. Stevens et.al. (2008) recorded several players reflecting on game rules in this way, on their own. Rachel, for example, criticized the fact that in Zoo Tycoon, the financial value of trees decline over time and cost nothing to clear-cut, contradicting her belief that there ought to be some ecological price to pay. Such an observation can become the basis of a rich discussion about why the game designers might create such a rule, and how she might change them to reflect her professed values. Thus, even procedural rhetoric that appears flawed to the player can become a prosocial learning opportunity.

It’s also possible that gameplay can itself encourage reflection. Grand Theft Auto IV provides one illustration of how this might work. In one mission, the player directs the main character, Niko, to kill another character. After completing the mission, Niko verbally laments the murder, which breaks his vow to leave behind his old life and start anew in America. The player suddenly finds herself in the uncomfortable position of realizing that she has just participated in corrupting Niko. Through clever design, Grand Theft Auto IV encourages the player to confront the very values that the game itself has just obligated her to enact. Moral educators in the Kohlberg tradition might explore how to take advantage of such opportunities for in-game reflection.

Using procedural rhetoric as an analytical tool can tell us a lot about the internal logic of video games and provide a powerful way to describe, critique, and reform that internal logic. Yet procedural rhetoric can only surmise actual impact on real players. Just because Grand Theft Auto IV offers a moment for reflection does not mean that players will make use of it or, even if they do engage in that reflection, change their beliefs or behaviors. We need empirical research to consider how the values and principles embodied within a particular game do (or do not) influence participants’ beliefs about those same values and principles in real-world contexts. Such research will be crucial for understanding the extent to which any moral learning that happens within games—whether we believe the mechanism to be self-reflection or practice and modeling—transfers out of the gaming context into actual behavior.

This question of transferability is particularly important because ethical decision making appears to be highly contextual (Darley & Batson, 1973; Hartshorne & May, 1928). Darley and Batson (1973), for example, found that seminary students on their way to talk about the “Good Samaritan” Bible story were no more likely to stop to help a homeless person than seminary students on their way to complete a non-related task. Rather, the factor that best predicted a student’s likelihood of stopping to help a homeless person was how late that particular student was for his or her succeeding appointment. Thus, not even the act of explicitly reflecting upon and considering the Bible’s lesson of lending a hand to a stranger in need changed the test subjects’ response to that very same scenario presented in real life. Likewise, a major debate that surrounds Kohlberg’s...
cognitive-developmental theory concerns the extent to which improving an individual’s moral reasoning abilities results in heightened moral action (Hauser, 2006). It may be that Rachel’s choices as a “zoo tycoon” only implicate her real-world behaviors should she ever become a real-world zoo director. Thus, future scholarship must consider whether moral lessons embedded in video games—whether they stimulate player imitation or reasoning—wind up sequestered from real-world beliefs and behaviors.

STRUCTURING HOLISTIC EXPERIENCES: VIDEO GAMES AS SOCIAL PRACTICES

We believe it is critical to observe individual persons’ actual rather than imputed interaction with the games they play. Until now we have been looking at games as objects, emphasizing their formal characteristics, rather than as activities involving an interaction between the player and the game, or among players (Juul 2005). Of course games aren’t an inert medium for conveying ideas but also a negotiated practice. Rachel happens to embrace the procedural rhetoric—both content and rules system—of Zoo Tycoon, and with them the identity of businessperson that they together articulate. But players need not accept this identity; they may choose to follow alternative rules or principles offered explicitly by the game, create new ones by bending game rules, or subvert the game altogether. Stevens et.al. (2008) describe how Katarina, another girl of Rachel’s age, actively resists the business identity suggested by Zoo Tycoon, embracing instead one more akin to an architect or designer:

Katarina was so unwavering in her focus on using the game as an aesthetic design medium that she actively occluded in-game instructions that recommended efficiency and point-maximizing behaviors, despite the chance this could lead to the failure of her zoo as a business. This, in turn, created the possibility that she’d no longer be able to extend her design, because if the business failed, her game would be over. She resolved this dilemma by using a cheat code that gave her extra money (p. 55).

Katarina’s radically different approach to playing Zoo Tycoon illustrates the autonomy that players can enjoy in playing video games. Even when the rules of Zoo Tycoon encourage players to assume the identity of “tycoon” and adopt the goal of amassing as much wealth as possible, a player such as Katarina might choose to focus, instead, on an alternative goal. As Stevens et.al. point out, “What individual players bring to the game shapes not only how they play, but what they play” (p. 56; emphasis in original). The creativity of play—the “emergent” quality of games (Juul, 2005)—requires that we dig into the real experiences of game players playing games.

The paucity of research into how players really interact with video games poses an obstacle to evidence-based prosocial educational efforts. Character educators, for example, can’t know whether players are enacting positive behaviors in the game as a genuine expression of a virtue or instead to maximize their points (again, “gaming the system”). Without observing gameplay, they cannot even know if players are following or undermining the game’s intent. Neither can proponents of moral education know whether players are wrestling with and reflecting upon difficult moral choices, or picking the path of least resistance, or ignoring the narrative meaning of the game entirely. And this is to say nothing of the issues of transferability to real-life behaviors we’ve raised.

Perhaps, then, we should not rely only on video games’ inherent potential for prosocial learning and additionally consider the ecosystem that surrounds actual gameplay—what Gee (2008) calls the “Game” (with a capital “G”) that surrounds the technological artifact of the game. On the
one hand, some internal features of games might themselves stimulate prosocial learning, as in the example we gave of Grand Theft Auto IV’s main character questioning the actions that the player has directed him to perform. On the other hand, learning can also take place within the larger setting of the Game, as when discussing Grand Theft Auto with peers or mentors. Ideally, as Gee advocates, the game design and the Game context combine to provide a complete experience that together reinforce prosocial learning goals.

Social scaffolds that create the conditions for a prosocial “Game” experience can take many forms. The most obvious and explicit would be a formal curriculum or lesson plan featuring group discussion. Educators can use video games as they do literature: sources for examples and reflection, especially around complex systems, alternative roles, personal choices, and other areas where games excel (Noddings, 2002; Selman, 2007). Imagine, for example, if Rachel’s parent or teacher noticed the contrast between the way she commodified animals in Zoo Tycoon and the way she cared for abandoned animals in real life. That dissonance can become a powerful springboard for discussion about whether personal and business ethics diverge, as well as for Rachel to imagine how she might handle conflicts between her own values and commercial interests in the real world (Appiah, 2008).

There are other social practices that typically surround games: peer groups who work together in real time to “beat” a game (either in physical or virtual proximity); hint guides that suggest effective strategies; reviews that help people pick games to play in the first place; social discussion groups for players to share hints, interpret the experience, or critique the design (Squire, 2006). Some players go so far as to expand or modify the game to suit their own vision by tweaking the rules or graphics, designing scenarios, or even building new games. Most of these social practices do not intentionally revolve around moral or ethical issues, but online discussions do sometimes turn to such questions as whether it is possible to complete a game without killing anyone, how the rules might be changed to reflect players’ views of the world, or which are the “right” approaches to morally vexing options within a game. For example, we recently ran across the following discussion about Grand Theft Auto IV:

Sp-o I just finished That Special Someone [a Grand Theft Auto IV mission] and I decided to let Darko live. What choice did you make? I don’t get sentimental with video games but a very good story culminated there, I think. Also, for anyone who killed Darko instead, what dialogue is different, and does it affect the rest of the story? - Baconography (Aug 1, 2008 6:56 pm PT)

If you kill him, Niko will confess that killing Darko did not solve anything or make him feel any better. Nothing will be affected after that though. I spared him because Darko is really just a mirror of Niko. Killing for a price... - Comix6190 (Aug 1, 2008 7:04 pm PT)

Killed him. The dialogue seems more somber; it almost seemed like Niko regrets doing all the stuff he has done in the name of seeking revenge on some guy who doesn’t even care about his life any more. Other than the dialogue after the mission when you take Roman to Brucie’s, I don’t think it affects the story at all. - TyphoonGT (Aug 1, 2008 7:05 pm PT)

Gamespot, 2009

The discussion quoted above, one of many on public discussion forums addressing the plot points of Grand Theft Auto IV, demonstrates at least some grappling with the moral dimensions of revenge. While we do not claim that the discussion excerpted here is very sophisticated,
it clearly presents an opportunity to deepen the experience and push more complex moral reasoning and discussion. Perhaps, for example, players at higher stages of moral development (to use Kohlberg’s framework) can influence the development of less sophisticated moral thinkers participating in or reading the discussion. At the same time, the discussion also continues to illustrate the dual nature of games: these players are simultaneously addressing both the story and the game, expressing interest in both what the “right” choice is as well as whether that choice affects the game’s outcomes.

Interpersonal interaction and dialogue is critical to many prosocial educational efforts. One way to create that social space is through discussion groups about particular video game experiences, which would be particularly suitable for formal settings such as schools and extracurricular programs. Such efforts, however, are difficult to manage and to scale in other settings due to their reliance on skilled discussion leaders. Another way prosocial educators might leverage the ecology of video games is through multiplayer games that encourage social relationships and interactions among players. Designed well, these games can make particular social interactions likely to happen without requiring an outside referee to bring them into being. For example, massively-multiplayer online games (“MMOs”) like *World of Warcraft* and *Eve Online* give players strong incentives to form associations, or “guilds,” to overcome challenges that individual characters cannot surmount. Many of these challenges are sufficiently difficult to require repeated practice, thus incentivizing players to form persistent guilds—with the resulting being that many MMO players gain the experience of participating in or leading long-term, close-knit, performance-oriented teams (Reeves & Malone 2007). Because these practices echo athletics, we hope researchers who specialize in the prosocial benefits of sport will evaluate whether MMOs foster similar outcomes such as persistence, sacrifice, leadership, and cooperation.

If video games can reach out into the social context of their players to organize their relationships, then we can also imagine tying those interactions back into the content of the game itself. Can an MMO confront teams with vexing moral dilemmas? Can disagreements over values and moral judgments themselves become the basic mechanism for a video game, as it is in the board game *Scruples*? Shaffer (2006), for example, describes a game in which players negotiate with each other over whether to allow risky biomedical procedures. As in debate clubs or mock trials, the players begin to discern and articulate their own values vis-à-vis the particulars of the subject, not just generic principles. We can imagine formalizing negotiation or debate into a multiplayer video game that gives players the chance to reflect upon and crystallize their moral and ethical values based on specific, tangible situations. In this way, video games possess the capability to instantiate a version of Kohlberg’s “just community”—a social space where individuals have the opportunity to debate, discuss, and resolve challenging moral issues relevant to themselves. Berkowitz (2002) has reported that this ‘just community’ approach has “demonstrated its effectiveness in promoting moral reasoning” (p. 56). Likewise, Power (2002) has found that what he describes as the “dilemma-discussion approach is an effective and reliable way of promoting moral stage development” (p. 131).

**NEXT STEPS AND RECOMMENDATIONS**

In this chapter we have attempted to synthesize two separate strands of research and scholarship: first, the various theories of prosocial development, and second, the burgeoning study of video games and learning. Up to now, intentional merger of the two research agendas has largely been confined to applying media-effects theories and methodologies to violent video games—an approach generally
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consonant with the character/virtue strand of prosocial education research, albeit from the negative direction. Unfortunately, very little research has focused on prosocial learning, and especially from perspectives other than analyzing content from a media effects framework. We believe that this chapter provides a useful first draft of a more holistic agenda for prosocial video games.

Looking forward, we see at least two main avenues for further action. For video games to aid teachers and parents in achieving prosocial aims, there must be better prosocial games in the market and better-informed consumers (whether players, parents, or schools) demanding them. We believe that such a market must rest on a research-based, empirical understanding of how games can offer powerful prosocial experiences. Otherwise, unfounded prejudices and assumptions might drive the market down ineffective or even counterproductive paths. Toward this end, we conclude here with a number of suggestions for future research and development.

EMPIRICAL RESEARCH ON PROSOCIAL VIDEO GAMES’ PROSOCIAL INFLUENCE

There exists little empirical research on the impact of video games on actual behaviors outside of the subject of violence and aggression—and even in that one area the research remains largely lab-bound. We advocate significant investment in such research to assess more fully what prosocial affordances video games might offer. Vital research questions include the following:

1. **What prosocial ideas, attitudes, or behaviors do players learn from existing game titles?** In this chapter we’ve mentioned existing games with potential prosocial value, such as *Nintendogs* or *Fable*. We believe these are promising starting-points for solid empirical research, and their authenticity gives them an advantage over the games researchers can themselves develop. We hope that researchers will reach beyond “shooters” to a wider range of game types and possible emotional responses, including curiosity, compassion, pity, or even affection.

2. **How do games raise moral and ethical issues in the context of real-world settings?** Laboratory studies provide valuable information by isolating key variables, but as we’ve discussed, real-world experiences can offer quite a different picture. We’ve derived significant insight from the rich findings of Stevens, et.al. We need significantly more research in the same vein, observing real gamers of all types playing games of their own choosing in natural environments.

3. **What prosocial ideas, attitudes, or behaviors do players learn from multiplayer video games, and how are they different than single-player games?** This chapter paid scant attention to multiplayer games, perhaps one of the most vibrant areas of video game play. The implications of computer-mediated human-to-human interactions strike us as dramatically different than human-to-computer engagement. Prosocial theories we skimmed over, such as sportsmanship or civic association, may offer a very different set of conclusions about what players are learning in these games than, for example, content analysis.

4. **How do different cultures and practices outside of gameplay influence the prosocial value of video game experiences?** Even when the controllers are down and the console off, game players may still be processing and interpreting the meaning of their game experiences. As Squire (2006) has described, they may be looking online for walkthroughs, criticism, interpretation; they could be chatting with friends and family about the game; they might even be modifying elements of a game title that they find
Video Games for Prosocial Learning

inaccurate or unjust. All of these are potential prosocial development opportunities.

New Interventions

Along the way throughout this chapter we identified possible ways that video games can play a role in prosocial development. Because our discussion largely focused on games that already exist, we wanted to mention briefly novel opportunities for prosocial engagement that existing games do not, or very rarely, exhibit.

1. **Expand the range of vicarious experiences video games offer.** Rusch and Weise (2008) describe “blind spots” where game developers have not ventured such as emotional impacts beyond aggression and dominance. A broader emotional range encompassing “hope,” “love,” or “sacrifice” would offer more depth for serious prosocial education to plumb.

2. **Highlight the moral dimension of system-impacting choices.** The “moral intuition” school of psychology posits that our moral senses evolved to suit smaller and simpler settings than today’s complex society (Greene 2003, Haidt 2001). One consequence of this heritage is that people tend to privilege “identifiable victims” over those who are unseen, even when the latter are more numerous and in more desperate need (Singer, 2009, p. 47). Perhaps the gravest challenge facing a prosocial learning agenda is to help us bridge the cognitive gap between our moral intuitions and the increasingly complex and global social, economic, and environmental challenges we face today. If so, then perhaps video games can play a central role because of their capacity to model complex systems (Salen & Zimmerman 2003). It remains an open question whether games can help players grasp the contours of these systems not just intellectually, but also morally.

3. **Use video games to shape behaviors directly.** This chapter has focused almost exclusively on educational interventions, but we believe that games also suggest interventions that directly promote prosocial behaviors without a strong learning component and the risk of failing to transfer that learning to action. The interface embedded in the dashboard of the Toyota Prius, for example, shows trees and flowers growing when fuel efficiency is high—essentially a video game that “players” control by driving an actual car. My.BarackObama.com, a website central to Barack Obama’s 2008 Presidential campaign, awarded supporters points for hosting or attending meetings or making phone calls to voters. (Early in the campaign, high scorers were even eligible to win a meeting with Mr. Obama). And *Wii Fit* has participants actually perform yoga moves and other exercises. These games directly influence behavior, bypassing the transference problem, by feeding real-world actions (e.g., driving, campaigning, exercising) into a video game. As we interact with more of our world through digital interfaces, designers can look to video games to learn how to “nudge” people toward better decisions and away from harmful psychological biases (Thaler and Sunstein, 2008).

CONCLUSION

Our recommendations for future research and development reflect our belief that video games do indeed possess an enormous and largely untapped potential for fostering the prosocial development of people who play them. Games that can successfully foster such development, however, must do more than appear socially positive on the surface. As we’ve suggested in this chapter, true prosocial games need to underlay appropriate messages with rules and gameplay that reinforce those core values. Parents, teachers, and other concerned
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citizens also need to surround the gaming experience with an environment that fosters real-world practice, discussion and reflection.

We conclude with significant hope that video games can be “good for your soul” in the ways we’ve described, many of which are unique to the medium. We have reason to be optimistic. For one thing, the video game industry is still young and capable of change; it took many decades, too, after Newt Minow’s “vast wasteland” speech for the television medium to respond with Sesame Street. Second—speaking of Sesame Street—respected entities like the Joan Ganz Cooney Center at Sesame Workshop have begun to rise to the new challenge. While many of these efforts focus explicitly on literacy and critical thinking, they often implicate prosocial concerns, as when the Cooney Center looks to digital media as a way to “Know about other countries and cultures” (Shore, 2008). Finally, video games like MMOs have already shifted popular attention away from the passive broadcast mentality of television towards communal, participatory engagement. With so many ways to make a difference in how people experience video games, the time is ripe for prosocial educators to seize the opportunity to add their voice to the wide array of gaming options.

REFERENCES


Video Games for Prosocial Learning


ENDNOTES


2 See testimony of Henry Jenkins, http://www.voxygen.net/cpa/speeches/jenkinstxt.htm. The belief that video games cause gun violence is so firmly rooted in popular imagination that pundits immediately assumed that Cho Seung Hui, perpetrator of the Virginia Tech shootings, played violent video games. In fact, evidence suggests that, quite unlike his roommates, Cho played no games at all — consistent with research that suggests that boys who play no games, alongside boys on the other end of the spectrum who play games in great quantities, demonstrate more social problems than other boys their age (GTC).

3 Note that, at least in the case of the two games cited, the system is symmetric, also rewarding immoral behavior with “evil” points.

4 See also Moshe Sherer, The Effect of Computerized Simulation Games on the Moral Development of Junior and Senior
High-School Students, Computers in Human Behavior, Vol. 14, No. 2, pp. 375-86 (1998), which showed some growth of moral reasoning / moral development, albeit in a very small sample size. The “video game” in Sherer’s study is better described as a computerized board game in which subjects discussed and posited moral dilemmas. However, changing the properties to national parks (as in one official edition of the game) does change the procedural rhetoric of the game, because public parks are not normally thought of as properties to be purchased, monopolized, and “improved.” That Monopoly cannot accommodate any arbitrary content illustrates that coherent procedural rhetoric requires game rules and content to work in concert.

As a matter of taxonomy, Zoo Tycoon is not a role-playing game but rather an open-ended or “sandbox” game. Squire (2008). It nonetheless articulates a set of rules that encourages adopting a particular way of looking at and interacting with that “sandbox.”

We are oversimplifying to some degree. In Zoo Tycoon, the expenses and income attached to animals have some relation to their real-life maintenance costs, while Railroad Tycoon has a different set of expense and income statistics related to real-life railroad systems. There may be additional rules specific to the asset (for example, zoo animals have some risk of escape, and some animals are incompatible with others). These details can give each game realism, but almost all of them ultimately factor into a final bottom-line calculation of profit or loss. Bogost would point out—and we would agree—that at the level of “unit operation,” the nature of the content does modify the game’s procedural rhetoric—for example, in asserting a general claim that prisoners are assets for generating profits, or a specific one that providing entertainment for prisoners prevent riots. But here we are focusing on the cumulative rather than constituent ideas in the game.

While the Grand Theft Auto series are well-known for their open-ended play, recent titles in the series all have some linear storyline that cannot proceed until the player accomplishes some task, such as the murder we describe in this passage.

Seen from this perspective, “cheat codes” are not so much ethical temptations as they are sanctioned mechanisms that allow players to set their own goals rather than accept the developers’ pre-fabricated ones. Developers offer these alternatives to expand the market more than if they dictated all the terms of play.

Sometimes known as the “pacifist challenge.” Note that, as the term implies, the pacifist challenge is often employed as a way to make the game more difficult, not necessarily as a moral statement. See, e.g., http://www.gamespot.com/xbox360/action/grandtheftauto4/show_msgs.php?topic_id=m-1-43484799&pid=933037

We don’t want to misrepresent the prevalence of these discussions on the public forums. Most of the discussion about this topic are far more focused on gameplay (“What do I get if I do X?”).

See more in-depth analysis from the first author here: http://blogs.law.harvard.edu/games/2008/11/16/mybarackobamacom-as-augmented-reality-game/
Section 2
Cognitive and Social Psychological Perspectives
Chapter 3
Videogames and Moral Pedagogy:
A Neo-Kohlbergian Approach

Dan Staines
The University of New South Wales, Australia

ABSTRACT

The Four Component Model of Moral Functioning is a framework for understanding moral competence originally developed by James Rest and subsequently revised with Darcia Narvaez. It posits that moral competence can be broken up into four distinct components: moral sensitivity, moral judgment, moral motivation, and moral action. The purpose of the present chapter is to demonstrate, via an examination of three commercial off-the-shelf (COTS) videogames (Ultima IV, Fallout 3, and Mass Effect), how this model can function as a blueprint for the design of moral content in games intended for pedagogy and entertainment.

MORAL PSYCHOLOGY: KOHLBERGIAN AND NEO-KOHLERBERGIAN APPROACHES

Research into the psychology of moral development has experienced something of a renaissance over the last two decades. Where the field was once defined by the views of Lawrence Kohlberg and the cognitive-developmental paradigm, new perspectives informed by recent research in the cognitive sciences now predominate. Chief among these is the so-called “Neo-Kohlbergian” program championed by psychologist James Rest and colleagues (1999).

To understand the neo-Kohlbergian approach to moral psychology, it is first necessary to appreciate the work of Kohlberg himself and the cognitive-developmental tradition in general. Developed by Swiss psychologist Jean Piaget in the first half of the 20th Century, the cognitive-developmental approach to moral psychology is rooted in two key claims: 1) that moral competence “stems from structures of moral reasoning” (Krebs and Denton, 2005, p.631) and 2) that these structures develop over time in

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a sequence of stages or phases, with each stage representing a “better cognitive organization than the one before it” (Kohlberg, 1981, p.26).

In ‘The Moral Development of the Child’ (1932), Piaget argued that moral stage development is characterized by two distinct developmental phases: Heteronymous and Autonomous. During the Heteronymous stage, which starts in infancy and ends in the early teens, children think of morality in terms of obedience, and the validity of moral rules as a function of authority. But as children grow older and interact regularly with peer groups, they develop an appreciation for the motives behind moral behavior, for the utility of reciprocity, and for the status of morals as entities separate from the authorities that enforce them (Krebs & Denton, 2005, p.629).

In his 1958 doctoral dissertation, Kohlberg—seeking to expand upon Piaget’s work—developed a series of nine hypothetical moral dilemmas and read them to a sample of 81 boys, recording their responses and probing extensively to determine the rationale for their judgments (Krebs & Denton, 2005, p.629). Over the next twenty years, Kohlberg followed up with more than half of his original respondents, re-interviewing them and refining his moral dilemmas as well as the methodology used to obtain response data. On the basis of these longitudinal studies, Kohlberg developed a six-stage model of moral judgment maturity (see Table 2) representing an “invariant sequence” of moral development (Kohlberg, 1987, p.20). Each moral stage entails “a new logical structure” – an organized way of thinking.

Kohlberg insists that cognitive development must always precede its moral counterpart (ibid. p.138), although he does allow that in many cases a person’s cognitive maturity can outstrip their moral competence. Although moral stage development is universal to humans, most of us (as the cynical reader might expect) do not make the most of our potential in this regard, with the majority of adults tested by Kohlberg and colleagues classified as “conventional” – i.e., in Stage 3 or 4.

Insofar as it places deliberative reason at the core of moral cognition, Kohlberg’s approach to moral psychology is typically classified as rationalist or Kantian (Hauser, 2006, p.16). On this view, the most reliable measure of a person’s moral competence is the sophistication of their moral reasoning. This emphasis, or perhaps over-emphasis, on rationality constitutes the main

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**Table 1. Kohlberg’s six stages of moral development (Source: Kohlberg, 1981, pp.17-19)**

<table>
<thead>
<tr>
<th>Level One: Preconventional Morality</th>
<th>Stage 1: Punishment and Obedience: the physical consequences of action determine its goodness or badness regardless of the human meaning or value of these consequences.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Stage 2: Instrumental Relativism: right actions consist of that which instrumentally satisfies one’s needs and occasionally the needs of others.</td>
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<tr>
<td>Level Two: Conventional Morality</td>
<td>Stage 3: Interpersonal Concordance: good behavior is that which pleases or helps others and is approved by them.</td>
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<td>Stage 4: Law and Order: right behavior consists of doing one’s duty, showing respect for authority, and maintaining the given social order for its own sake.</td>
</tr>
<tr>
<td>Level Three: Postconventional Morality</td>
<td>Stage 5: Social Contract: right action tends to be defined in terms of general individual rights and in terms of standards that have been critically examined and agreed on by the whole society.</td>
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<tr>
<td></td>
<td>Stage 6: Universal Ethics: right is defined by the decision of conscience in accord with self-chosen ethical principles appealing to logical comprehensiveness, universality, and consistency.</td>
</tr>
</tbody>
</table>
Table 2. The four components of moral functioning and related skills/sub-skills (Source: Lapsley & Narvaez, 2005)

<table>
<thead>
<tr>
<th>Moral Judgment</th>
<th>Moral Sensitivity</th>
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</thead>
<tbody>
<tr>
<td>Understanding Ethical Problems</td>
<td></td>
</tr>
<tr>
<td>• Gathering information</td>
<td>Understand Emotional Expression</td>
</tr>
<tr>
<td>• Categorizing problems</td>
<td>• Identify and express emotions</td>
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<tr>
<td>• Analyzing ethical problems</td>
<td>• Manage anger and aggression</td>
</tr>
<tr>
<td>Using codes and Identifying Judgment Criteria</td>
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<tr>
<td>• Characterizing codes</td>
<td>Take the Perspectives of Others</td>
</tr>
<tr>
<td>• Discerning code application</td>
<td>• Take a cultural perspective</td>
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<tr>
<td>• Judging code validity</td>
<td>• Take a justice perspective</td>
</tr>
<tr>
<td>Reasoning Generally</td>
<td></td>
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<tr>
<td>• Reasoning objectively</td>
<td>Connecting to Others</td>
</tr>
<tr>
<td>• Using sound reasoning</td>
<td>• Relate to others</td>
</tr>
<tr>
<td>• Avoiding reasoning pitfalls</td>
<td>• Show care</td>
</tr>
<tr>
<td>Reasoning Ethically</td>
<td></td>
</tr>
<tr>
<td>• Judging perspectives</td>
<td>Responding to Diversity</td>
</tr>
<tr>
<td>• Reason about standards and ideals</td>
<td>• Work with group and individual differences</td>
</tr>
<tr>
<td>• Reason about actions and outcomes</td>
<td>• Perceive diversity</td>
</tr>
<tr>
<td>Understand Consequences</td>
<td>Controlling Social Bias</td>
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<tr>
<td>• Analyzing consequences</td>
<td>• Diagnose bias</td>
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<tr>
<td>• Predicting consequences</td>
<td>• Overcome bias</td>
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<tr>
<td>• Responding to consequences</td>
<td>• Nurture tolerance</td>
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<tr>
<td>Reflect on Process and Outcome</td>
<td></td>
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<tr>
<td>• Reasoning about means and ends</td>
<td>Interpreting Situations</td>
</tr>
<tr>
<td>• Making right choices</td>
<td>• Determine what is happening</td>
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<tr>
<td>• Monitoring one’s reasoning</td>
<td>• Perceive morally</td>
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<td>• Applying positive reasoning</td>
<td>• Respond creatively</td>
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<tr>
<td>Coping</td>
<td></td>
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<tr>
<td>• Managing disappointment and failure</td>
<td>Communicate Well</td>
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<tr>
<td>• Developing resilience</td>
<td>• Speak and listen</td>
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<tr>
<td>• Applying positive reasoning</td>
<td>• Communicate nonverbally and alternatively</td>
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<tr>
<td>• Managing disappointment and failure</td>
<td>• Monitor communication</td>
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<tr>
<td>Moral Action</td>
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<tr>
<td>Resolving Conflicts and Problems</td>
<td>Respecting Others</td>
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<tr>
<td>• Solve Interpersonal Problems</td>
<td>• Be civil and courteous</td>
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<tr>
<td>• Negotiate</td>
<td>• Be non-violent</td>
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<tr>
<td>• Make amends</td>
<td>• Show reverence</td>
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<tr>
<td>Assert Respectfully</td>
<td>Cultivate Conscience</td>
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<tr>
<td>• Attend to human needs</td>
<td>• Self command</td>
</tr>
<tr>
<td>• Build assertiveness skills</td>
<td>• Manage influence and power</td>
</tr>
<tr>
<td>• Use rhetoric respectfully</td>
<td>• Be honorable</td>
</tr>
<tr>
<td>Taking Initiative as a Leader</td>
<td>Act Responsibly</td>
</tr>
<tr>
<td>• Be a leader</td>
<td>• Meet obligations</td>
</tr>
<tr>
<td>• Take initiative for and with others</td>
<td>• Be a good steward</td>
</tr>
<tr>
<td>• Mentor others</td>
<td>• Use rhetoric respectfully</td>
</tr>
<tr>
<td>Planning to Implement Decisions</td>
<td>Help Other Cooperate</td>
</tr>
<tr>
<td>• Thinking strategically</td>
<td>• Act thoughtfully</td>
</tr>
<tr>
<td>• Implement successfully</td>
<td>• Share resources</td>
</tr>
<tr>
<td>• Determine resource use</td>
<td></td>
</tr>
<tr>
<td>Cultivate Courage</td>
<td>Finding meaning in life</td>
</tr>
<tr>
<td>• Manage fear</td>
<td>• Centre yourself</td>
</tr>
<tr>
<td>• Stand up under pressure</td>
<td>• Cultivate commitment</td>
</tr>
<tr>
<td>• Managing change and uncertainty</td>
<td>• Cultivate wonder</td>
</tr>
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</table>
point of difference between the Kohlbergian and Neo-Kohlbergian models of moral development. Where Kohlberg saw the capacity to make rational moral judgments as the basis of moral maturity, Neo-Kohlbergians contend that it is merely part of a much larger and more complex cognitive apparatus. According to James Rest and colleagues (1999), there are in fact four key psychological components that comprise the complete moral agent: Moral Sensitivity (the ability to recognize and respond to moral phenomena), Moral Judgment (the capacity to engage in moral reasoning and make moral choices), Moral Motivation (the desire to act on moral decisions and focus on them to the exclusion of other concerns), and Moral Action (the ability to act on moral decisions and see them through). Taken together, these form The Four Component Model of Moral Functioning (see Table 2).

THE FOUR COMPONENT MODEL AS A FRAMEWORK FOR DESIGN AND CRITIQUE

In this section, I will employ The Four Component Model as a tool to critique the moral content in three Commercial Off The Shelf (COTS) videogames: Ultima IV, Fallout 3, and Mass Effect. In so doing, I hope to demonstrate how the model can inform the design of moral content in videogames more generally.

Supported by empirical research in psychology and neuroscience (e.g., Narvaez and Vaydich, 2008), the Four Component Model functions as a blueprint for the development of moral expertise. As Darcia Narvaez (2006) explains:

Moral experts demonstrate holistic orientations in one or more of the four processes. Experts in [Moral Sensitivity] are better at quickly and accurately ‘reading’ a moral situation and determining what role they might play. They role take and control personal bias in an effort to be morally responsive to others. Experts in [Moral Judgment] have many tools for solving complex moral problems. They use reason about duty and consequences, responsibility and religious codes. Experts in [Moral Motivation] cultivate ethical self-regulation that leads them to prioritize ethical goals. They foster an ethical identity that leads them to revere life and deepen commitment. Experts in [Moral Action] know how to keep their “eye on the prize,” enabling them to stay on task and take the necessary steps to get the ethical job done. They are able to intervene courageously and take initiative for others. Experts in a particular excellence have more and better organized knowledge about it, have highly tuned perceptual skills for it, have deep moral desire for it, and have highly automatized, effortless responses (p.716).

It is my contention that videogames, by virtue of their interactivity and capacity to simulate personal, social, and emotional contexts, are particularly suited to cultivating expertise in each of the above listed ethical skills.
Though the purpose of this critique is primarily to inform the design of videogames for moral pedagogy, in my view it is also relevant to the design of moral content for games intended solely for entertainment. If games are to be effective as moral educators, they must (among other things) present moral content—dilemmas, temptations and so forth—in a manner that engages student focus and encourages them to reflect on their in-game behavior. In short, they must be entertaining as well as instructive; they must be good videogames as well as effective teaching tools. As such, it seems reasonable to assume that effective moral content in an educational videogame could, with appropriate tweaking, be just as effective in a game designed solely for fun.

Moral Judgment: The Case of Ultima IV

Originally released in 1989 for the Apple II and then later ported to a wide variety of platforms, including the PC and Nintendo Entertainment System (NES), Ultima IV: Quest of the Avatar is a role-playing game designed by Richard “Lord British” Garriott remarkable for its strong focus on moral development. Where the majority of its RPG contemporaries focused on epic conflicts between good evil, Ultima IV had players undertake a spiritual journey of sorts (the titular Quest of the Avatar) in which the ultimate goal is the cultivation of eight virtues: Honesty, Compassion, Valor, Justice, Honor, Spirituality, Sacrifice, and Humility. By performing certain actions, such as giving money to the poor or donating blood to healers, players develop these traits over the course of the game until they are sufficiently virtuous to obtain the Tome of Wisdom and become the ultimate moral exemplar that is the Avatar.

Compared to modern RPGs such as the Fable and Star Wars: Knights of the Old Republic series, Ultima IV’s capacity for engaging Moral Judgment skills is surprisingly high. Consider the character generation system, for instance. Eschewing the standard Dungeons & Dragons-inspired attribute chart, Ultima IV has the player answer a series of moral dilemmas, delivered via tarot cards dealt by an aging fortune teller. Here is a sample of the sort of dilemmas posed in the NES version of the game:

*Entrusted to deliver an uncounted purse of gold, thou dost meet a poor beggar. Dost thou (a) deliver the gold knowing the Trust in thee was well placed, or (b) show Compassion, giving the beggar a coin, knowing it won’t be missed?*

This is an effective moral dilemma for a few reasons. First of all, it’s a genuine dilemma, rather than merely a moral temptation. The difference is crucial, and unfortunately ignored by many games with moral content. A genuine moral dilemma involves conflict between two or more morally compelling claims (Kidder, 2003, p.17). The abortion, euthanasia, and stem-cell research debates are all examples of this kind because all sides have legitimate moral arguments. Moral temptations, on the other hand, are simply instances in which one may feel justified in doing something obviously immoral (ibid.), like downloading pirated music or cheating on a spouse.

According to Narvaez and her colleagues, engaging in ethical reasoning of the sort associated with moral dilemmas is just one of seven essential skills related to the development of Moral Judgment (Lapsley & Narvaez, 2005, p.156). Others include:

- Understanding ethical problems
- Using codes and identifying judgment criteria
- Reasoning critically
- Understanding consequences
- Reflecting on process and outcome
- Coping and resiliency

As well as being a valuable guide for educators, these seven skills provide a comprehensive
blueprint for the design of videogame content intended to promote or engage Moral Judgment skills. View it as a checklist of sorts: the more boxes a given piece of content ticks, the more likely it is to activate cognitive faculties related to Moral Judgment. How do you design content to expand the ways in which judgment is piqued? Well, let’s go back to the moral dilemmas in Ultima IV, and see to what extent they could be improved—pedagogically speaking—by the application of this method.

By their nature, the dilemmas in question have already (to a certain extent) ticked off four of the seven boxes: namely, reasoning ethically, reasoning critically, understanding ethical problems and using codes/identifying judgment criteria.

The first two we’ve already discussed: although distinct cognitively, ethical and critical reason are mutually dependent—to the point where some philosophers (notably Kant) see them as virtually identical. Related to these two, the ability to understand ethical problems develops in the context of repeated exposure to them (Churchland, 1998, p.107). The fourth skill, using codes and identifying judgment criteria, is implied by the specific kinds of dilemmas presented in Ultima IV. For example, consider again the following excerpt:

Entrusted to deliver an uncounted purse of gold, thou dost meet a poor beggar. Dost thou (a) deliver the gold knowing the Trust in thee was well placed, or (b) show Compassion, giving the beggar a coin, knowing it won’t be missed?

The terms in bold are the ones I consider morally salient. Entrusted and Trust in thee (with a capital) both imply duty and responsibility. They encourage one to think of the problem in relation to their role as the delivery person of the gold. Framed in this way, the issue is considered to be one of Honor (one of the Eight Virtues mentioned above): honor of one’s duty, honor of one’s superiors, and honor of one’s honesty. Conversely, poor, show Compassion (again capitalized), uncounted and it won’t be missed frame the problem as one of empathy and charity. Pulling for the Virtue of Compassion, these words encourage the player to empathize with the beggar while simultaneously diminishing the negative impact their well-meaning theft will have on their hypothetical employer. In this way, it is necessary to consider both codes of conduct and other judgment criteria when approaching this dilemma.

With the other three skills, the dilemmas do not fare as well in supporting their practice. For starters, since the dilemmas are pure hypotheticals with no effect on the game other than determining the player’s class and starting position, they’re unlikely to spark much reflection on the consequences of Moral Judgment. There are a number of ways the dilemmas could be made more pedagogically effective in this respect. For example, one could simply have the player’s answers act as modifiers for their in-game virtues: compassionate answers enhance Compassion, honorable answers enhance Honor, and so on.

This leaves two more skills. Reflecting on process and outcome entails reasoning about the structure of moral decision making and involves thinking about means and ends, making choices, and monitoring one’s own reasoning for implicit and explicit biases (Narvaez & Lapsley, 2005, p.156). The dilemmas in Ultima IV engage this skill to a certain extent in that a number of them—like the one about the beggar—are means-versus-ends type problems. However, once solved, there is very little opportunity or incentive for the player to engage in deeper reflection about their choices. A tried and tested away of achieving this in moral philosophy is to give the same dilemma multiple times with various little tweaks each time (as in the variations of Philippa Foot’s (1978) famous “trolley dilemma”). So, for example, the beggar dilemma could be followed by another dilemma in which the player has to decide whether to steal food from a wealthy merchant for the purpose of feeding their sickly child. The situations aren’t
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entirely analogous, but the point is that they’re similar enough to be comparable, and are thus capable of triggering ethical reflection in players who recognize their similarity, but answer each differently.

Coping and resiliency, in a nutshell, refers to the capacity to make solid Moral Judgments in the face of adversity and disappointment (Narvaez & Lapsley, 2005, p.156). It is a difficult faculty to engage with hypothetical moral dilemmas because they exist in a contextual vacuum. In responding to the dilemmas in Ultima IV, for example, one does not feel challenged or otherwise under pressure because said dilemmas don’t exist in a context in which those feelings make any sense. A player who decides to give the beggar a coin does not feel anxiety over betraying their employer because said employer only exists as a word. They might consider it questionable intellectually, but there are no external pressures that one must resist. There’s no possible guilt or social approbation to contend with, as it’s an entirely self-contained problem.

To break the Ultima IV dilemmas of their contextual isolation, one would need to connect them to the rest of the game and its world in a meaningful way. One possible way to do this would be to have some of the dilemmas repeat a number of times during the game, but under circumstances that might cause the player to waver from their original choice. For example, one could design a modified version of the beggar dilemma such that giving to the beggar may cause other characters (such as certain shopkeepers) to stop responding to the player. Morally, this version of the dilemma is identical to the original – the only difference is that the modified version is embedded in a context that challenges the charitably inclined player’s resolve and capacity to reason clearly in a muddy situation.

It’s worth noting at this point that I’m not arguing that videogame content designed to promote Moral Judgment needs to engage all of the above skills all the time to succeed in that respect. My goal—and this applies to all the games discussed in this chapter—is simply to illustrate how the scope of moral content can be broadened by an application of the Four Component Model to the process of game design. The extent to which one should broaden the scope of their content in this way depends entirely on what their goals are as game designers, educators, or both.

Moral Sensitivity and Megaton in Fallout 3

Fallout 3 is an action-heavy RPG released by Bethesda Softworks in 2008. Like the previous Fallout games, this one takes place in a retro-futurist post-apocalyptic wasteland littered with the remains of Cold War Americana. The player takes the role of a citizen of Vault 101 – one of several hundred underground shelters designed to protect pockets of society from the nuclear fallout ravaging the rest of the planet. Following an incident early in the game, the player must leave the vault and venture into the blackened ruins of Washington, D.C. to search for their missing father, thus initiating a sprawling adventure punctuated by frequent moments of moral temptation.

I use the term “moral temptation” deliberately because that is exactly the form in which most of the moral content in Fallout 3 is presented. Unlike Ultima IV’s dilemmas, moral problems in Fallout 3 generally involve choosing between an obvious good and an obvious wrong. For example, early on in the game, the player discovers the town of Megaton: a shanty settlement constructed around an undetonated nuclear bomb. Upon talking to the local sheriff, Simms, the player learns that the bomb, although undetonated, is still live and may yet explode, destroying the town and everyone in it. At this point, the player can choose to disarm the bomb (provided they have the requisite tools and knowledge), or continue to explore the rest of Megaton, eventually happening across an individual by the name of Mister Burke.

Mister Burke is a bad person. He talks in an insidious purr, wears an expensive business suit,
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and carries a silenced pistol (although only a sticky-fingered player would know that). He also wants to detonate the aforementioned nuclear bomb, and what’s more, he wants to pay the player to do it:

_I represent certain … interests, and those interests view this town—this ‘Megaton’—as a blight on a burgeoning urban landscape. You have no connections here, no interest in this cesspool’s affairs or fate. You can assist us in erasing this little ‘accident’ off the map._

In contrast to Sheriff Simms’ fatherly affability, Mister Burke is depicted as cartoonishly evil, deriving profit and pleasure from wanton destruction. And so, the choice confronting the player could not be any more black and white: either side with the hard-working Good Guy and save a town of (mostly) innocent people, or succumb to temptation and side with the Bad Guy, dooming the town and its citizens for the sake of money and material goods.

So far as moral temptations go, this particular temptation is not a very compelling example of its kind. A good moral temptation entails apologetics: one must be able to justify, however weakly, their immoral behavior. Once again, downloading music from the internet is a good example of a moral temptation because it’s easy to rationalize. For example:

- I wasn’t going to buy it anyway
- I only want to see if I like it
- Record companies are greedy and deserve to be ripped-off
- I still buy concert tickets and merchandise

But with the Megaton quest in _Fallout 3_, there is no coherent rationalization available – the only plausible reason a morally engaged player would want to take Mister Burke up on his offer is if they’re trying to be psychotic.

Considered in the context of the game’s Karma system, which awards good and bad karma points to the player based on their behavior, what Mister Burke is really offering here is a chance for the player to manipulate their moral identity as though it were any other character attribute. In the same way that one chooses their hair color or gender in _Fallout 3_, one also chooses whether to be Hero or Villain in a situation obviously designed for that purpose. The setup and options are obvious because they need to be, lest the player miss or mess up an opportunity to develop their character’s stats.

This might be fine in terms of a simple game design (or in this case, as a means of designing your avatar), but unsuccessful for the purposes of moral pedagogy. After all, real moral temptations and dilemmas are seldom as obvious as deciding whether to murder people or save them. In the real world, moral situations are deeply embedded in the context of everyday life, such that it is often difficult to identify them as moral in the first place. Indeed, the capacity to identify moral problems as moral problems is fundamental to the development of Moral Sensitivity – which, like the other components of the Four Component Model, can be divided into seven sub-skills (Narvaez & Lapsley, 2005, p.156):

- Understanding emotional expression
- Taking the perspectives of others
- Connecting to others
- Responding to diversity
- Controlling social bias
- Interpreting situations
- Communicating well

Of these, understanding emotional expression, taking the perspectives of others, connecting to others, and interpreting situations are the most relevant to the Megaton temptation since they are the skills most likely to be activated by the temptation in its present form. They are the key to making it more effective from a psychological/pedagogic standpoint.

One of the essential components of understanding emotional expression is the ability to
identify and express particular emotions (Lapsley and Narvaez, 2005, p.156). The extent to which one can practice this skill in a game like *Fallout 3* depends largely on the emotional complexity of the characters the player encounters. A character possessed of complex emotions invites scrutiny and empathy, encouraging the player to recognize the role emotional states play in motivating their behavior. In the Megaton temptation, the chief personalities—the Sheriff and Mister Burke—do not invite emotional scrutiny because they don’t have any emotions worthy of scrutiny. Despite the nature of the situation in which they’re involved, neither expresses any sentiment beyond what is necessary to establish their role as the unswerving avatar of their respective moral code. (Mister Burke, for example, angrily scolds the player if asked whether it would be permissible to warn the inhabitants of Megaton before blowing it up.)

What Simms and Burke need is emotional depth. For the former, this implies deepening the connection he has to Megaton: to the town itself, to the people, and to their way of life. Basically, the sheriff needs to care about the thing he asks the player to save. Note that this does not mean that he has to be a gushing font of heartfelt speeches and tear-stained entreaties. Establishing his emotional connection to Megaton could be as simple as having him talk about his young son (who lives with him) or about his relationship with the town’s various inhabitants. The player doesn’t need to see Simms pour his heart out – they only need to see that he has a heart, and that it’s invested in the situation at hand.

As for Mister Burke, there are a number of ways one might enhance his ability to engage the player emotionally. One thing worth noting in this respect is that even if Burke is meant to be evil, that does not excuse him from expressing emotions, and more importantly, from soliciting emotional responses from the player. Perhaps, instead of simply asking the player to blow up Megaton, he could instead manipulate them into it. Perhaps he could attempt to make the player see the town and its inhabitants in a negative light by appealing to certain emotional/psychological propensities, such as prejudice (Simms is black), self-righteousness (the town is populated by derelicts, including prostitutes and drug dealers), or vindictiveness (some of the townsfolk are unnecessarily rude and hostile – maybe they deserve a bit of nuclear comeuppance). In behaving in this way, Burke would provide the attentive player (or the player assisted by an attentive instructor) ample opportunity to not only to express their emotions (either with or against him), but also to appreciate how emotions can be manipulated in the process of moral deliberation.

Closely related to one’s faculty for understanding emotional expression is the capacity to take the perspective of others. The cornerstone of many traditional and modern approaches to moral education, including both the Kohlbergian (Kohlberg, 1978, p.45) and neo-Kohlbergian models, this particular skill is, in my view, more easily engaged with videogames than any other media. While books, movies, plays, and television shows can provide exposure to a variety of moral perspectives, only games provide the means for interacting with them. With games, one cannot only observe moral agents, but talk with them, interrogate them, and argue with them. Better, one can even adopt and act out different moral perspectives in a safe “semiotic domain” (Gee, 2004, p.26) free of messy real-world consequences (Dickey, 2007, p.258). Admittedly, the extent to which one can actually do this in most games, commercial or otherwise, is limited, but the potential is most definitely there, waiting to be exploited.

Of the characters living in Megaton, only three advance perspectives relevant to the temptation: Simms, Burke, and Confessor Cromwell. As we’ve already seen, the first two are simply manifestations of diametrically opposed moral dispositions: save the town because it’s good or blow it up because it’s evil. The third, that of Confessor Cromwell, is a little more interesting, though sadly underdeveloped. In essence, Cromwell is a
local cult leader. As the head of the Church of the Children of Atom, he preaches that the bomb (i.e., the same bomb the player has been asked to deal with) is a holy relic and that nuclear detonation is in fact a kind of explosive rapture in which “each of us shall know peace, shall know an end to pain, and shall know Atom in his glory.”

But while Cromwell’s dialogue suggests he ought to want the player to detonate the bomb, he neither comments on nor attempts to influence the player’s in this respect. This is a missed opportunity. It’s obvious that the Confessor is meant to be a kooky sort of character—a parody of real-life street-corner evangelists—but the strangeness of his beliefs does not render them any less interesting from a moral perspective. Indeed, the oddness of Cromwell’s perspective arguably makes it more valuable inasmuch as considering it might compel the player to articulate, either to themselves or by selecting certain dialogue options in-game, what makes their particular view preferable.

Of course, Cromwell is just one of many characters in Megaton whose perspective could potentially inform the player’s moral behavior. In saying this, I don’t mean to suggest that everybody in town should have an opinion on whether the player should detonate the bomb or not. All that is required is that they provide the player with an opportunity to broaden their view of how certain choices can affect other people and the world in which they live. One could, for example, encounter a character who enthuses on the role Megaton has played in the social landscape of the wasteland — how its continued existence guarantees the growth of trade and so forth. On the flipside, one might also uncover documents detailing a dark undercurrent of violent bigotry running through the town’s short history. These simple examples would serve to enrich the player’s understanding of the situation at hand — to provide perspectives from which to make an informed moral choice.

Moving on now to the third skill, the extent to which one is capable of taking another’s perspective can often depend on the extent to which one feels connected to them. One finds it easier to empathize with people with whom one already shares a bond, such as family and friends. Consequently, if one’s morality is to be more than strictly parochial, it is necessary to learn how to connect with others beyond one’s immediate circle. According to Lapsley and Narvaez, this can be achieved by cultivating three interrelated skills: relating to others, showing care, and being a friend (2005, p.156). Sadly, there is little opportunity to practice any of these skills within the context of the Megaton temptation, and *Fallout 3* in general.

Though the characters that populate Megaton are generally personable, in a very artificial sort of way, it’s difficult to relate to them as such simply because there’s very little there to which one can relate. In talking to them, one gets the sense that they are not so much people as automated service kiosks, designed to dispense crucial information and services to the player as efficiently as possible. When the player is permitted to engage them on a personal level—to discuss with them their views, vices, aspirations, likes, dislikes, and so on—it is only to the extent that it serves some obvious function in the game world. So, when the player finds out that one of the residents (a man named Leo Stahl) is addicted to drugs, they are encouraged to use that information like a token in exchange for karma points, drugs, money, or experience. One doesn’t find out why Leo uses drugs, or how he became addicted, or indeed anything that might help the player relate to him and his situation. He is simply the town junkie, end of story.

Given this, it is naturally unsurprising that caring for characters like Leo is next to impossible. Again, there simply isn’t enough there to care about. And even if there were, any chance the player has to express care—say, in the form of a goodwill gesture—is inevitably tied to a reward of some kind, which shifts the emphasis away from the act itself onto its immediate benefits, be they in the form of money, experience points, karma points, or material goods. I don’t pretend
that a caring act has to be entirely selfless, but it’s reasonable to say that acts for which there could be no selfish motivation whatsoever are generally stronger expressions of goodwill than those to which obvious benefits are attached.

If the player is to relate to these characters, if they are to care for them and be a friend to them, then said characters require extensive development, preferably over the course of repeated interactions with the player in a variety of different contexts. In the case of the aforementioned Mister Stahl, this could be achieved using his drug problem as the focus. Rather than simply exploiting Stahl or commanding him to stop shooting up, the player could perhaps assist him in an extended quest to break his addiction, periodically checking on his progress and helping him rebuild different aspects of his life. This would give the player a chance to establish a relationship with Leo – to get to know him on a personal level. The key thing to remember is that one can’t expect this sort of attachment to spring up instantaneously, over the course of one or two brief conversations designed to establish a quest or convey practical information. Just as in real life, videogame relationships, if they are to be meaningful, need to be built.

What is the reward for doing all this? Nothing other than the satisfaction of helping somebody become a better human being. Although doling out goodies of the sort discussed above is an easy way to sustain player motivation, I don’t think it is necessarily the most effective, especially insofar as moral content is concerned. In the real world, moral behavior is not typically motivated by the desire for tangible rewards, but rather by the feeling of satisfaction one gets from doing the right thing (e.g., Narvaez & Vaydich, 2008, p.297). The same applies to moral content in videogames. Oftentimes, when the player adopts a role in the game world, be it hero or villain, simply acting in ways consistent with that role is reward enough (Gee, 2004, p.98).

Indeed, some players will even forgo tangible rewards for the sake of maintaining their avatar’s moral identity. For example, certain dedicated players of Looking Glass Studio’s Thief games participate in “ghosting” – a way of playing the game whereby the goal is to stick to a kind of thieves code in which violence of any sort is completely forbidden. This is partly to make the game more challenging, and partly because ghosters find it satisfying to stay in character, morally speaking.

As previously mentioned, the ability to interpret situations—to perceive and respond to morality as it occurs in everyday life—is at the core of Moral Sensitivity, and of morality in general. On the view of moral functioning here advanced, moral competence consists of a suite of interrelated cognitive skills (largely unconscious and automatic) that are activated in response to certain physical, psychological, and social stimuli. It follows from this that the extent to which one is capable of recognizing said stimuli has a tremendous impact on the extent to which one is moral at all. After all, a person can’t respond to moral cues if they can’t identify them. Consider again music piracy. While some downloaders may feel the need to justify their morally dubious behavior, for others it simply doesn’t register as morally salient. To younger people particularly, downloading is an ordinary activity, like watching television or reading a book. It isn’t moral and it isn’t immoral. It’s just something one does.

The Megaton temptation, on the other hand, is unmistakably moral. It is in fact too moral. Stripped of emotional and social context, it is morality in stark black and white, as pure and abstract as an algebraic equation. And it is for that reason above all else that it fails to engage. In confronting this temptation, the player is not challenged to discover its nuance – to identify morally relevant information and piece it together to form a coherent picture of what ought to be done. Indeed, all the morally relevant information is presented in the plainest terms possible. In this way, one is not allowed to see what the situation is, but rather one is told what it is. With robotic clarity and candor,
Simms and Burke give the player a clear moral choice, leaving no room for ambiguity of any sort. The only way it could be a more obvious moral temptation is if Simms were dressed as an angel and Burke sported horns and goatee.

Insofar as they would make it less obvious—which is to say, more emotionally and socially complex—the changes suggested in this section would, I believe, make the Megaton temptation significantly more compelling. With regard to games more generally, be they for pedagogy or entertainment, the key take-away point from all this is that moral dilemmas and temptations need to be firmly embedded in the contexts from which they arise, because it is only in those contexts that they are rendered morally meaningful.

**Moral Action in Oasis from *Fallout 3***

As another case study, let’s take a look at another quest from *Fallout 3*. This quest is available in an unusual settlement named Oasis. Isolated from the rest of the wasteland by a natural barricade of steep cliffs, Oasis is unique in the world of *Fallout 3* in that it is a lush natural paradise, not unlike a post-apocalyptic Garden of Eden. The reason for this miraculous fertility is Harold: a sentient tree whose seeds spread vegetation wherever they land. Worshipped by the locals as a god, Harold is in fact a mutant, in other words, a regular person who gradually turned into a tree following exposure to an experimental mutagen. Rooted to the same spot for thirty years, he has come to despise the tedium of his immobile existence, and bluntly asks the player to end it for him. It wouldn’t be murder, he explains. It would be a favor. It would be euthanasia.

Now, this is already a notoriously difficult moral dilemma – but that’s only half of it. Once the player leaves Harold, they are immediately confronted with an argument in progress between the leaders of Oasis, Treefather Birch and Leaf Mother Laurel. The issue at hand is the spread of Harold’s seeds. Repulsed by the wasteland and afraid of its inhabitants, Birch would like to suppress Harold’s fertility, thus limiting the town’s growth. Laurel, on the other hand, is of the opposite view, advocating accelerated expansion. Which one gets their wish depends entirely on the player, who is asked to resolve the matter by doing one of two things: (a) apply a suppressive sap to Harold’s heart to slow his growth, or (b) apply an accelerative liniment to speed it up. For either of these options to succeed, Harold obviously needs to be kept alive, which of course conflicts with his request for euthanasia. Thus the player is left with three choices in total:

1. Maintain the integrity and sanctity of Oasis by applying the sap.
2. Spread Harold’s fertility into the wasteland by applying the liniment.
3. Put an end to Harold’s suffering painlessly by piercing his heart – or sadistically by burning him to death.

In stark contrast to the Megaton temptation, this is a remarkably subtle and engaging piece of moral content. Like the beggar’s dilemma from *Ultima IV*, it embodies the classic conflict between deontological and utilitarian meta-ethics, encouraging the player to confront questions that have troubled philosophers for centuries. Questions like: Is it permissible to kill to prevent suffering? To what extent does the good of the many outweigh individual liberty? It is it ever right to use a rational being as a means to an end, or do all rational beings (including mutants) count as ends in themselves? Of course, because these questions are implicit in the situation and aren’t explicitly formulated for the player’s consideration, it’s possible—even probable—that many players will fail to register their relevance to the dilemma. From the perspective of moral pedagogy, this is not only acceptable, but desirable. As we’ve already discussed, real moral dilemmas are seldom simple, and that is precisely why they are interesting. The same applies, or at least ought...
to apply, to hypothetical dilemmas: a certain level of complexity is necessary, not only to stimulate growth, but to capture and maintain interest.

As a multi-faceted moral dilemma deeply embedded in a complex socio-emotional landscape, the Oasis quest is capable of engaging at least two of the four components of moral functioning—those being Moral Judgment and Moral Sensitivity. That leaves Moral Motivation and Moral Action. For now, let’s concentrate on the latter.

Put simply, Moral Action is the ability to turn moral cognition into moral behavior. Like the other three components of moral functioning, it is divided into seven interrelated sub-skills (Narvaez & Lapsley, 2005, p.157):

- Resolving conflicts and problems
- Asserting respectfully
- Taking initiative
- Planning to implement decisions
- Cultivating courage
- Persevering
- Working hard

Insofar as the player’s role in Oasis is to adjudicate the dispute between Harold, Birch, and Laurel, the significance of the first skill—resolving conflicts and problems—is more or less self-evident. I use the term “adjudicate” in a very loose sense here: the player is really more an enforcer rather than an arbiter. Whereas real adjudication generally involves negotiation and compromise, in Oasis it is merely a matter of choosing one side to the total exclusion of two others. There is no allowance for conciliation even though the dilemma provides considerable scope for it. For example, perhaps Birch and Laurel could be persuaded to reach a middle ground with regard to Harold, combining the liniment and sap to encourage moderate growth over an extended period of time. Or for a more straightforward compromise, why not have it so that Harold can be dissuaded from suicide, either for the good of Oasis or the good of the entire wasteland? Even if a mutually beneficial resolution isn’t possible (and sometimes it isn’t), the player should at least be given the opportunity to bring the parties together and have them discuss the issue face-to-face. Indeed, given how much Harold, Birch, and Laurel have invested in the outcome of this dilemma, it’s odd that they are not permitted to play a more active role in resolving it.

That said, *Fallout 3* is still a videogame, and in videogames it is usually the player’s job to take the initiative. Although, in the case of Oasis, initiative isn’t so much taken by the player is it is thrust upon them. After all, one can’t even enter the village without agreeing to speak with Harold, and one can’t speak to Harold without being asked to euthanize him. Similarly, Birch and Laurel don’t ask for the player’s assistance—they assume it. In this way, the player is effectively denied the chance to ‘step-up’ to the problem, but fortunately, that isn’t the only opportunity they have to take the moral initiative in Oasis. After talking to Harold, Laurel, and Birch, one is free to roam the village, talk with the inhabitants, and solicit their opinions on their neighbors and the issue at hand. This allows the player to take the initiative for making an informed choice—it lets them assume responsibility for discovering the facts and perspectives relevant to the dilemma. In sum, it’s provides the player with an opportunity to exercise leadership, and to actively take responsibility for doing the right thing for everyone involved (Narvaez & Lapsley, 2005, p.157).

There is one more of the above-listed skills that is particularly relevant to Oasis, and that is perseverance. With regard to Moral Action, this refers to one’s capacity to be steadfast, to have the competence required to overcome obstacles and transform one’s moral convictions into moral (Narvaez & Lapsley, 2005, p.157). So far as the present dilemma goes, there are a couple of reasons this skill is especially pertinent. The most obvious is the fact that—as we’ve already seen—it’s impossible to please everyone, regardless of which choice the player makes. Moreover, each
of the available solutions could have potentially disastrous consequences, not only for Oasis, but for the entire wasteland. Thus, the player must possess the resolve to do what they think is right in the face of uncertainty and opposition. Introducing some level of negotiation between the parties (as I suggested above) would weaken this to an extent, but even in that case, one must still possess the determination and skill necessary to see and implement a compromise.

In addition to this, the Oasis dilemma also challenges the player’s emotional resolve, particularly where Harold is concerned. If one chooses to euthanize the mutant tree, one is faced with the prospect of killing what is for all intents and purposes an intelligent and likeable person. What makes this even more challenging is that Harold is not isolated: the inhabitants of Oasis are clearly attached to him, either as a savior, a friend, or both. This is particularly affecting in the case of Sapling Yew, a young girl who describes Harold as her best and only friend. In talking to her, the player is encouraged to consider the emotional ramifications of the proposed assisted suicide. If the player feels that killing Harold is the right thing to do, and is intent on doing exactly that, then they must do so despite the pain it will cause an innocent child. One could hardly ask for a better test of moral resolve in a videogame.

**Moral Motivation and Mass Effect**

In discussing the last of the four components of moral competence, I’d like to shift focus and explore some practical ways to combine games with traditional pedagogy to facilitate the growth of Moral Motivation. But before we get into specifics, I will discuss general theories about using games in a formal moral education setting.

As is the case with educational games generally (Sanford et al., 2006, p.4), the educational effectiveness of moral games is inextricably tied to the context in which they are deployed. As James Paul Gee notes:

>“In terms of human learning, information is a vexed thing. On one hand, humans are quite poor at learning from lots of overt information given to them outside the sorts of contexts in which this information can be used ... On the other hand, humans don’t learn well when they are just left to their own devices to operate within complex contexts about which they know very little (2004, p.113).”

This is especially true of moral learning. According to Narvaez, effective moral education—what she calls Integrative Ethical Education or IEE—aims to enhance moral competence by cultivating four distinct but interconnected levels of knowledge: Identification Knowledge, Declarative Knowledge, Procedural Knowledge, and Execution Knowledge (Narvaez, 2006, p.721). The type of situated learning environments games provide excel at addressing the first, third, and fourth of these, but falter somewhat when it comes to the second (Randel et al., 1992, p.269). It follows from this that a successful application of games to moral pedagogy ought to involve a significant component of “real” classroom activities, such as teacher-guided discussion, written assignments, and readings in moral philosophy. Not only would this help frame and contextualize what students experience in-game, but it would also allow them an opportunity to analyze their own commitments and engage in genuine moral discourse with their peers.

To investigate what this might look like in practice, let’s turn now to one of the seven sub-skills associated with Moral Motivation: cultivating conscience. An essential component of complete moral personhood, educating for this capacity entails providing students with opportunities to exercise self-command, wield power and influence, and behave honorably (Narvaez & Lapsley, 2005, p.156). By themselves, videogames are more than capable of simulating situations in which these skills may be practiced, but the way and extent to which said practice contributes to development
depends largely on how it is contextualized in the classroom.

For the sake of illustration, let’s say we’re using science-fiction RPG *Mass Effect* as part of a lesson designed to help students cultivate conscience. More particularly, let’s say we’re using the part from *Mass Effect* where the player—an intergalactic secret agent named Shepard—is confronted with the opportunity to spare or execute a defeated foe. Said foe is an alien commando, and a former ally of your nemesis, by whom she claims to have been brainwashed into compliance. I say “claims” there because there is in fact no way to know whether she’s telling the truth or not. And even if she is, that does not necessarily imply that she deserves leniency.

In considering these issues and coming to a decision, the player may exercise all three of the sub-skills related to conscience cultivation. In exercising restraint, the player honors their role as an agent of in-game justice, demonstrating self-command by resisting the temptation to abuse their authority. Conversely, in shooting the prisoner, they wield that same authority to the fullest extent possible, exercising their power over life and death for the sake of caution (of the “you’re too dangerous to live” type) or revenge. Admittedly, someone playing the game for entertainment might make the decision based on the desire to acquire “Paragon” or “Renegade” points (which act much the same way as Karma points do in *Fallout 3*), but I suspect their appeal might be mitigated somewhat by limiting students to this one portion of the game, meaning they could not acquire enough points of either sort to have any interesting impact on their character.

However, even if students make the choice on moral rather than mechanical grounds, that doesn’t mean they necessarily understand the motivations and reasons behind said choice. For this reason, subsequent classroom activities would focus on bringing both into the open and analyzing their merit. One could, for example, collect the students into groups based on what choice they made and then guide them through a debate on the perceived value of each approach. Debate has often been praised for its capacity to stimulate thought in the classroom (e.g., Shaffer, 2006, p.21), and has is a staple of modern approaches to moral education. In the process of debate, students are exposed — with the help of a teacher — to more sophisticated or “higher levels” of moral reasoning, which they may then adopt (Kohlberg, 1981, p.27). Obviously, one could have students debate the death penalty without the game and many of the points raised would be identical. The purpose of the game is to provide a context through which these ideas can be understood: to root moral abstraction in concrete experience, enhancing the impact of both.

**DIRECTION FOR FUTURE RESEARCH AND CONCLUDING REMARKS**

This is only one analysis of how games and traditional pedagogy might be wed for the purpose of moral development. Indeed, it is my contention that games are capable of addressing the entire moral-pedagogic spectrum as defined by the Model of moral functioning. By analyzing three COTS videogames on the basis of that model, I also hope to have demonstrated its potential for informing the design of moral content for entertainment as well as education. That said, although I believe there is good reason to think that games can have considerable impact on moral development, there are still a number of areas that require further research before any practical applications of this approach could be made. For example, some areas include:

1. There is the possibility that the moral power of games may be a double-edged sword — that perhaps the medium’s potential for moral pedagogy correlates with its potential for moral perversion. If games can “make people good” in certain circumstances, then
perhaps they can also “make people bad” in others. The question then becomes: what are the characteristics of these circumstances?

2. Although the IEE approach goes some way to clarifying what can be done in the classroom to encourage moral development generally, there are still questions regarding the implementation of games within that framework that are yet to be resolved. These include questions about the organization of players (1 player to a computer? Groups?), the structure of lessons (How should time be organized?), and the measurement of learning outcomes (How is progress assessed?).

3. The effect that game genre and type have on learning in this context is yet to be determined. Which genres work best for stimulating specific moral skills? How do things like graphics and interface design affect ethical engagement?

Before closing, I would like to briefly address the issue of purpose: why is moral education important? As Samuels and Casebeer argue, in order to develop virtue, “one must be given a chance to practice being virtuous” (Samuels & Casebeer, 2005, p.77). Obviously there’ll always be people who act immorally, but that doesn’t mean we shouldn’t try to encourage the opposite. To do otherwise seems almost unjust – like we’re punishing people for failing to utilize skills they were never given a chance to cultivate in the first place.

In addition to the social benefits of moral education, there’s also the fact that using a game to teach morality could only mean good things for gaming’s public image. Videogames have been accused of various degrees of moral bankruptcy for over two decades now, and despite a paucity of supporting evidence, these accusations have gained considerable political mileage with policy-makers and the general public. But if it can be shown that games are not totems to moral destitution, that they can in fact play a valuable role in the development of moral character, then maybe that can be leveraged for the benefit of the medium as a whole.

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REFERENCES


Videogames and Moral Pedagogy


Chapter 4
The Good, The Bad, and The Player: 
The Challenges to Moral Engagement in Single-Player Avatar-Based Video Games

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ABSTRACT
In this chapter, the authors create a theoretical model to analyze the challenges inherent in the implementation of moral choices in single-player avatar-based video game. Based on previous research in moral psychology and game studies, the authors investigate the relationship between the player’s moral emotions and the events she causes to happen in the fictional world of a video game. The authors find that there are two factors that govern the identification with the moral content of the game’s fiction: the implementation of moral agency into the game, of which they identify two basic scenarios (fixed justice and accumulation of deeds), and the style of gameplay the player chooses to follow. The authors give numerous examples from interviews, on-line discussions and gaming press of instances when players feel moral emotions about im(moral) actions they have taken in a video game.

INTRODUCTION

“When I play a BioWare role-playing game, my characters tend to not only lean toward the nicer side, but almost immediately start twinkling with the magical pixie dust of purity. It’s embarrassing, but I just make the decisions I believe I’d really make, and end up that way.” - John Walker, Eurogamer.com (Walker, 2009)

“I laugh out loud when I run pedestrians over in Grand Theft Auto and get a kick out of unleashing Godzilla on my Sim City. In fact, I can’t name a video-game that did evoke any sadness or true ethical dilemma in me until BioShock.” - Osama, TowardsMecca.com (Osama, 2008)

In February 2009, John Walker, a well-known video game journalist, started an intriguing experiment.
He revisited *Knights of The Old Republic*, a 2003 role-playing video game designed by the Canadian company Bioware and set in the *Star Wars* universe. The game lets players choose between the Light and the Dark side by carrying out good or evil actions in its fictional world. “Playing evil” results in your character having different sets of skills and looking haggard and scarred. Revisiting the now-classic game, Walker set out to become the vilest character possible—“the bastard of the old republic.” His series of articles chronicle not only his bastard’s deeds, but also his own reflections on the actions he took. At one point, his character encountered a doctor who was “secretly treating the very poorest citizens, for free, against the wishes of the crimelord Davik” (Walker, 2009). Given a number of conversation options ranging from altruistic to gruesome, Walker made the bastard tell the doctor that: “If he didn’t give me all the money and health packs he had, I’d report him to the authorities.” Walker confesses that “it hurt to do it.” “Seriously, I physically winced,” he adds (ibid.).

Walker is, of course, not the first player to experience a clash of his avatar’s and his own moral identity while playing a scoundrel in a video game. Neither is he the first player to feel real emotions about a fictional event in a video game. Besides a blooming academic debate on emotional engagement in video games, there are ongoing conversations on gaming forums and even a couple of “saddest moments in gaming history” lists on the Internet (TheFluffyFist, 2006).

On the other hand, as Osama from the *Towards Mecca* gaming blog reminds us, games—even the same games that make certain people sad—can be played in a calculating, ruthless, emotionless way (see Sicart, 2009). We can run over pedestrians in an organized crime simulation like the *Grand Theft Auto* series without giving the slightest thought to ethics.

In Walker’s case, we can observe a certain degree of moral engagement, which is lacking in Osama’s account. What makes the player feel or not feel morally engaged? What drives our moral choices in games and how do we relate to them? These are some of the questions this chapter is trying to answer. To do so, I develop a theoretical approach that can conceptualize moral engagement in video games and hopefully give us a better understanding of how games can provide moral experiences. I believe this type of approach is necessary to find a place for games in the project of moral education.

In this chapter, I have chosen to focus exclusively on single-player games, as opposed to multi-player, to shed more light on the relationship between the player and the designed experience of a video game, instead of analyzing interaction among players. To limit the topic even more, I focused on avatar-based games only. The avatar is “an embodied incarnation of the acting subject” (Klevjer, 2006, p.87). In referring to avatar-based games, I mean games in which the player controls one character or a small group of characters led by a main player character. The relationship between the player’s and the character’s morality is one of the key topics of this chapter.

My project has two complementary parts. On one hand, I will examine how game design can contribute to moral engagement. On the other hand, I will be looking at styles of gameplay that enhance or hamper one’s moral engagement with a game. Most examples will be from recent and fairly recent mainstream games. The theoretical investigation will be bolstered by accounts of gamers’ experiences, some of them coming from gaming blogs and discussion forums, others from interviews I conducted for the purpose of this study. Six students from my Spring 2009 game studies course at Masaryk University in Brno, Czech Republic signed up for participation in a moderated focus group. All of them are experienced players, but none had any theoretical background regarding the topic before being interviewed. The two central discussion questions that drove the interviews were: “How do you decide when you face a moral choice in a video game?” and
“Do you sometimes feel bad about something you’ve done in a video game?” After transcribing the recording of the conversation, I translated it into English. Although it inspired some of the concepts presented here, the chapter should be considered a theoretical one, with quotes from gamers providing examples.

**TO FEEL, OR NOT TO FEEL: THEORETICAL PRELIMINARIES**

**Moral Choice in Moral Philosophy and Psychology**

Using media for moral education is nothing new. Over the centuries, literature has advanced many models for moral and immoral behavior and provided *morals* in the most literal sense. But as moral psychologist Amélie Rorty notes, literature also lacks something:

*The role of developing the imagination—particularly through reading literature and drama—is, as may have recently argued, central to developing moral sensibilities, particularly to refining moral perception. But while such sensibility may be necessary for morality, it is not sufficient. It is as difficult to carry imagination to practice as it is to act from rules and principles. Imitation and practice are necessary for both. Unless they are expressed in the smallest nuances of practice, the principles of justice [...] can at best introduce the beneficial complexity of internal psychological conflict (Rorty, 1993, p. 38).*

Fiction obviously cannot substitute moral practice. Rorty, however, only takes non-interactive fiction into account. Making moral choices in video games is markedly different from observing moral choices in literature. As Aarseth explains in his theory of cybertext, digital games are *ergodic*—the sequence of signs that is presented in the course of the game changes according to the player’s actions (1997). In other words, the player has agency to change the state of the game. In the games we are studying, this means that she has agency (and possibly, responsibility) over the avatar’s actions in the fictional world of the game. At the same time, making a moral choice for a fictional character in a video game is obviously different from making a moral choice for one’s self in the real world, because it remains a mediated experience.

We have, however, observed that there may be a link between someone’s moral sentiment and the events in the fictional world. When this link is maintained, we can speak of *moral engagement.* To clarify the nature of this link, we must bridge the theoretical gap that lies between the two poles. The theoretical approach of this chapter is informed by two different disciplines: moral psychology and game studies. In terms of moral psychology, we will focus mostly on the developments of the last decade that contribute to our understanding of moral engagement.

Traditionally, morality was viewed as being governed by reason (Greene et al., 2001). Lately, however, new discoveries in moral psychology have caused a shift in how we approach morality (Nichols & Mallon, 2005). Neuropsychological studies, such as the one by Greene and his collaborators, have shown that immediate emotions might play a much greater role in judging (or making) a moral decision than previously thought (2001).

Greene’s team’s goal was to explain the paradox of the two dilemmas well-known in moral psychology.

In the *trolley dilemma*, a runaway trolley is heading toward five people who will be killed unless the trolley changes course. The only way to save them is to hit a switch that will turn the trolley onto an alternate set of tracks where it will kill one person instead of five. Most people say they would hit the switch (Greene, 2001). In the *footbridge dilemma*, the trolley is, again, running to kill five people. You are standing next to a large
person who is a stranger to you on a footbridge above the tracks. The only way to save the five people is to push the stranger off the bridge and onto the tracks. He will die, but his body will stop the trolley killing the others. In this case, most people choose not do so, although, on a purely rational level, there is no difference in casualties (Greene, 2001).

Greene, et al. presented test subjects with variations of these dilemmas and monitored their brain activity and reaction times using functional magnetic resonance. They found heightened activity in the parts of brain related to emotion and prolonged reaction times in the subjects dealing with dilemmas that resembled the footbridge dilemma, as opposed to other kinds of dilemmas. According to their findings, the kind of emotional response this dilemma produces can precede—and override—rational reasoning (Greene, 2001).

We will get back to the footbridge dilemma, but first, let us look at the implications of this finding.

The possibility of our moral decisions being governed by emotions inspired more work in the field that leaned toward a constructionist view of morality. This direction is represented by Greene himself (2002) and Prinz (2007), among others. Prinz argues that “our emotions are influencing our judgments” (2007, p. 26) and points at many examples of emotional response this dilemma produces can precede—and override—rational reasoning (Greene, 2001).

Let us now return to the difference between the footbridge and the trolley dilemmas. Greene, et al. suggest that the footbridge situation, in which a person is pushed to his or her death, the action is more “up-close and personal,” as opposed to the more impersonal action, like a hitting of a switch. They, however, conclude that the personal-impersonal distinction might only be a useful “first cut.” (2001, p. 2107).

A later study by Nichols and Mallon focused on the perceived permissibility of sacrificing one actor to save five in the footbridge and trolley cases. They show that the asymmetry between the two is observed even when human actors are substituted by inanimate objects, such as wine glasses (2005). The “personal” distinction, we could argue, can be replaced with a more general factor of immediate agency—destroying a wine glass still gets us into an immediate contact with the destroyed object.

Nichols and Mallon also note that permissibility also depends on the magnitude of the outcome of the morally questionable actions—if billions of people are saved in the footbridge case rather than five, the choice is perceived as more permissible (Nichols & Mallon, 2005). They conclude that the assessments of impermissibility “implicate three factors: cost/benefit analysis, checking for rule violations, and emotional activations” (Nichols & Mallon, 2005, p. 539). All three will come into consideration while analyzing video games. In the next section, we will turn to game studies and look for instruments which will help us understand moral engagement in video games.

Game Studies and Moral Engagement

The second source of our theoretical framework about moral engagement in games is game studies. First, let us note that there have been previous investigations of games and ethics, including works by Pohl (2008) and Sicart (2009a, 2009b). Pohl uses methods of literary theory to outline
ethical interpretation of gameplay (2008). In both his paper (2009a) and the book-sized monograph (2009b), Sicart provides thought-provoking in-depth analyses of the relationship between ethics and game design. He touches on many of the topics I discuss in this chapter, but stays mostly within the realms of rational analysis. He focuses on games as designed ethical systems and, for most part, abstracts from the imperfections and distortions that occur on the interface between the game and the player, which is the part that I am investigating in this chapter. Therefore, my view can be deemed complementary to his. I will refer to both his and Pohl’s works as we move along. I will, however, try to build my argument from the moral emotion perspective instead.

First, we need to make clear a few things about video games. We have already said that digital games are ergodic (Aarseth, 1997). By taking actions in the game, we affect the simulated world. For the purposes of this chapter, we will also adopt the view that a video game is an interplay of rules and fiction (Juul, 2006). According to Juul, the rules of the game are real in that they have real consequences (losing a game is a real-life fact). Fiction, which contains the representation of the fictional world in writing, graphics and sound, is not.

A relationship based purely on a game’s rules is not enough to make for a moral judgment. There is hardly anything immoral about capturing a piece in checkers—unless we focus on the morals of the real-world gameplay consequences (i.e., letting a weaker opponent win a game), which is not the subject of this chapter. Without fictional context, the player actions cannot be interpreted morally. As Pohl noted, “it makes a difference if we have to arrange blocks in an optimal position or if we have to save the princess from the jaws of a monkey” (2008, p. 101).

As I discussed earlier, according to moral psychologists, emotional engagement is one of the important factors in moral decision-making (Greene et al., 2001). At the same time, there are voices in game studies that underline the role of emotion in gameplay. In her exploration of narrative capabilities of interactive media, Murray speaks of the desirability of “emotionally authentic experiences” in immersive environments (1998). Both Murray and Rusch (2007) conclude that the emotional link between the fictional situation and the player is established through agency—the ability to trigger various events in the fictional world by our deliberate actions. When we can interpret such actions morally (such as in moral dilemmas) and the player is emotionally engaged, we will speak of moral engagement.

But the player cannot enter the fictional world herself. She enters it via an avatar. According to Kjevler, the “avatar mediates fictional agency” and has capabilities and restrictions that “define the possibility-space of the player’s fictional agency within the game” (2006, p. 87). The avatar, constrained by the game’s rules, is the site of the player’s agency. This agency can make us feel moral emotions about our/our avatar’s actions. We will see that the player/avatar dichotomy plays an important role in our investigation. We must also keep in mind that the avatar has a fictional identity—either created by the game designers, or co-created by the player, or both—which may include the character’s moral profile. Kjevler distinguishes between a playable character, which is the fictional character with his or her background and personality, and an avatar, which is the mechanism of fictional agency. We will not use two separate terms, but our use of the term avatar will encompass both meanings.

Setting off the Bomb:
A Model Scenario

Having all the concepts in place, we can look at a hypothetical gameplay situation. At the beginning of Fallout 3 (Bethesda, 2008), a stranger in a bar in the town of Megaton offers a mission to the avatar in return for a reward. It consists of detonating a nuclear bomb and effectively de-
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destroying the town and killing all its citizens (for obvious reasons, the mission was left out for the Japanese version of the game). The situation is of considerable complexity and can have many unexpected consequences. But let us simplify it for now and focus only on the act of accepting or refusing the mission.

The player’s decision may be motivated by various considerations. There are gameplay concerns, such as the desire to win the game, maximize the score or explore all the possibilities the game offers. There are also fictional concerns. The player may hold interest in the lives of the game’s fictional characters or role-play an avatar with a certain personality traits. Contextual circumstances are also important: the player may behave differently when being observed than when playing alone. All these factors relate to the three factors identified by Nichols and Mallon as relevant for moral dilemmas and all of them affect the level of moral engagement.

What happens when the player decides to take action? On one hand, there is the avatar, created by the player, who may or may not express fictional moral emotion prior to and after partaking in a fictional event. On the other hand, there is the player, who may or may not experience real moral emotion prior to and after partaking in a real event. When morally engaged, the player also experiences real emotion over a fictional event. (Real emotion about a real event is of course also possible, for example anger about losing the game.) Basically, given that we only include the moral emotion of guilt in our analysis, we could be dealing with these hypothetical situations (not necessarily featured in the game of Fallout 3):

[1] The player chooses to destroy the town, with a moral emotion of guilt.


[3] The player chooses not to destroy the town, avoiding a moral emotion of guilt.

[4] The player chooses not to destroy the town, not avoiding a moral emotion of guilt.

[5] The player has no choice but to destroy the town and does so with a moral emotion of guilt.

[6] The player has no choice but to destroy the town and does so without a moral emotion of guilt.

In cases [1], [3] and [5], the player experiences a moral emotion. To induce this experience, both the game and the player must work together. In [1], the potential reward might outweigh the guilt, whereas in [3] the player probably chose to follow her moral principles. The lack of choice in [5] can still be morally engaging, as we will see in the examples of fixed justice scenarios.

In cases [2], [4] and [6], the player does not experience a moral emotion. Both the game and the player might be the cause. First of all, the game might have not made clear the consequences of the decision or it is just badly designed. We will examine these factors in the section about the game’s share in moral engagement. In [6], the player’s agency is limited and therefore he might not be engaged. Lack of emotion in [2] and [4] might be caused by the player choosing a gameplay style that does not engage in fiction, such as metagaming, which we will also discuss later.

Another relevant explanation is that the player chose to perform as an avatar who would not feel such a moral emotion—in case of Fallout 3, there is even a list of “suggested” role-playing personalities, such as “badass wastelander,” compiled on the Planet Fallout Wiki (2009). If the player is still engaging with the fiction and has a sense of agency, a tension between two moral identities arises (case [1]), which we saw in John Walker’s bastard example. Walker was basically role-playing a villain and had to suffer through very unpleasant moral emotions. We will address these topics in the section about the player’s share.

There would be twice as many examples if we decided to divide them based on whether
the avatar expresses fictional guilt. To a certain extent, we can observe this in Rockstar Games’ *Grand Theft Auto IV* (2008), in which the avatar Niko Bellic, an immigrant-turned-gangster, is often presented as a person who does in fact not enjoy violence. The game however, rarely offers the player non-violent options. This tension, documented by Sicart (2009a), could be most engaging in cases [5] and [6], in which the player would have to blow the town up and confront the avatar’s reaction.

The bomb scenario has provided a model of possible outcomes of a moral dilemma in a video game and we will continue referring to it. Now we can look at both sides of the story, first at the game’s share and then the player’s share in moral engagement.

**Moving Pixels: The Game’s Share in Moral Engagement**

Not all games will elicit moral emotions. But as both the previous work on games and ethics and our examples have shown, there is a growing awareness of moral issues in games. This does not necessarily mean that these games are being made with the intention of promoting moral development. Inclusion of moral choices and dilemmas generally makes for a deeper narrative, to say nothing of the thrill of “being evil.” Having a choice often implies branching narratives that cannot be revealed in their entirety on a single playthrough. This adds to replay value and sparks discussion on games’ forums, where players discuss the rationale and the implications of their choices. Some of these conversations can be very engaging, as we will see later in this chapter. Even before a game is released, fans may discuss which character—good, or evil—they will choose to play, which in turn creates the much needed buzz. Especially in the role-playing genre, advertising moral gameplay has become something of a marketing instrument, not unlike graphics engines in first-person shooters. As Peter Molyneux said in regard to *Fable II* (Lionhead, 2008), a game that boasted many moral choices: “[At] the end of the day I believe choice and freedom will make you remember the experience, especially if you make a choice and there is real consequence to that choice. I think that is far more engaging than just following a linear story” (Nieborg, 2008). We should keep in mind that the fact that games marketed as having moral gameplay will not necessarily elicit moral engagement—and vice versa.

Looking for ways in which moral issues are implemented into video games, we must not forget about the quality of their fictions—writing, graphics and sound contribute to immersion by building make-believe worlds to which a player can emotionally relate. Ward, in her critique of *Mass Effect* (Bioware, 2007), argues that realistic facial expressions are a key contributing factor to the immediacy of a gameplay experience (Ward, 2008). Although we might not share Ward’s opinion, we cannot dismiss the quality of presentation altogether.

As Rusch reminds us in her work on emotional design, emotional design in video games should work not only on the level of presentation, but also at the gameplay level (2007). However, let us begin by examining games that do not actually conceptualize moral choices on the gameplay level. They too can be morally engaging.

**Fixed Justice Scenario**

To fulfill the objectives of the game, the player often has to take moral or immoral actions within the fictional world of the game and has no choice but to do so. In that case, we can talk about the fixed justice scenario. This corresponds to the cases [5] and [6] of our bomb example.

In the simplest cases, the fiction of the game presents a good protagonist battling against the evil antagonist(s). Such narrative structure can justify destructive and violent gameplay in many classic examples like *Doom* (iD Software, 1993). If you think that shooting monsters is immoral,
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the only thing you can do is to stop playing the game. Such games contain an implicit system of morality, according to which it is moral to bring down anything that is threatening your progress in the game. Later, we will show that this morality “from above,” which is rarely questioned, can be used by game designers in a subversive way.

While it might seem that no moral engagement is involved in cases where one’s progression in the game is fixed, that would be a gross oversimplification. In moral philosophy, a similar question was examined by Frankfurt (1986). He concludes that the principle whereby “a person is morally responsible for what he has done only if he could have done otherwise” is flawed, as it does not account for the person’s intentions prior to the action (1986, p. 143). In these games, rather than making choices, the player has to “live the values of the system and reflect upon its consequences and meanings” (Sicart, 2009b, p. 163). Sicart calls these “closed ethical games” (2009, p. 215).

Playing with the player’s intentions, linear games will use various deception techniques that make the player feel moral agency, although the rules do not offer moral choice. The first one is the illusion of choice, which is often just a method of making the game seem bigger that it is. It may, however, be a very compelling way of representing the futility of one’s efforts. For example, in Silent Hill 2 (Konami, 2001), the player experiences the illusion that he can save a fictional character who is being attacked by the game’s antagonist, the violent Pyramid Head. Although the avatar cannot accomplish this, the player can make the avatar (James) try. Such futility, in real life just as in video games, easily provokes the feeling of guilt. As Rusch puts it in her critique of the game:

As a player, I felt guilty for saving my own ass and leaving Maria to die. I tried to fight Pyramid Head, but he was far too strong for me and I got killed every time I tried to stand up to him. Run- ning, behaving like a coward, was my only hope [...]. (Rusch, 2009)

The other technique can be tentatively called the blind follower model. In games that lack narrative choices, the player tends to control the avatar based on what he is told by “the game” (be it in instructions or in-game briefings). She accepts an external justification for the actions she is making the avatar take and, in a way, delegates his or her moral responsibility to a higher authority (see Montada, 1993). As a result, a narrative structure emerged in video game storytelling which revealed this authority to be immoral and manipulative (Weise, 2009).

Such narrative strategy can be used to great effect. The narrative first-person shooter game BioShock (2K Games, 2007) has a limited moral choice (which will be discussed further), but mostly consists of a linear narrative that takes place in the ruined underwater city of Rapture. In the first portion of the game, the player is contacted via radio by a person named Atlas who insists he is an ally, and that he needs help. There is no way of knowing whether he is trustworthy, but the game constrains the player to do only what he is told. Halfway through the game, Atlas turns out to be the game’s villain. The avatar was nothing more than his puppet and the game deceived the player into adopting the ethics of the villain. Such revelation can be a powerful generator of moral emotions.

A similar scenario takes place in the acclaimed Shadow of the Colossus (Sony, 2005). In this game, the avatar Wander is promised that after slaing 16 huge creatures—colossi—his dead love will come back to life. These colossi, however, are not portrayed as “evil”, but as peaceful, solitary forces of nature. As the player leads Wander to kill the colossi, his appearance deteriorates—he grows paler, his hair gets darker—which might be interpreted as externalization of the avatar’s guilt. However, carrying on his nightmarish task is the only thing he—and the player—can do. He is even rewarded by becoming more powerful.

In the case of Shadow of the Colossus, the player is not really blind. She can see that Wander
is governed by desperation rather than morality (Sicart, 2009b). He wants to kill the colossi, while the player might not. As Dave P. put it in the comments on the Joystiq magazine forum:

[I felt] sadness not only because I knew I was 1/16th closer to the end of what was a wonderful gaming experience, but sadness because I wasn’t sure my character was doing the right thing. I mean, who am I to be destroying these majestic things in order to cheat death? (Dave P., 2005)

The fiction of the game is powerful enough to elicit moral engagement. That does not mean that a realization such as Dave P.’s comes automatically—it does require an open mind. At least, it comes up very rarely on the game’s official Sony forum.

All things considered, we might conclude that in the blind follower model, a tension arises from the possible clash between the player’s moral values and the actions she is forced to take. This tension can be frustrating, but it can also be emotionally powerful. We have seen that games using both this model and the illusion of choice technique may provide the player with profound moral experiences, although they might not be considered as having moral gameplay in the traditional sense of offering choices.

Accumulation of Deeds Scenario

In the simulated fictional worlds of video games, the choices we make for an avatar have consequences. Usually, games that advertise moral gameplay will let the player make moral choices and use rudimentary morality systems to give the player feedback on the moral value of (some of) her actions. Games such as this will confront the player with a series of situations corresponding to cases [1] to [4] in our bomb example.

The adventure game I Have No Mouth And I Must Scream (Cyberdreams, 1995), the first game to be marketed as addressing complex moral issues, introduced the “spiritual barometer”. Based on the player’s actions, the multiple avatars in the game were evaluated from a moral standpoint by placing them on a scale of the barometer. Since then, many games have used a single sliding scale of good and evil. The position of the player on such scales may determine non-playable characters’ attitude toward the avatar(s) or trigger other events in the game world. Often, a certain branch of narrative opens based on a moral or other choice.

I will use the science fiction role-playing game Mass Effect as one of the examples of what is challenging about designing moral gameplay and what can go wrong. It is an ambitious game that is, simultaneously, indebted to the traditions of role-playing, narrative branching and morality scales. Combining psychological and moral profiles, Mass Effect gives the player points on the Paragon (meaning adheres to the law) and Renegade (meaning neutral to the law) scales. Both are considered “good” though, as the Paragon is someone who follows the rule of law and acts with tact, whereas the Renegade is someone who does things outside of the rules, or is not always as diplomatic. The assignment called The Negotiation, for example, unfolds in the following way:

Admiral Hackett needs Commander Shepard [the avatar] to negotiate with a warlord named Lord Darius. When you arrive at the base Darius will begin the negotiations on the offensive [...]. As you proceed through the negotiations, you can choose to appease Darius and end the mission peacefully. Alternatively, at any point you can decide that you’ve had enough of “Lord” Darius and simply kill everyone. You receive 8 Paragon points for ending the conversation peacefully, or 25 Renegade points for killing them all. (Mass Effect Wiki, 2009)

Although systems like this overtly offer moral gameplay, they may suffer from drawbacks that threaten the link of moral engagement. We will
divide them into four categories, arguing that moral gameplay may be: imposed, quantified, polarized, predictable and inconsistent.

First of all, the moral values of particular actions are imposed by the game designer. Why 8 points for a peaceful solution and 25 for killing everybody? This sort of arbitrariness demasks the system and reveals that the consequences come not from the fictional world, but from the designers.

Secondly, the feedback is usually quantified and the consequences (or at least some of them) arrive instantly. Not only is it a crude oversimplification, but it also becomes subject to manipulation to achieve gameplay goals. To access some assignments in the game, for example, you have to have a certain number of Paragon and Renegade points. Thus, gameplay motivation and moral motivation can get mixed up—Sicart notes that gameplay of this kind is not ethical, but “merely statistical” (2009b: 209).

Thirdly, the moral gameplay is too polarized. The variety of choices might not accommodate the moral profile that the player decides the avatar must follow. If the choices are just polar opposites of good and evil, they might not account for the player’s intention (why not just kill Darius and let others live?). This can threaten moral engagement.

The fourth point of criticism is that moral choices are predictable. In Mass Effect, like many role-playing games influenced by the output of BioWare over the late ’90s, the moments of choice occur almost exclusively in conversation with non-player characters. But emotional design can hardly be successful if the game screams that “a moral choice is coming.” Speaking of Mass Effect (in an article unrelated to the Bastard), John Walker says:

*I’m not sure, but I don’t know if RPGs are quite the place to try and resolve the most controversial and divisive subjects of our day. Well no, that’s not true at all. They could be, but perhaps in a setting slightly more dignified than as a result of overhearing a conversation on a street, and then immediately being given life or death decisions to make for complete strangers. (Walker, 2008)*

From the perspective of moral philosophy, the incredibly tough decisions such as Sophie’s choice (mimicked by a similar choice between two crew members in Mass Effect) are indeed borderline cases. As Greene puts it in his moral philosophy dissertation:

*Naturally, moral dilemmas of this kind receive much attention, but we shouldn’t lose sight of the fact that most moral judgments—the ones we don’t bother to talk about, the ones that are just “common sense”—are not hard at all. (Greene, 2002, p. 172)*

We should not be surprised that it is these tough decisions that are often implemented in games. They require a considerable amount of reasoning and weighing of consequences—a thought process which is ultimately game-like.

But moral gameplay is often relegated to small, isolated islands. As one of the interviewed gamers, Jarek, put it: “I tend to play differently and experiment a lot, when I know the game is not watching.” Often, the game can wink a lot and then gaze with great fervor, especially at the points where its narrative is branching. Then, the player’s moral engagement is fleeting and erratic.

The fifth point, inconsistency, is related to the previous one. As each option in a choice-driven game has to be specifically written and designed, integration of moral questions into gameplay and fiction is a challenging task. It might break the consistency of gameplay, fiction, and ultimately, overall poetics.

In Mass Effect, for example, you are occasionally faced with moral choices, but you cannot shoot civilians (it has no effect whatsoever) and most enemies are nothing more than cannon fodder, as they don’t get the special Darius treatment. There
is no moral consequence to their deaths beyond completing a mission.

Let us look at another example. In *BioShock*, the player encounters the mutant Little Sisters, girls bred to be living containers of ADAM, a substance which is essential for gameplay as it allows the avatar to become more powerful. When you encounter a Little Sister, you can choose to either “harvest” (and kill) the Little Sister or “save” her and let her return to her community. Both options have their benefits, but the eventual outcome is rather balanced. In terms of actual gameplay, there is very little difference whether you decide to save them. Nevertheless, while harvesting Little Sisters counts toward the accumulation of your (im)moral deeds, the fact that you are killing hordes of other mutants along the way is not questioned in any way.

We might dismiss all these criticisms as elements of genre, and generally, game design conventions. The players are accustomed to them and, as a result, ignore them, or use them as guideposts for entering into a new experience. Also, the games that suffer from them are often more thought-provoking than games that do not attempt moral gameplay at all. Nevertheless, while harvesting Little Sisters counts toward the accumulation of your (im)moral deeds, the fact that you are killing hordes of other mutants along the way is not questioned in any way.

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The role-playing game *The Witcher* (CD Projekt, 2007), for example, builds on moral ambiguity. Choices come at predictable moments, but the game usually lets the player choose between two camps neither of which is morally sound: for example, you can either join the despotric and bureaucratic Order, or the reckless and violent Elven guerrillas. This makes the player question the avatar’s (and her own) values. Moreover, the consequences of the player’s decisions take place long after the action is taken, making it impossible for player to calculate with the outcome.

In another example, the otherwise linear stealth action game *Metal Gear Solid 3* (Konami, 2004) fiddles with the concept of the game as a *hidden moral spectator* in a very inventive way: In a haunting scene toward the end of the game, it shows the player the ghosts of all the people (mostly soldiers) the avatar, Snake, has killed throughout the game:

*Trapped in the twilight between life and death the player is visited by visions of everyone they have killed throughout the game. The player cannot hurt any of the ghosts, but the ghosts can hurt the player. Snake must simply endure all the pain and agony he has caused, facing each and every enemy soldier he has killed, all bearing the scars of exactly the way the player chose to kill them. (Weise, 2004)*

By delaying the confrontation with the consequences of the player’s actions and making them a little more unpredictable, the relative rigidity of scale-based morality systems can be prevented. How else can moral gameplay be enhanced?

Let us start with another concept taken from moral philosophy. According to one of the morality scholars we have chosen to follow in this chapter, morality is intersubjective: “the meaning of obligation is socially defined” (Tugendhat, 1993). Therefore, a game that intends to have a robust and consistent morality system should strive to simulate the social dynamics that define it and create a world that reacts to our moral agency. Such simulation could bridge the local and global consequences by introducing non-player characters that are able to react to all morally relevant avatar’s actions individually and at the same time also pass their judgment on to other non-player characters. This emergent morality system would deal with the predictability and inconsistency problems. Games already exist that try to introduce a “social dynamics engine” (Koo, 2009), such as *Fable* (Lionhead, 2004) and *Fable 2* (Lionhead, 2008). The implementation of such an engine is however very limited, and the game presents the player with inconsistent reactions from the non-player characters (NPCs), the
The Good, The Bad, and The Player

inhabitants of the fictional world not controlled by the player. (Nieborg, 2008). Before concluding the section about the game’s share, let us review the possible strands of moral gameplay design in the following chart.

Don’t Watch me Stealing Cars: The Player’s Share

No matter how well a gameplay experience is designed, it takes both the game and the player to establish an emotional link of moral engagement between her actions and the game world. As I mentioned in the introduction, the player may choose her style of play based on gameplay, fictional and contextual concerns. The gameplay-oriented styles include strategizing, meta-gaming and exploration and fiction-oriented styles can be divided into honest play and role-playing. I will examine contextual factors separately. As all of the styles mentioned above affect moral engagement, let us now deal with them one by one, while keeping in mind that a player can switch from one style to another in the course of gameplay.

Strategizing is a predominant orientation on the game’s rules, while ignoring the fiction. Earlier, we have adopted the view that the game is an interplay of fiction and rules, which are “real” in the sense that they determine the outcome of a game. As the “real” motivation of the player is usually to win the game, she might make her choice according to what style of gameplay suits her better, not according to moral concerns.

This kind of strategizing is made easier when the game’s morality scales are demasked. Although Tugendhat, for instance, posits the moral ability outside of other abilities (1993), in games, morality is often just another “stat” (Sicart 2009b). We touched upon this briefly in our discussion of Mass Effect and we can expand the argument using another example.

In the classic role-playing game Baldur’s Gate II (Bioware, 2000), the player is informed about the change in her reputation right after having made a moral choice. The reputation is represented numerically, the higher the figure, the more virtuous the avatar is. This allows for an instrumental use of the morality system—knowing that a certain figure on the reputation scale will change some NPC’s attitude toward the avatar, the player may decide to act in order to achieve that figure, retrofitting her decisions to her goal.

For example, one of the interviewed gamers, Jan, killed innocents in Baldur’s Gate II just to lower his reputation enough so that he could hire strong non-player characters who are evil and would not join him otherwise. Otherwise, he would not usually choose the “evil” options when given a choice. This mixing up of gameplay and narrative decisions might be, to a certain extent, prevented by the game offering balanced outcome of all possible options: even in BioShock, your decision not to harvest the Little Sisters is eventually compensated by gifts.

The term meta-gaming has been established in gaming discourse as finding one’s own goals in the game, which the designers did not originally

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<th>Scenario</th>
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<td>Accumulation of deeds</td>
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<td>Emergent morality system</td>
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intend—or playing with the system. If we are, for example, competing in how many pedestrians we run over in the motorized crime simulation game *Grand Theft Auto IV* (Rockstar, 2008), we might want to give up on any responsibility in the fictional world, if only for a moment. The player might not even consider such moments “proper gameplay” and when retelling the story of her progression through the game, she will be likely to leave this part out. Meta-gaming is like stepping out of the avatar (at least his fictional context, the playable character), while still controlling it. The disconnect naturally means that the player is not morally engaged.

In his classic typology of players, Bartle mentions the “explorer” type (1996). When compelled to discover all the content in the game, players often employ the gameplay style of exploration, not only in terms of discovering the limits of the game world, but also in terms of finding out all possible outcomes of different choices. The players save and reload games after a major decision and choose an option depending on its consequences. If the outcome is apparent immediately after the decision, the player can often reverse it by reloading the game, potentially disengaging herself from the fiction in the process. *The Witcher*, for example, prevents this by delaying some of the consequences by several hours of gameplay.

In terms of fiction-related styles of gameplay, we can distinguish between two basic ones: honest moral gameplay and role-playing. Honest gameplay is the most straightforward kind of moral engagement. We project our moral code into a fictional world, reaffirming our moral beliefs based on our moral emotions. For those of us who do not wish to wreak havoc in post-apocalyptic towns, this would correspond to the case [3] of our bomb example.

Examples abound. In *Bastard of the Old Republic*, Walker admits that he tends to play as if he was in the avatar’s shoes. One of the interviewed students, Jan, also said: “When I played [the game] for the first time, I played as if it was me.” Still, he acknowledges that it is just one of the possible styles of gameplay—a first time one. Later, the time might come for role-playing.

When role-playing, we take on a moral profile different from our own. As Jarek said, “you can try out what you would not normally do.” And this is, obviously, one of the biggest attractions of video games. Role-playing a character with a different moral profile can be both fun and an interesting experiment. As a player who calls himself “nfs nol” puts it on the official *Mass Effect* forum: “I have more fun playing a ruthless character.” This would fit in with the case [2] from our bomb scenario.

The motives for role-playing and the relationships between the player and the avatar can be very intricate and idiosyncratic. In the rhetoric of the posters on the *Mass Effect* forum and the in-game YouTube videos comments, there is an obvious distinction between the player and his avatar (“my Shepard,” Shepard being the last name of the avatar, whose gender can be selected at the start of the game)—especially when the poster has finished the game repeatedly with different, customizable avatars:

*Definitely renegade is fun, but for this playthrough I wanted to make it seem like a realistic movie with Shepard being totally ruthless only when he needs to be, when the situation requires it.* (Stealthspectre, 2008)

As we can see, as long as the game allows for it, the role-playing style of gameplay can be very nuanced. Still, many players encounter difficulties when trying to role-play a ruthless character, because the disconnect between the player’s and the avatar’s morals does not necessarily mean loss of moral engagement. Effective visual and emotional design may re-connect the player with the character he is role-playing. That is what happened to John Walker while trying to be a bastard. The same thing, represented by the case [1] from our bomb example, happened to
Osama from TowardsMecca.com, while playing *BioShock*:

*Almost immediately afterwards [the first playthrough], I started the game over with the intention of beating it once more but by harvesting every little sister this time. I confess I did do it the first time, but could not continue after that. The action of harvesting them made me feel ridiculously guilty.* (Osama, 2008)

We might concede that what makes *BioShock* so emotionally resonant is first and foremost the imagery. When choosing to harvest a Little Sister, the avatar takes the writhing little child into his hands and effective devours her, extracting from her the sea slug which had been implanted into her body and which contains the precious ADAM. No matter how mutated the sisters are, the visual representation of the act is very vivid and disturbing and reminds us of the *immediate agency* of the footbridge dilemma.

Another example is the “I Remember Me” subplot in *Mass Effect*. In this assignment, commander Shepard is asked to calm down a young woman, traumatized after years as a slave to an alien race. She is threatening to kill herself and Shepard is the only one who can talk her down. Unless Shepard proceeds in a very sensitive way, the woman will shoot herself. Although available only to certain players (based on some customization choices prior to playing the game) and being rather insubstantial in terms of the master narrative of the game, it has gained a lot of attention on the forums. As *dreyshock* confides:

*I don’t think I could bring myself to play renegade for this particular sub-plot. It’d be too heart-wrenching to see her commit suicide or attack Shepard, which is what I suspect would happen.* (Dreyshock, 2008)

For another player, it dramatically changed the concept of his or her avatar, as if a new aspect of Shepard’s personality had been revealed:

“I Remember Me” is probably my personal favorite assignment in the game. I got to see a completely different side of my Shepard. She was so harsh up until that scene, and changed my mind on a lot of my decisions. (Usasoldiern, 2008) [typos corrected by J.S.]

In this example of the tension between the avatar and the player, the player basically role-played character development. Thanks to moral engagement on the side of the player, Shepard, who is an elite soldier and is both voiced and animated accordingly, found his or her soft side.

Both the devouring of the Little Sisters and the “I Remember Me” sequence are, of course, carefully staged examples. But even the more mundane gameplay actions can be interpreted morally. Although we often abstract from moral considerations while playing games such as *Grand Theft Auto* (especially when it is so difficult to not run people over), an observer can make us change our mind. Probably the most interesting contextual factor of moral engagement, spectators can reinforce the player’s connection with the fiction of the game. As our interviewee Jarek said:

*I was playing *Grand Theft Auto* and my son came around and asked me: What are you doing, daddy? Are you stealing cars? Then I realized I should not be doing it, at least not in front of him.*

Spectators might not be participating in the gameplay, but they can easily engage with the game’s fiction. Another interviewee, Štěpán, noted:

*I make different decisions when I’m controlled by something out of the game—in this case, it might be my girlfriend who identifies with the avatar and tends to take the in-game events more personally. This makes me more “moral” in the game.*

I believe that this *spectator effect* deserves deeper investigation. This effect is also in place
in multi-player games, but those bring about numerous other concerns that we cannot deal with in this chapter.

Let us conclude this section by saying that players choose to morally engage or disengage based on what the game provides and their own goals. This does not mean that they are immune to the fiction or to moral concerns. We can see the different gameplay styles and their relation to moral engagement in the following chart.

**CONCLUSION**

The specific experience of moral engagement in video games appears at the interface between the game and the player. We have observed different design strategies and styles of gameplay that affect moral engagement. These are not entirely independent: the fixed justice scenario, for instance, rarely allows for role-playing and the accumulation of deeds scenario, to a certain extent, prevents meta-gaming.

I have also identified a number of challenges to moral engagement in video games and made it clear that moral engagement and emotional experience is not guaranteed simply by solid game design. We have seen that it is foolish to demand moral responsibility from the player for everything immoral she does in the game, but we have also shown that clever design can make the player reconsider and contemplate her choices. There is rich evidence in interviews, forums and the gaming press that players can indeed be moved and that they will reflect upon the deeds of their avatars.

We cannot automatically consider video games as superb tools in moral development. But they can frame simple moral thought experiments (like the trolley and footbridge dilemmas) with a wider fictional context and provide a unique experience that can reveal to players through their own moral emotions how they relate to different moral codes. Although it is not easy to integrate moral issues into a game, setting them in a familiar fictional world adds a vividness and immediacy unprecedented by other media.

How can we expand on the potential of the medium? First, I believe that game scholars should conduct further research of actual player experience. We should not take a game’s moral design as a given and, instead, study particular ways of engagement by the methods of player ethnography and discourse analysis of players’ discussions and write-ups. This way, game designers can see how their respective approaches to moral gameplay resonate in players. It can make them reconsider the long-standing conventions and clichés that are used in design of moral gameplay and bring forth new and gripping emotional experiences. In the end, even playing evil in a video game can make one a better person.
REFERENCES


**GAMES**


Chapter 5
Playing with Ethics:
Experiencing New Ways of Being in RPGs

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ABSTRACT
Role playing games (RPGs) are compelling spaces for ethical play. Participants can take on roles very different from their own and experience the world through a variety of social contexts. This form of play can be encouraged by good game design principles including the balanced use of consequence, mirroring, social context, and freedom. This chapter examines the structure of ethics in role playing games and uses case studies of expert role players and analysis of game design to explore the effective use of the four design principles in popular games.

INTRODUCTION

RPGs and the Ring of Gyges

In Plato’s Republic (1992), Socrates expresses the danger of power unlimited by social norms and controls through the story of Gyges. In the story, this otherwise unremarkable man finds a ring of invisibility, which allows him to act without fear of social reprisal. As he gathers wealth and power, he is compelled to increasingly perverse action because he is unconstrained by traditional morality. He can act as he pleases within his environment.

A player in a role playing game (RPG) plays one or more characters in a story. They control the character’s actions and make choices for the character. In some games, the player’s options are quite limited, and the players choices, successes or failures determine whether or not the story continues. Other games are more open-ended. There are usually still restrictions, but players are allowed a much greater freedom to follow their own interests through the game’s setting, making their own stories as they go. Games that offer great freedom are often called sandbox games because they provide the setting, the sandbox, but do not determine what actions the player takes within it. In a sandbox RPG a player is often given the freedom to choose whom
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to kill, what to steal, and which factions, if any, they choose to serve. A player of one sandbox RPG, *Baldur’s Gate 2* (Bioware, 2000), may choose to join a guild of thieves. Ultimately the player’s character may rise through the ranks of the thieves’ guild, eventually taking over the local guild chapter, allowing the character to organize all of the crime within a city. In *Baldur’s Gate 2*, and most single-player RPGs, the game allows the player to save their game at any time, and the player is allowed to return to any previous saved game. Many players will try an action and then reload to a previously saved game if they do not like the result. This gives the player the ability to always succeed at any challenge, if they have sufficient patience and time and have avidly saved previous games. If the most recent game does not give them the result they hoped for, they can go to earlier saves and try again. The Internet also provides a tremendous amount of information about games, including step by step instructions, or walkthroughs, for finishing areas of the game, and lists of secret areas, items, encounters, etc, within the game and how to find them. Information exists about almost all games somewhere on the Internet. It is, therefore, possible for a player to go online, learn about all of the options available in a game and choose the experience they want most. This combination of knowledge and the ability to replay events or roll back time gives the player of a single-player RPG powers within the game environment that are like the powers wielded by Gyges in Socrates’ story.

*Baldur’s Gate 2* is one of many games that give the player tremendous freedom. Some other examples of RPG games that provide the player with wide-ranging freedom to create their own experience include *Grand Theft Auto: San Andreas* (Rockstar North, 2004), *Baldur’s Gate* (BioWare, 1998) and *Fallout 3* (Bethesda Softworks, 2008). These games provide the player the freedom to be deceitful, malevolent and wicked, though they often also allow the player to be honorable, benevolent and good. Because the player can have their character break norms and laws we normally uphold, the games have been reviled by some for allowing players to play out immoral and violent stories. When a discussion of an RPG game focuses only on social norms broken and not on the whole of the experience, one might dismiss it out of hand as reprehensible. Similar attacks have been laid on other works of fiction, using the moral breaches of the main characters to justify banning or condemning the work. One might rightly point out that games are not movies. Nor are they written fiction. A game is a new media type where the player does not just watch the action, but performs it, and when the player wields the power of Gyges within the game, the experience is much different than merely watching someone powerful act on screen. There are many aesthetic differences between these media, but in this chapter I want to focus on the experiential nature of games, and how it relates to ethics, by listening to the designers and players themselves. First, however, I want to expand the conversation by offering another way to evaluate ethics, other than comparing actions against existing social norms.

**Ethics and Culpability in Games**

The ethics of a game environment are significantly different from the ethics of other spaces in life, other than at the most abstract level. We may still strive to treat others as we wish to be treated, but the application of this guideline is very different in a game than at work or home. When we kill a character in a game, even one played by a real person, we have not actually committed murder. When we steal from programmed, fictional entities, we cause no suffering that has moral valence. In our current state, where death of an avatar does not kill the player, treating the killing of an avatar like murder would be a misappropriation of a word from one context into a very different context, where what is at stake has entirely changed. To insist would be to act as if ethical language has
meaning out of any context, which would be nonsense (Wittgenstein, 1993). The word “kill” does not mean the same thing when applied to an avatar or fictional character as when applied to a living thing. That is not to say that there are no ethical issues relevant to single-player game play. When the measure for ethical action is taken out of game, the relevant ethical issues are more likely to be whether one’s game play is taking away from one’s responsibilities as a parent, a romantic partner, or a member of society. Regular exercise and good physical health are wonderful, but not if one leaves one’s five-year-old child alone at home when at the gym. The actual ethical values one expresses in game do not hold true outside of the game. When we make decisions that have consequences, we practice decision-making in a moral world. When the world is a fiction, we have a luxury we rarely have in life. We can try on one set of moral values and, when we decide we don’t like them or want a new experience, we can leave those values and try new ones. Due to the power of single-player game play, the player has the power to change the game world so the other characters in the world accept this change, treating the character in a new way and reacting to the character’s new values. By sharing control of the moral world with the player and allowing the player to practice or experiment with moral choices, the designers create a sandbox where the player can practice living with values. In the world, the actions we take become a part of our facticity (Sartre, 1956) and we have to live with the consequences. In a game world, we can experiment with one set of values, then start over and play through the same events in the same world with a different set of values and experience the differences our decisions can make.

Are Games Moral Spaces?

Tory, one of the participants in this study, expressed what she took to be a logical conflict when asked to think about an ethical decision she made in a game. “Within the context of the game,” she argued, “a player can do no wrong.” That may be true, but many of the same sandbox RPGs that allow for actions that would be considered morally bankrupt out of game also allow actions that would be considered truly heroic. In fact, much of the game play of many of these games consists of just such decisions: ethical decisions with real consequences to the main character of the game, to the other characters in the game, and to the game world itself. While the player may be protected from full culpability for the actions their character takes, many of these worlds ensure that the character has positive and negative consequences for their actions. To think of the game world as free of ethics is to not think about it on its own terms, similar to thinking of the moral world of other fictions as irrelevant to our world’s morality. Arguably, those watching the moral decay and depravity of Tony Soprano in HBO’s show The Sopranos (Chase, 1999) are interested in the characters not because they live in a world free of ethics and morality, but precisely because they do live in a moral and ethical world. The same can be said of those playing games. Within the context of the game world, the character’s actions may be powerfully ethically relevant. Though killing an orc in Neverwinter Nights may not have ethical relevance to the player out of game, within the game, the player might be hailed as a hero for saving a town from a marauding orc, or perhaps as a villain for murdering the wise orc that had been convincing the orc tribes to maintain peaceful relations with their neighbors. The character has moral culpability, but the player arguably has no more than the writers of The Sopranos have for their main character’s sociopathic actions. Even if culpability is not shared, there is a connection between the character and player, and it is through this connection that the player gets to experience heroism or villainy. Moreover, it would be wrong to limit the moral experience to just good and evil. The player who is experiencing the game world through and with their character gets to share the
character’s emotional life, including their confusion, angst, turmoil and elation. Through gameplay, we can choose to take on the character’s experiences as our own. The ability to share the experiences of a fictional character provides role playing with one of its greatest affordances for learning. The experience opens the door to an empathic understanding of others.

The Theory and Design of Moral Game Spaces

If we accept that single player games are spaces where moral decisions are performed in a relatively safe environment, there are still open questions about how these environments can be designed. The remainder of this chapter takes a moment to look at the whole arena of ethics. From a theoretical standpoint, this chapter argues that games offer an ethical experience that is practical and descriptive. It offers an opportunity to not just witness, but also live through and perform the ethical life of another. The chapter then discusses empirical data suggesting that four elements of gameplay enhance ethical engagement, creating a more convincing and compelling environment for decision making. The combination suggests design goals for single-player sandbox RPGs that offer opportunities for learning about ethics.

THE ETHICAL ARRAY

Talking about ethics and morality suffers from an almost unavoidable set of ambiguities. This discussion of ethics is intended to be as broad as reasonably possible, and is based on philosophical ethical theory more than any particular value system. When talking about ethical traditions, we might talk about two axes (see Figure 1). The first is between principles and practice, descriptive and normative ethics. The second is between critique and dogma, dogmatic and critical ethics. The following sections provide some explication of both of these axes, followed by some explanation of how they relate to ethics in games.

Principles and Practice

While we may think the central question of ethics to be what ought we to do?, it is equally relevant to ethical inquiry to ask what do we do? This marks the difference between ethics of principle and ethics of practice, respectively normative and descriptive ethics (see Figure 1). Briefly, normative ethics describes what one does, and uses principle to defend and justify claims. Descriptive ethics describes how members of a culture tend to act, and uses tradition to defend and justify claims. Descriptive ethics is not necessarily more or less conservative than normative ethics. For example, sixties counter-culture sought to throw off traditional norms, and developed new traditions in the process. As culture develops, so too does tradition.
Playing with Ethics

Descriptive ethics is practical. Making a claim to description as a justification for an action is making an appeal to the authority of practice. On the other hand, making a normative claim is making a meta-practical claim. Like all meta-claims, they still lie within a practice, but the claim to authority relates to the foundation or premises of the practice. The claim is generally to a set of claims that are thought to be logically prior to the practice. Here there is a difference between logically prior (a priori) and historically prior. Arguments that rely on logic prior to practice propose or assume that there are reasons for the existence and maintenance of particular practices. They do not necessarily propose that these reasons predated the practice, or are historically prior. One may argue that the reason these practices survived is because they were stronger, better, more divine, more true, etc. and that this is precisely because they were grounded by principles already present in the best practices, forming a consistent system that may have never been stated until the culture was already well formed. Most communities form in precisely this way. Intentional communities, which form with the intent to institutionalize an a priori ethical system, are relatively rare; most cultures engage in a muddier process of normalizing already-existing practice or rationalizing the current practice into a set of norms.

In this muddy world, description of practice can be used as justification for future norms. After all, previous success of a practice can be a reasonable argument that it is generally beneficial. Likewise, norms can be used to justify changes in practice. When creating theoretical approach to ethics, it is important to notice that the two are intertwined, but nonetheless, what works as justification for one, history, does not serve any use for the other, principle, and vice versa. In the two, what counts as justifiable warrant for action differs.

Game designers have tools for conveying both principle and practice to the player. Principle is available in game mechanics that rate some actions as moral and others immoral. In Planescape: Torment (Black Isle), the game modified the character’s alignment along two spectra, from good to evil and from law to chaos, based on the character’s actions. In Fallout 3 (2008), the game used a counter, called Karma, to measure how heroic or dastardly the character’s actions had been. Both of these measures effected how some of the characters in the game treated you and also determined access to some special abilities. The game also portrayed other characters in the world. The actions of the other characters spoke to the traditions and practices of the cultures in the game world. In both games, the player plays an outsider to the game’s culture(s) and is able to decide whether to accept or resist the surrounding practices. Cognitive empathic association with a culture, coming to understand the values and motives of a culture, is possible in a game when the player chooses to have their character take on a culture, and plays their character in accordance with that culture’s values and practices. This is an affordance of games not possible to the same extent with other media. When the player plays a character from another culture, they have the opportunity to see the world through their characters eyes, and also to pull back and see their character from their own perspective, possibly ultimately agreeing or disagreeing with the wisdom or morality of the choices they made in character. Though afforded by games, it is harder to design descriptive ethics into a game world than it is to impose normative ethics. Much of the onus for creating the ethical experience is on the player, though according to this author’s research (Simkins & Steinkuehler, 2008), discussed later, some design decisions are more likely to entice or encourage players to accept a role as a active participant of an in-game culture.

Critique and Dogma

The second axis is the dogmatic/critical axis (see Figure 1). This is a marker of how much the foundation of the ethical theory, whether descriptive
or normative, is in question. At the extreme of dogmatic ethics, the principles or traditions are unquestioned. At the opposite, critical, extreme, all principles and traditions are guidelines, open for debate and adjustment even in the moment they are applied. At different times and in different contexts we may find ourselves in different places along this axis.

Critical ethical societies require some form of deliberation to determine what is ethical, but debate also exists in societies that rely more on dogmatic ethics. The grounds for debate in a dogmatic ethical environment are often about the meaning of the ethic’s first principles or most basic traditions, not the correctness of those principles or traditions. Debate in critical ethics is often about whether a particular tradition or principle is applicable, and if so how it is applicable, in the current context. As an example of the difference between the two, there is an ongoing debate in Christian theological circles around the meaning of the commandment against taking life (Bailey, 2005). Many of us grew up with the following translation, “Thou shall not kill” (Exodus 20, KJV) or “You shall not kill” (NAB). Nonetheless, other translations translate the verse as, “You shall not murder” (NIV, NRSV). The difference between the two can have serious ramifications on what is considered acceptable ethical practice. As long as the argument is about the legitimacy of the translation of the text while both accept the ultimate authority of the untranslated text as the sole authority for doctrine, the argument stays within the bounds of acceptable dogmatic argument. A critical critique of the commandment might argue that the commandments are not necessarily still relevant to our lives (descriptive). It might alternately argue that while the current validity of the commandment is not in question, there are alternate and sometimes contradictory commandments that together serve as guides, and our role is to use our facilities to interpret those commandments within our current context to decipher what is right (normative). Both of these would be critical moves, allowing for revaluation, not just reinterpretation, of the text.

There is a common criticism of critical approaches pointing to an exaggerated view that there is not just no eternal truth, but that there is no foundation for truth claims (Latour, 2005). To make that claim is to miss that there are historical and material constraints to our existence, elements Sartre would call facticity (1956). These constraints not only limit us, but provide grounds for creating better and worse arguments for critical positions, and for judging those arguments against each other. To throw out any form of justification is to accept a world in which might makes right. In this world, the most effective argument is made by the one with the power to force his opinion on others. In this struggle we stand beside Plato, abandoned by Thrasymachus but still trying to convince him in absentia that justice is not just the will of the stronger (Plato, 1992). Fortunately, critical ethics does retain some tools for argument against power. In a critical ethical discussion, the basis for ethics is always itself up for debate, but this does not necessarily leave everything up for grabs ethically. In critical ethics, as in dogmatic ethics, some forms of justification are acceptable within the discourse, just as some are not. For the critical ethics of Nietzsche, life affirmation, an aesthetic principle, guides ethical decisions (1966, 1974). What is life affirming is always open for debate in Nietzsche, and he does not allow that anyone could ever close the question. For Nietzsche, the aesthetic guide to ethics is always up for debate within the discourse, but it still serves as a marker one can use to guide one’s practice and even criticize the practice of others. Marx also provides a critical approach to ethics, in which material conditions and the contradictions that exist within economic systems serve as the guide (1887). As these contradictions are worked out historically, the system moves toward one in which ethics are possible because alienation is removed—the classless society. The presentation of ethics in Nietzsche and Marx is
not explicit; it must be drawn out of their work, and that should not be surprising. As undogmatic ethical theories, it is more difficult to present an ethical theory simply. Instead of trying to hit a moving target, ethics at the moment, they both take a historical view, neo-Hegellian for Marx and anti-Hegellian for Nietzsche, which focuses on ethics as in process, not static (Marx, 2005; Nietzsche, 2000).

Insofar as games are played in first person, they afford a critical perspective that is difficult to achieve in other media. While it is quite possible to analyze the ethics of a person in literature or in a movie, the perspective is that of an outsider. A person playing a game is an insider. When a game is designed with principles, dogmatic ethics, the player must react to and play within the constraints set by the game’s design. Similarly, but less intrusively, when the player’s character encounters other characters, their actions will demonstrate their traditions, their descriptive ethics. It is easier as a game designer to create situations where the player must react than it is to create situations where the player can act in-character. When a player is given the opportunity to make ethical choices by choosing what to do, the designer opens the potential for creating a critical space for the players actions in character. Furthermore, when the choices a character makes are reflected back on the character, and the player, the player has the opportunity to critically exam their own ethics in light of their character’s situation. Again, this is a more complex design, but it is particularly afforded by games because in games, particularly in these sandbox or open RPGs, the player is active in decision making.

Games and Ethics

Within games, the characters may have practices and principles defined by their environment, or brought in by the player. They may approach their choices within the game from a dogmatic or critical perspective. Characters within games exist across the entire ethical theoretical frame. Still, more than other media, game designers have at their disposal tools more suitable to the descriptive and critical quadrant of our graph (see Figure 1). Not only do they have tools for engaging players in ethical decisions, they also have tools for engaging players in learning about ethics. Games focus on play (Frasca, 2003). Though they are spaces where consequences are mitigated (Gee, 2003), and where outside concerns can be lessened (Huizinga, 1955), even if they are not removed, play spaces can be highly consequential (Malaby, 2007). When someone cares about a game, it becomes part of their life world. Play spaces form a kind of third place (Steinkuehler, 2005), a play space that is neither work (or school) nor home. It is a space in which community affiliation can grow, even across differences of opinion, political opinion, and other interests. In a play space, people are unified by their interest in the game. Learning can occur here, in part because play is a powerful tool for learning (Vygotsky, 1978), and because the most effective learning is aligned with the life of the learner (Dewey, 1905).

The focus of the playfulness of games is less on the lack of significance of the spaces, and more on the active and engaged participation a player has in co-creating the experience of the game by playing it—the role of the player as co-author of their narrative. The game becomes an affinity space (Gee, 2004), existing both within and around the game, where players can participate in the game as a discourse (Steinkuehler, 2006). The goal of this play may not be something exterior. It may not be seen as preparation for life or school or work somehow, but that does not mean it is not a goal-oriented activity that leads participants to improve their skills, allowing them to participate at a higher or more interesting level of play. None of this should surprise us. The use of the word “play” in “playing with a theory,” “the interplay of ideas,” and “putting a new idea into play” suggests that play allows us to experiment with new ideas, coming to increased understanding and bridging
the gap between what we have experienced and what we seek to understand (Gadamer, 1989). These are performative, practice-oriented spaces. They are active spaces where ideas are played with. Performance is the central activity of the game, and this performance provides the opportunity to experience a new way of being in the world. As experimental spaces they are also inherently critical, in that questioning foundational concepts is always a possibility within the play space. Games are sometimes focused on particular principles, and some are infused with pervasive perspectives derived from a particular dogma; this is possible because almost all RPGs are intentional worlds. The interplay and practice orientation of games do not necessarily support these normative or dogmatic approaches. In fact, the transgressive elements of games (Gee, 2003) suit a process of questioning through playful practices within the game. In other words, designers should not expect to easily convince their players to play out their dogma or norms, though if they recruit the player into the game as a critical practice of taking on a new identity, they may succeed in encouraging the players to play their characters within the game world’s dogma or norms. This brings us to the central point of the chapter, developing ideas on how to invite players to engage with the game and with the critical and practice-oriented space the game world provides.

**ENGAGING GAME WORLDS**

This author’s previous empirical work focused on the elements of games that produced particularly interesting and engaging ethical decisions within single player RPGs (Simkins & Steinkuehler, 2008). The data was collated from thirteen semi-structured (Spradley, 1979), individual interviews conducted in 2007 as a part of a larger ethnography of a role playing community. The participants are between 25 and 35 and each has been playing computer or face to face RPGs for more than ten years. The interviews were transcribed and thematically coded for the values expressed by the participant (Miles & Huberman, 1994). The values were categorized by general type into four aspects of game design. The four included consequence (or effecting change), mirroring, social context and freedom. Consequence is the ability for the player, through the character, to affect the game world through actions taken in game. Mirroring is the reflection of the game world and the game’s characters to the actions taken by the player. Social context is the in-game social environment, which provides the social context for the character’s actions. Freedom is the ability of the player to have their character take actions the player would like the character to take within the context of the game’s social environment.

While a more systematic analysis of the coded data appears in the original work the description of the four elements of game design may be clearer if seen in the context of the interviews. In each interview, the participant was asked to describe a scene from a game that included an ethical decision that they found interesting and engaging. They were asked to describe the situation in the game and what they chose to have their character do in the situation, and were then asked three questions about the scene. First, they were asked to describe how they felt during the scene. Second, they were asked if they felt they were able to do take the actions they wanted to take. Third, they were asked if they would have chosen to take a different action if they encountered a similar situation later in the game. Despite their choice of these scenes from games they found particularly interesting and engaging, the participant’s responses reveal both strengths and weaknesses in the design of their chosen game. The next section takes a closer look at some of the responses, and at the games they chose, as examples of the four principles, and of ethical systems and decisions in action in games.
Playing with Ethics

Final Fantasy VI

Robert recalls feeling “happy, a little annoyed and frustrated” with a choice presented in Final Fantasy VI (Square, 1994). At a bridge, followed by hordes of enemies, one of the main characters, Shadow, offers to sacrifice himself so the rest can escape. Originally, Robert did not see this as a choice, just a part of the storyline. He thought that Shadow would leave for a while, only to return later. As the game progressed and Shadow did not return, it became clearer that he was gone. This was brought home later in the game when Shadow’s daughter, Relm, enters the party. She pines for her father, even as the world ends. Robert was shocked that the earlier decision had later ramifications in the game, and experienced the loss of Shadow as a powerful part of the narrative. Only later, well after completing the game, did Robert discover that the choice to stand with Shadow on the bridge or let him sacrifice himself was a legitimate one. He had assumed the game would force his hand, as this series tends to do. The realization that he had been free to choose sparked a complexity of emotions. RPGs usually “Railroad you along a given track,” which doesn’t give much freedom to the character to determine how the plot or character development will progress. Robert was happy to have been given a real choice. Unfortunately, he felt the choice was not about what would make the better story, but about what would most benefit the player wanting to complete the game and keep his characters alive.

Realizing that videogame makers are starting to incorporate decisions was a very pleasing thing to find out because there has always been a linear track that you follow... Having played a lot of games since then, they grotesquely underuse that. There are still precious few games that really give you the option to make a decision like that, and I would very much enjoy playing more [games] where I am stuck between two very hard choices and I need to choose what is going to be best for these people and it is not necessarily cut and dried. There is always a problem that you run into with videogames though when you have stuff like that. Part of playing a video game is the question how am I as a real person playing a game with a controller going to accomplish the goal of the game, which is to beat it. There may be a right decision, the decision that allows my most powerful characters to survive, that sort of thing. I don’t know if you can ever reconcile that with completely flexible systems allowing you to make serious moral choices, but I would like to see them try rather than railroading you along a beaten track.

In both its successes and its limitations, Shadow on the bridge shows all four of the elements that build engagement in RPGs, though not in equal degrees. Heroic memes played a large part in Robert’s love for this scene in the game. He explains, “I am a sucker for noble sacrifice.” Like Gandalf or Obi-Wan Kenobi, Shadow stands alone against the enemy to buy time for others to escape. Of course, a heroic sacrifice is less powerful of we do not come to care about the hero, or about the people their sacrifice saves. Final Fantasy VI reveals many of their character’s pasts by showing their dreams. This helps the player to know the background and motivation of their characters, and also gives them more reason to care for them. The dreams show that Shadow used to be a thief, along with his partner Baram. His partner becomes wounded. Shadow decides to leave him behind while he escapes. The similarities in the choice between Shadow leaving Baram and the player leaving Shadow to defend the bridge completes a cycle of development in Shadow’s character from one who would leave a friend behind to one who would sacrifice himself for friends. It also places the player character in a situation very similar to Shadow’s, where he knows he left a friend behind to die while he escaped.

Death in the Final Fantasy games comes in two forms. Any character can die in a combat,
but those deaths are not final. Either in combat with magic or automatically after combat, the dead character revives. While combat death is temporary, a character’s death in the narrative is permanent. This contradiction in the meaning of death is nevertheless consistent, and carries a different reaction among the characters in game, none of whom seem overly concerned with combat death, but all of whom react strongly to death in the narrative. Narrated deaths in Final Fantasy games tend to be rare events, and narrative deaths are mirrored by other characters in the game. Shadow’s daughter Relm is the primary mirror for the significance of Shadow’s death.

Shadow had a daughter, Realm, and at one point you have her in your party, and she is pining for her father, and the whole world has been destroyed, so it is not so surprising that she is separated from her father, but she is never going to find him again because he is dead because of the decision you made. I don’t know, because I didn’t ever play through it again, but theoretically, in fact certainly, they should be able to meet up again, if he was still alive.

The death of Shadow is reflected, mirrored, in the need Relm has for reconciliation with Shadow, the father who abandoned her as a child. By showing that this loss is significant to her life, she deepens the impact of Shadow’s sacrifice. The choice has consequences not just to the world (consequence), but also to the other characters in the world (mirroring). In a game, changes to the world can easily turn into right or wrong choices rather than choices in storytelling and character development. As a player holding the controllers and playing a game, it is hard for Robert, and many of the participants, to feel comfortable with a decision that reduces power and capability in the game.

This dichotomy between story and game is traditional. It is highlighted in debates between ludology and narratology as game design principles (Frasca, 2003). However, in RPGs it is to some extent a false dichotomy. The play of the game is about telling a good story as much as it is about completing goals. Game play is a powerful motivator for learning and for engagement (Squire, 2008), but so is storytelling (Bruner, 1986, 2002). Robert offers a solution.

They set [Shadow] up as a character you would love, or hate, or at the very worst love to hate. It was not quite heartbreaking to find out he was gone, but it was certainly sad, especially when interacting with his daughter. Finding out later it actually hit a bit more. Finding out that it wasn’t actually a risk cheapened it a little bit. That made it, ok there was a right solution to this and I made the wrong one. I made the decision that seemed most in character. It was the most interesting to me... [so it was frustrating] finding out that it would have all been fine if I stayed. There would have been no negative consequences if I stayed.... I would love to play more stuff where I am stuck between two really hard choices and I have to choose what is going to be best for these people and it is not necessarily cut and dried.

The design choice on the bridge was unusual for the Final Fantasy series of games. While they are RPGs, they are close to the opposite extreme from sandbox games. The plot of the game is largely fixed and the player plays out the challenges the group encounters along the way. In this moment, the designers gave the player a legitimate choice, a choice with consequences. This choice succeeded in giving Robert a satisfying story. Later, when he discovered that he had lost resources he could have kept by helping Shadow defend the bridge, he felt somewhat cheated. Rather than feeling he had helped create an interesting story and honored a friend’s heroic sacrifice, one set of ethical values, he instead felt he had failed to satisfy another set of ethical values, winning the game while protecting resources. Ultimately, his wish is to encounter more stories where the focus is taken off of the
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out of game ethics and on hard choices that lead to ethical sacrifices within the game.

This scene shows a success in mirroring, through Relm, but a failure, at least from Robert’s point of view, in consequence. The consequences detracted from the significance of the decision, rather than adding to it. It was an unusual success in freedom, but that was largely undermined by the tendency in this series of games to remove any meaningful decisions.

Elder Scrolls IV: Oblivion

As a tool for engaging in ethical decision making, Final Fantasy was limited because the plot was fixed. A single decision that profoundly affected the game gave Robert a craving for games that offer much greater freedom, and more balanced consequence for that freedom. Elder scrolls IV: Oblivion (2006), the fourth installment of the Elder Scrolls series, is on the other extreme, and is one of the most open-ended sandbox RPGs available. In an interview with Gamespot (2004), Todd Howard, executive producer of Oblivion at Bethesda Softworks, described the designers’ approach to creating the game:

All of our Elder Scrolls games follow a similar philosophy: “Live another life, in another world.” With each game, we go back and look at how we can make that come alive for the next generation of hardware and gameplay. So the “big-world, do-anything” style remains, and I think that’s an essential element to what we do with the series. The player needs a certain size and a large number of choices to really make role-playing feel meaningful.

In Oblivion, the designers included a fame and notoriety system that recorded what the world tended to think of you. Similar to other games, such as Fable (Lionhead Studios, 2004), the game assumed that most of the characters in the game can judge the player’s character’s virtue on first meeting her. Some may like a character despite, or because of, a ruthless past, but the character’s history affects all future interactions. Though simplistic, this allows the game to create factions that will be allies or enemies for your character depending on your actions in the game. Over the course of many games, the Elder Scrolls games have created a world with a wide diversity of cultures, each with its own religions, norms and political systems. In the empire that provides the setting for Oblivion, blood sports are acceptable entertainment. One can, voluntarily, enter the ranks of the gladiators and fight through increasingly challenging foes. The final enemy is the arena’s current champion, an enormous warrior who remains undefeated after many battles. Tom encountered the champion in the training area between matches. The champion is called the Gray Prince, and though he never knew his father, his mother told him his father had been royalty. He asked Tom’s character to find the truth of his father. Unfortunately for the Gray Prince, his father was a malicious liar. He was not nobility, and worse, his diary details a long history of corruption, deceit and treachery, including the seduction of the Gray Prince’s mother. When Tom returned to the Gray Prince with the sad news, he was surprised at the result. The Gray Prince accepted the news, but asked the character to challenge him for the position of grand champion of the arena. Just as the fight began, the Gray Prince ran to Tom’s character, sheathed his weapon and asked to be slain. Killing the Gray Prince won the character the title Grand Champion, but it also marked the character as a murderer.

In response to this murder, or in fact any murder in the game, assassins approach the character and offer entrance into their order. To enter the order, the character must kill a person in cold blood, someone who has done nothing to deserve it. The game does not require the character to accept the invitation, just as it does not require the character to fight in the arena. In fact, the game consists of hundreds of quests, and it is quite possible for a
player to play through and never even know that fighting in the arena or joining the assassins’ guild was a possibility. If one chooses to take this path, some options are opened to the character and others are closed. The world responds to player actions both in reactions other characters’ reactions to the player character and in the options available to the player in the future.

*Oblivion* excels at offering players opportunities to take consequential actions. The social context of the game world created constraints on acceptable action, but also allowed an otherwise heroic character to engage in gladiatorial fights, uncover the wickedness of some of the characters in game and decide what to do in response to the revelation. The Gray Prince responded emotionally to the revelation of his past, and created new opportunities, through the approach of the assassin’s guild, for Tom to determine his character’s path. Unusually for a sandbox game, the greatest frustration for Tom in this series of events was a limitation of freedom. Once the Gray Prince decided to die in the arena at the player character’s hand, the game design did not allow the player to refuse. A failure to attack the Gray Prince would leave the player unable to leave the arena and continue the game. A better design would have found a way to have the Gray Prince truly force the player’s hand or would have accepted the player’s refusal and had the other characters in the world respond appropriately. Freedom in a game, as in life, is a freedom to make the choices you want, not to control the consequences. Though it may not have been popular, it might have been better to have the arena authorities ban both the Gray Prince and the player character from the arena for life for refusing to honor their contract to fight.

**Options and Ethics**

Ethical decisions are not possible in a vacuum. They exist within the context of the game world, but we also bring our own interests and preferences to them. Several of the participants in this study mentioned that they preferred to play good, heroic characters in games or expressed discomfort with taking egregiously wicked actions in character. Others expressed an interest in playing an anti-hero or a villain, taking actions they would never take outside of a game. The participants in this study had a tendency to equate ethics with how righteous one is according to a normative definition. Even the game designers tend to use this shorthand when defining ethical relationships within games. Whether called Karma, alignment, or another word, even games that include multiple morality systems within the game world, like *Oblivion*, tend to use a simple system to rate a character’s righteousness. This can be useful. It can help players have some idea that what they are doing is indeed having an effect. It can also serve as shorthand for a more complicated behind-the-scenes system of reactions. This kind of out-of-game mirroring is useful, but it can become a liability as well. In an essentially Manichaean moral system, like that of the *Star Wars* universe in *Knights of the Old Republic*, a simple moral spectrum may make sense, but in a world like that portrayed in *Fallout*, it can disrupt and oversimplify an otherwise complex social context. In *Fallout*, the characters live in a Hobbesian anarchic universe where life is solitary, poor, nasty, brutish and short. Previous games in the series emphasized that life in the wasteland forced most into a pragmatic attitude where ethical sensibility is a luxury few can afford. Still, players accrue positive karma by helping others and negative by hurting the innocent, leading to a binary moral system somewhat at odds with the prevailing social context. In *Fallout 3*, the critical path of the game requires regular interaction with other heroic individuals, and “Three Dog,” a radio personality one can listen to through most of the game, encourages the player and others in the wasteland to “fight the good fight.” Players are given a great deal of freedom to play the character as they choose, but in practice it is difficult to play through the game without becoming either extremely good or extremely evil, as measured.
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by the game mechanics. Instead of a world of compromise and gray, it becomes a dark world where a few good people fight heroically against an evil majority, who largely lack either names or personalities.

While it might serve the purpose of creating a more vibrant and interesting social context for ethical decisions, proposing that games move toward a greater moral complexity may be outside the interest of game companies. From this interview data, it seems that many participants are more comfortable with crisper lines in games. Eileen, another participant discussing *Oblivion*, commented:

[I play] different characters with different opinions of the world, different goals and points of view. [For one character] I specifically chose a race that was good at stealing and sneaking and was actually treated differently in game, which I found kind of cool.... Really what I was playing was a bunch of stereotypes, and I truly was playing the stereotypes... Some of [the reason for] that, I suppose, is that it is a game, in real life things aren’t so clear cut right or wrong, much harder to have the corner on truth, so to speak, and to know that you’re in the right.

Still, this may be an argument for a wider diversity of feedback for specific actions in games. *Fallout 3*’s use of Three Dog and his radio station provides fantastic mirroring of the player’s actions. As the player progresses through the game, completing main and side quests, Three Dog comments on the character’s progress. The result is an intermittent running commentary on the effect of the character’s actions on the people of the wasteland, coming from a single perspective. Interestingly, if you choose a different radio station, you may hear an alternate commentary on your progress, either from Agatha, a violinist thanking you for returning her Stradivarius violin to her, or from the Enclave, who claim to be the preservers of the United States government through two hundred years of post-nuclear turmoil. The extent of the viewpoints offered is limited, but this offers a possibility beyond simplistic moral spectra. They could have opted to have each community in the game express its own opinion about the character’s actions, limited by their knowledge. This is certainly more complex to design and implement, but it provides the possibility of a much more interesting and nuanced ethical world without sacrificing the player’s ability to choose a stereotype, or an archetype, they wish to inhabit in the game.

RPGs offer a game experience different from many other games. Taking part in another culture as an insider offers opportunities to learn about the culture, about the dynamics of cultural interaction, and about one’s own culture by comparison. All of this interaction depends on creating an ethical space that is interesting and engaging. In games where the play is interesting, but the ethics are boring or problematic, a player may reasonable choose to play another game or simply ignore the uninteresting parts. The interviews here suggest that players can enjoy the process of experimenting with ethical decisions when they interact in with an environment that feel alive, fair, and focused on story not success. To this point all of the examples have focused on single-player games. Technology is allowing computer games to increasingly go online, and therefore multiplayer. Social RPGs, whether face to face or online, are increasingly in a position where they must deal with the complexity that comes with social interactions, especially when those interactions include ethical conflict.

CONCLUSION

Design affects a player’s desire and ability to be drawn into the game world. Though I am particularly interested in how this helps the space become interesting for ethical play, engaging play is a goal in its own right. The experiences shown here suggest that increasing consequence,
mirroring, social context and freedom helps to draw players into the game. Design is an art, not a science, and good games are not created simply by including the four elements described here. The best games, according to the participants, often fail to provide a satisfying experience in one of the categories. The whole experience is often compromised when part of the design contradicts others. Even in a successful sandbox game, like *Fallout 3*, the choice to include a robust descriptive mirroring system, feedback from other characters including the radio programs, with a relatively clumsy normative mirroring system, Karma, ultimately makes a potentially frustrating combination. Specific decisions about how much of each element to include in a particular game remains a design choice. It seems more important to design the four elements of the game to be coherent. Future research could add a great deal more detail to how these elements interact, and would include the enormous complexities that come with multiplayer games.

**FUTURE RESEARCH: GOING SOCIAL**

Social games add complications to the dynamics in almost every aspect of game play. Rather than a game world created by designers with coded constraints, social games have aspects that no code can simulate. These interactions help to create the game world outside of the control of designers. In other words, as much as single-player games are co-designed, multiplayer games require negotiating the game world among all participants, designers and players, and the impact of players on each other holds at least as much importance as does the design of the game space and the player’s individual choice. Designers must struggle with creating and nurturing a sense of community. Creating a coherent social context and communicating that context increases in importance just as the designer’s power to control the context wanes. In social games it is even more important to recruit players into the game’s social context, to encourage them to play within it instead of rebelling against it while still allowing players sufficient flexibility to express their own vision. It is, after all, the community of players’ play space.

These additional challenges to organizing and designing multiplayer RPGs appears to coincide with an enormous increase in the possibility of engaging participants in legitimate social experiences, including legitimate ethical experiences, within the games. The level of nuance and individual presentation of character far surpasses what any single-player game has yet wrought, or

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is likely to achieve. It also opens the door for an overlap between in-game and out-of-game ethics. While any in-game action within a single-player game has no effect on others, all in-game actions in a social game affect the other players and their characters; that is part of the point of playing together. This means that the rule for acceptable portrayal of antisocial behavior in game needs to be governed by out-of-game consent of all players affected. There may be a “magic circle” around games (Huizinga, 1955) creating a sacred space where playfulness can occur, but if so it is not something that happens automatically or that persists without maintenance. A boundary between in-game and out-of-game space needs to be nurtured, protected and enforced. Future research will hopefully help us maintain the balance of care and challenge that could make social RPG experiences excellent environments for learning about and playing with ethics.

REFERENCES


Playing with Ethics


Section 3
Philosophical Perspectives
Chapter 6

Bioshock in the Cave:
Ethical Education in Plato and in Video Games

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ABSTRACT

Plato’s cave, when read with attention to its ludic element, provides a model for the way video games can teach ethics. This chapter describes the cave-culture-game, the interactivity of the prisoners of the cave with the shadow-puppet play. It argues that on its own, the cave-culture-game gives insight into the standard reproduction of dominant ideological ethics by most games that have frameworks of ethical choice. The attempted disruption of this cave-culture-game by the philosopher, however, gives additional insight into the ethical potential of video games. To explore this, the chapter provides a close reading of 2K’s Bioshock, which shows how video games can teach ethics through disruptive gestures such as the forced killing of a major character.

INTRODUCTION

Plato is arguably the first ethical philosopher (that is, someone who thinks publicly about the meaning of right and wrong) in the Western tradition. Before he composed his dialogues, what was commonly organized under sophia (“wisdom”) was a great deal closer to what we today call “science” than it was to philosophy. The Greek word philosophia in fact appears to be Plato’s own coinage for the real-life practice that lies behind the dialogues he wrote; in that practice, and thus in composing those dialogues, he took his inspiration from the conversational practice of his teacher Socrates, who seems to have been interested almost exclusively in questions of ethics. Plato himself was not disinterested in scientific matters, but his foundation of Western Philosophy began from the systematic elaboration of a position on the question of what it means to be, and to do, good. That sort of theorizing quickly became the sub-field of philosophy that we call “ethics.”

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Bioshock in the Cave

I argue in this chapter that in certain important respects, Plato is also the first video game designer. I make this argument based on a reading of the famous allegory of the cave in the sixth book of Plato’s Republic. The allegory of the cave, as I will explain, portrays society as a group of prisoners whose only view of the world is a shadow-puppet play projected on the cave wall in front of them. In this chapter I show that Plato depicts, in that shadow-puppet play, a cultural practice characterized by a defining element of video games: interactivity.

I argue that because philosophy for Plato is always essentially about ethics and because the allegory of the cave is the charter myth of philosophical education (or, as Plato would have it, education tout court), what I will call the game of the cave, analyzed in relation to the ethical structures of modern video games, helps us ask and begin to answer some very subtle questions about what games can do. I argue in this chapter, finally, that games have a power to disrupt interactivity that the medium of film, for example, whose interactivity is not immediately apparent, does not have.

Accordingly, this chapter examines several games, and in particular Bioshock (2K, 2007), as elaborations of Plato’s original design. I seek to analyze specific similarities and differences between what I will define as Plato’s game and these modern games to gain some insight into the complex question of how games can teach ethics. In particular, I examine Plato’s conception of the connection between ethics and mimesis.

In the first part of this chapter, I propose an analysis of the climactic moment of the myth of the cave that takes fully into account its essentially interactive aspect. In the second part of the chapter, I discuss several examples of ethical elements in modern video games, and show that those moments echo Plato’s account of the prisoners in the cave. It turns out that the Platonic perspective on those games’ ethical moments is pessimistic as to the games’ potential to effect ethical education. On the other hand, I argue that we need not adopt Plato’s pessimism to reap the benefits of the cave reading.

In the third part of this chapter, therefore, I turn to one game in particular, Ken Levine’s Bioshock—a game which I argue actually thematizes its own ethical framework. With the help of my analysis of the cave, I argue that the “ludonarrative dissonance” of the game in fact comments upon the game itself as an exercise in ethics, the ethical framework of video games in general, and indeed the ethical framework of culture itself. Through the mechanism identified by Plato, Bioshock teaches ethics just like Plato’s Socrates teaches ethics in Republic, by situating the gamer in an imaginary bind whose ineluctability enacts the lesson.

The Cave as Video Game

A quick review of the Story of the Cave will help begin to make my argument clearer. Socrates, who is both the narrator and the main character of Plato’s Republic, tells the Story of the Cave to his interlocutors in Republic (most importantly including Plato’s brothers). Socrates introduces the story as a way of addressing the problem of educating philosophers, a topic to which the characters of Republic have been returning again and again in their conversation.

Here it becomes important to remember that Plato wrote almost exclusively in the form of dramatic dialogue, Republic included. The basic outward form of every major work by Plato is dramatic, without third person narration unless one of the dramatic characters, like Socrates in Republic, does the narration himself. Republic is indeed especially noteworthy in this respect because in it Socrates himself tells the story of the conversation that we call Republic. Socrates is thus both the narrator and the main character.

It makes sense also to introduce the idea of mimesis here, because in fact what Plato does in writing his dialogues may be seen as itself a form
of mimesis. Mimesis has been, and will continue to be, one of the most hotly debated ideas in Plato and in Western culture. For the purposes of this chapter, I define it as “identificative performance,” by which I mean, more or less, pretending to be somebody else. When we perform in a tragedy, or play a video game, we pretend to be someone we are not; when Plato writes a dialogue, he does the same thing. The status of mimesis in Plato and the relation of that status to the history of aesthetics in the Western philosophical and artistic traditions is perhaps best entered into with a book like (Halliwell, 2002). My own treatment of it stems in large part from the revolutionary work of (Nagy, 1996). (See also (Bakker, 1999)). A large part of what I see as the contribution of this chapter to the study of video games springs from a parallelism between mimesis and the important term “immersion” that others, especially Marie-Laure Ryan, have also seen. On the parallelism between mimesis and immersion see (Ryan, 2001), especially 14-15; for immersion in general, see the same work, especially 89-171.

In the Story of the Cave, as Socrates tells it, people have been chained in a cave in a seated position, with their heads bound so that they may only see the rock wall in front of them, upon which is continually projected a shadow-puppet play by means of the light of a fire. One prisoner is released (for reasons never explained, by methods never explained) and dragged outside to see the upper world, including the sun. In a series of conditional statements, Socrates then contemplates what would happen if the released man—the philosopher—should return to the cave and attempt to persuade others to get up and go outside with him. Socrates tells us that the prisoners have competitions concerning the shadow-puppet play, and that these competitions are so important to the prisoners that they would kill the philosopher who tried to release them.

These competitions make up what I call the cave-culture game. Many readers—many even of those who think they know the Story of the Cave—are surprised to discover upon re-reading the story that the prisoners of Plato’s Cave do not simply watch the shadow-puppet play projected on the wall before them. Rather, they interact with the shadows by making observations about them, and, crucially, compete with one another in the accuracy of their observations, receiving prizes and honors for their acumen in predicting what the shadows will do next. The investment felt by the prisoners in this cave-game—the immersion in the play that they undergo—indeed turns out to be the most important part of what makes them angry with the man who has been released and has been dragged outside to see the real world of the metaphysical forms. They would kill him, Plato’s Socrates tells us, because he wants them to give up that immersion.

The myth, or allegory, of the cave comes at a key moment in Republic. Socrates has just finished guiding his interlocutors through a discussion of what a philosopher should be, and what a philosopher should do. That discussion arose from the attempt to lay out an educational plan that might produce leaders capable of leading the ideal state. With the myth of the cave, Plato has Socrates return to the problem of education and begin to bind philosophy and education together; Socrates thus introduces the myth with the words, “Compare our nature to the following state, where education and non-education are concerned.” He continues,

SOCRATES: I said, . . . “Behold! Human beings living in an underground den, which has a mouth open toward the light and reaching all along the den; here they have been from their childhood, and have their legs and necks chained so that they cannot move, and can only see before them, being prevented by the chains from turning round their heads. Above and behind them a fire is blazing at a distance, and between the fire and the prisoners there is a raised way; and you will see, if you look, a low wall built along the way, like the screen which marionette players have in front of them, over which they show the puppets.”
“I see,” said [Glaucon].

“And do you see,” I said, “men passing along the wall carrying all sorts of vessels, and statues and figures of animals made of wood and stone and various materials, which appear over the wall? Some of them are talking, others silent.”

“You have shown me,” he said, “a strange image, and they are strange prisoners.”

“Like ourselves,” I replied; “and they see only their own shadows, or the shadows of one another, which the fire throws on the opposite wall of the cave?”

“True,” he said; “how could they see anything but the shadows if they were never allowed to move their heads?” (Republic, Book VII). (In this chapter I employ extensively revised versions of Jowett’s translations of the works of Plato.)

A reader unfamiliar with Republic may be surprised to see the strange format of the above passage, which I have laid out in dialogue form, including the notation that Socrates is speaking. Most translations find ways to gloss over a basic fact of Republic that happens to be absolutely crucial for understanding the cave, and, in this chapter, how the cave relates to video games. The entirety of Republic is a first-person narration by Socrates of a dialogue he had at a friend’s house. It is a dialogue for one, and although Socrates is clearly noted as the speaker, in the same way he would be if Republic were a tragedy or a comedy, no other dramatis persona is present. Laying the passage out as a one-person dialogue thus indicates the way Republic strongly thematizes identificative performance. That is, the dialogue itself comprises a performance as somebody else, which is how Socrates himself defines mimesis in Book 3 of this same Republic, and what connects Platonic philosophy to video games. Moreover, as I will show, Republic enact any through this constitutive mimesis a strong critique of mimesis’s potential for education.

Reading Republic as Plato wrote it, with all the “he saids” and “I replieds” is tedious but essential, because we should never forget that Republic is itself an instance of the same kind of shadow-puppet play the prisoners are watching, and the reader’s interaction with it is an instance of what I call in this chapter the cave-culture-game. The shadows cast by the puppets on the wall perform as the “vessels and statues and figures of animals,” and these statues and figures are performing as what artisans have carved them to resemble. It is also worth noting for clarity’s sake that the usual translation of mimesis, “imitation,” might make the connections a bit easier to understand, but also commits a fundamental betrayal of what Plato’s words mean within the discourse of 5th Century BCE Athens. In the same way, the reader of Republic is performing as Plato performing as Socrates (this enactment of the performance of Republic occurs whether the reader reads silently or aloud, but it may help to recall that silent reading was almost unheard-of in the ancient world). So, as I shall go on to argue, on the one hand the shadow-puppet play is culture, understood as interactive mimesis, and on the other Republic is just such an interactive mimesis.

In my reading, the myth of the cave is the moment in Republic that most emphatically both questions and finally confirms the potential of mimesis for education in ethics. It confirms that potential in a very complex, but nonetheless powerful way, which at the same time places it in the context of the Platonic understanding of culture. An analysis of the ludic aspects of the cave—that is, the cave-culture-game I will examine below—demonstrates first that instances of mimesis such as the ones Plato knew and criticized (especially homeric epic and Athenian tragedy), and like the
video games we know and criticize today, should be, on a Platonic understanding, viewed very skeptically as occasions for ethical education. Second, however, such an analysis also demonstrates that these instances of mimesis provide an opportunity for disruption such as the return of the ascended, newly philosophic man (who is clearly an allegory for Socrates himself) that has greater potential for teaching ethics. By “disruption,” I mean an interference by a force from outside the mimesis that disturbs the operation of the mimesis—whether the shadow-puppet play, a tragedy, a film, or a video game—and throws it into question.

A nuanced understanding of mimesis and ethical education in the myth of the cave thus demands that we work toward a more complete reading of the myth, one that includes its ludic aspects. We must also look briefly at the place of the myth within the course of Plato’s work on culture and the ethical issues with which culture confronts us. This more nuanced reading does not in the end add much to the potential of the myth for film studies, but, tellingly, it leads us on to what I consider a very helpful framework for understanding video games as ethical constructs. Whether we agree with Plato in his pessimism concerning the ethical potential of conventional mimesis (he famously expels Homer and tragedy from the ideal city in Book 10 of Republic), the special nature of the disruption—indeed, even the attempted but apparently unsuccessful disruption—of that mimetic cultural framework proves extremely provocative, particularly when we look at the disruption in the context of a game like Bioshock.

In all Plato’s work that touches on the relationship between culture (especially poetry) and ethics (Republic being the dialogue where the two come most notably into conflict), three concepts arise again and again. These elements are also strongly related to the question of video games’ relation to ethics both because video games constitute a cultural practice and, more abstractly, because of the connection between video games and mimesis that I am discussing in this chapter. The three concepts are mimesis, immersion, and cultural investment. For Plato, these three matters are ineluctably bound, though he configures them very differently as his project develops, most notably between his two ideal cities, that of Republic and that of Laws.

To put the broad range of Plato’s thought on the matter succinctly, Plato distrusts the power of mimesis and immersion because he sees it as producing the kind of negative cultural investment we find in the cave. The prisoners of the cave are so immersed in the performance (that is, the mimesis) of the shadow-puppet play that if someone should come to tell them that there is more to human existence than that mimesis they would kill him. That distrust of mimesis leads Plato to argue in Republic that poetry and music should be barred from the ideal state, but over the succeeding years he seems to come to believe that that same power is so great for producing positive cultural investment that he comes to propose that in the ideal state poetry be allowed, but tightly controlled.

Plato, however, maintains throughout his discussions of mimesis that the identification and investment produced by mimesis, the practice of performing as someone else, lie at the foundation of culture and ethics as he found those things in the Athens where he and Socrates grew up. Because of the investment in culture brought about by the immersive nature of mimesis, culture as Plato found it could not be reformed, and so in his works he envisioned building either a sort of non-culture that avoids mimesis entirely (which is one way of looking at what he proposes in Republic), or he envisioned building a similarly-constructed but differently-designed alternate culture (which is what he proposes in Laws). In the Phaedrus, for example, a famous discussion of the question of whether writing is a good or a bad thing revolves around the cultural investment made by speechwriters in their written speeches; Socrates’ criticism of this investment is that written speeches actually impair philosophical education if they are
mistaken for actual philosophy. With this criticism of writing, Plato simply reconfigures the problem of the cave. —which is simply the configuration in other terms of the problem of the cave. Just as the prisoners of the cave become invested in the shadow-puppet play to the exclusion of the “reality” of their world, those who write down speeches become invested in the written speech instead of the ideas behind it. Concerns of space have severely constrained my discussion of Phaedrus, but the most relevant chapters are 258-260 and 274 through the end of the dialogue.

In the myth of the cave, then, these terms come together most memorably, as Socrates lays out a powerful way of looking at how culture works. The myth has three parts: the description of the cave and its inhabitants in their initial position, where Plato makes it clear that the prisoners’ relation to the shadow-puppet play constitutes a culture, and that that culture comprises an immersion in a mimesis; the account of the one inhabitant mysteriously freed from his shackles and led into the outer world; the account of that newly-enlightened man returning to the cave and attempting to free the other cave-dwellers. The final, climactic part is perhaps the part to which those who use the myth as an interpretive framework, whether philosophical or cultural, pay the least attention. Its position, its inherent drama, and its relation to the culture of the work’s original Athenian audience, however, should rather recommend that part to us as in fact the most important part of the myth.

This final part is also the most useful for my purposes in this chapter, because in it Plato designs something very akin to a video game:

Socrates: I said, “. . . if they [that is, the prisoners of the cave] were in the habit of conferring honours among themselves on those who were quickest to observe the passing shadows and to remark which of them went before, and which followed after, and which were together; and who were therefore best able to draw conclusions as to the future, do you think that he would care for such honours and glories, or envy the possessors of them? Would he not say with Homer, “Better to be the poor servant of a poor master, and to endure anything, rather than think as they do and live after their manner?”

“Yes,” [Glaucon] said, “I think that he would rather suffer anything than entertain these false notions and live in this miserable manner.”

“And if there were a contest, and he had to compete in measuring the shadows with the prisoners who had never moved out of the den, while his sight was still weak, and before his eyes had become steady (and the time which would be needed to acquire this new habit of sight might be very considerable) would he not be ridiculous? Men would say of him that up he went and down he came without his eyes; and that it was better not even to think of ascending; and if any one tried to loose another and lead him up to the light, let them only catch the offender, and they would put him to death” (Republic, Book VII.)

The ludic element of the shadow-puppet play becomes clear. The cave-culture-game would not be a bestseller at any price-point, perhaps, no matter how much its publisher spent on marketing or how many announcements and “first looks” it provided to the gaming press, but the essential interactivity of observation and remark and prediction in which the cave-prisoners engage with the shadows before them bears a manifest
resemblance to what game critics and gamers alike call “gameplay,” as does the final contest in measurement in which the ascended man fails so miserably.

Film theorists saw clearly that the technology Plato developed in the story is a direct anticipation of the cinema. In a classic essay, Jean-Louis Baudry introduced to film studies the idea of the filmic apparatus, relying heavily on the myth of the cave ((Baudry, 1999), cogently critiqued in (Carroll, 1999)). Baudry saw that the passivity of the prisoners watching the shadow-puppet play is highly analogous to the passivity of cinema-goers watching a film, and that the projection from behind the audience onto a surface in front of them is precisely analogous between the two occasions. The importance of Plato’s Cave to film theory has been in the idea that the basic truth of the cinematic apparatus’ power to capture subjects in ideology is essentially transhistorical. The apparatus of the cave, like the cinematic apparatus reproduces ideology, an important subcategory of which is, of course, ethics, which might be defined from the perspective as the set of cultural assumptions that govern the judgment of right and wrong.

From my perspective in this chapter, the use of the cave by film studies beautifully sets up the myth’s potential use by those studying video game ethics: if film, as Baudry and others demonstrated, works as an apparatus to aid in the interpellation of subjects into ideology, perforce shaping their ethics in the process, video games do the same even more thoroughly—but the ludic aspect of video games at the same time gives much greater potential for disruption. (The powerful concept of the ideological state apparatus was introduced by Louis Athusser (Althusser, 1971).) As I will proceed to explicate, it is when the cave is at its most ludic that the ascended man, the philosopher, Socrates, makes the intervention that seals his fate and makes him the midwife to an ethical philosophy.

The prisoners of the cave, that is, participate in their culture as a game, just as they also participate in it as an epic, as a tragedy, and (as film studies sees) as a film. (This idea has recently been explored in relation to video games quite compellingly by Mackenzie Wark (Wark, 2007).) None of those mimetic representations, in themselves, has the power to educate constructively in ethics—the prisoners’ resolve to kill anyone who wants to release a prisoner demonstrates that quite succinctly. The extreme prominence, though, given to the ludic element of the cave, the cave-culture-game, must make us wonder about the potential of a disruption specifically in that ludic element—that is, a disruption in the interactivity itself—to effect real ethical education as Plato conceives it—that is, to bring about something like Republic itself, a new kind of disruptive game.

The idea of a new kind of game, a new kind of mimesis, is one that Plato himself had, and explored in Laws, a work which as I noted above is his other meditation on the ideal state.

Athenian: And, if any of the serious poets, as they are termed, who write tragedy, come to us and say—“O strangers, may we go to your city and country or may we not, and shall we bring with us our poetry—what is your will about these matters?”—how shall we answer the divine men? I think that our answer should be as follows:—Best of strangers, we will say to them, we also according to our ability are tragic poets, and our tragedy is the best and noblest; for our whole constitution [politeia] is an imitation of the best and noblest life, which we affirm to be indeed the truest tragedy. You are poets and we are poets, both makers of the same strains, rivals and antagonists in the noblest of dramas, which true law can alone perfect, as our hope is. Do not then suppose that we shall allow you in a moment to erect your stage in the agora, or introduce the fair voices of your actors, speaking above our own, and permit you to harangue our women and children, and the common people, about our institutions, in language other than our own, and very often the opposite of our
own. For a state would be mad which gave you this license, until the magistrates had determined whether your poetry might be recited, and was fit for publication or not. Wherefore, O ye sons and scions of the softer Muses, first of all show your songs to the magistrates, and let them compare them with our own, and if they are the same or better we will give you a chorus; but if not, then, my friends, we cannot (Laws, Book VII).

In this striking passage from Laws we see two essential elements of the cave-culture-game more clearly. First, we see how deeply the Platonic philosopher is supposed to control culture in the ideal city. Second, and, even more importantly for my argument in this chapter, we see how Plato bridges the gap between the allegorical world of the cave, where the shadow-puppet play is a metaphor for the entire cultural apparatus, and the specific apparatuses of systems of mimesis like video games.

Putting this contribution of Laws in the terms of the cave is actually quite instructive: the Athenian in Laws is saying that the shadow-puppet play of the cave must continue, but that the philosophers should be the ones controlling the story. Culture—and in the context of Athens, culture is always political culture—is itself a mimesis, a tragedy (Plato’s ideal culture being the “truest tragedy”), and a mimesis that is at the deepest level comparable, and in competition, with individual mimetic performances. As themselves interactive mimetic performances like the cave-culture-game, video games therefore have on this scheme an educational function analogous to that of the culture-game itself.

Powerful confirmation of the idea that homeric epic, tragedy, and video games all fall into the range of apparatuses subsumed into the culture-cave-game comes in the place of the cave-game within the myth of the cave, within Republic, within the Platonic project. Republic is a mimesis of a first person narration by Socrates of his dialogue in the house of Polemarchus, in it, Socrates performs as himself, and as his interlocutors. Obviously, Plato wants prospective philosophers reading Republic to understand his mimesis as superior mimesis. Just as obviously, though, given the length at which Socrates and his interlocutors discuss mimesis and its role in culture and philosophy, Plato wants us to understand that his work is, in its way, mimesis.

In video game terms, that is, the cave-culture-game is a sort of mini-game within the larger game-story of Republic. When Plato has Socrates use the shadow-puppet play, with its ludic element, as an analogy for what people do in a the kind of culture Plato and his readers knew well, and which Plato found to be badly in need of reform, he invites his readers to remember that the dramatic situation of the dialogue is a social occasion that makes up an essential part of that same culture. In that same dramatic situation, the reader has already seen (especially in Book I of Republic) characters trying to score points in conversation, in a way analogous to the contests of the prisoners in the cave. To read the myth of the cave, then, is to be invited to realize that reading the myth of the cave makes you part of a mimetic culture, just as designers often use mini-games to invite game-players to realize that they are playing a game.

We emerge from this collocation of passages with one firm idea about mimesis: that culture, positive or negative, functions by way of mimesis’ power to immerse people in imaginative performances. The cave-game, exiguous as it is, is nevertheless a full representation of culture from the perspective of mimesis and immersion: honors and prizes for interaction, producing an ethics so false and distorted that it leads to the murder of the philosopher who tries to convince the culture-cave-dwellers that there is anything outside their culture-cave-game.

What the cave-game tells us about ethical education is that mimesis and interactivity, uninterrogated, produce a closed, self-reinforcing ethical system that, good or bad, simply but forcefully
propagates itself through the immersion brought about by that same mimesis and interactivity. The interrogation of mimesis and interactivity, however, has the power to cause disruption, and although that disruption cannot be actualized within the game itself, it nevertheless enacts ethical education in its failure of actualization. When Plato’s gamers kill the philosopher, they obviously have not learned anything. But the gamers of Republic—Socrates’ interlocutors—have learned to question culture in a new way.

Can video games accomplish the same sort of ethical education? Do they do so? In the next section I examine a few ethically-informed moments in popular games in light of what the cave-culture game tells us about interactivity and culture.

**Video Games as the Cave**

The idea that video games can function as ethical systems comparable to the ethical system of Plato’s “cave-culture-game” would seem to get natural support from the several games like Bioware’s Star Wars: Knights of the Old Republic (KOTOR) and Rockstar’s Grand Theft Auto IV (GTAIV) that allow the player to “play as” what a player raised in modern world culture easily recognizes as a “good” character or an “evil” character. Different games have different names both for these light and dark poles and for the system within which the player chooses them, as well as widely different implementations of the consequences of choosing to adhere to one or the other. For example, whereas in KOTOR, the content of the game is carefully designed to be altered only in its superficial detail throughout, until at the very end of the story the possibility opens of two radically different endings, in Bethesda’s Elder Scrolls IV: Oblivion an entire extended story within the larger narrative of the game-world is unavailable to the player until his or her character has committed murder. A reasonably brief examination of these ethical systems reveals them to be on the one hand extremely revelatory of their cultural underpinnings (or, if you prefer, their ideology) and on the other exactly analogous to Plato’s cave-culture-game in their interactive mimetic reinforcement of culture and, with it, ethics. That examination in turn serves as a springboard into the discussion of Bioshock and its potential revelations about the ethical dimension of video games with which I conclude.

The most important—indeed, the defining—element of video games’ ethical systems is that they are never and can never be actually open. It is by definition impossible to make in-game ethical choices that fall outside the range of ethical choices provided by the video game, even if we should imagine an extreme case in which a player manages to “break” a game and for example kill a non-player character (NPC) whom the game designers had explicitly intended not to be susceptible of being killed. In this hypothetical case, although the choice of killing the NPC would not be part of the designers’ intentions, the game nevertheless would have provided that opportunity and not a range of other opportunities (if the player should “break” the game further he or she would have pushed out the limits, but not erased them). There exists also with respect to some games, in particular on the PC platform, the possibility of modding the game in such a way as to provide opportunities not designed by a game’s original composers, but in that case, the game has self-evidently become a different game, in having those different choices.

That is, because every game that includes ethical choice provides a closed range of ethical choice, every game’s basic ethical framework (including Bioshock’s) is analogous to the cave-culture-game. Every game’s ethical choices work within a framework reducible to the prisoners’ interaction with the shadow-puppet play, wherein they are made to feel themselves invested in the cave-culture-game because of their capacity to obtain rewards for their interaction with the play. (There is powerful support for this notion of the prisoners’ investment in the shadow-puppet play in Burnyeat’s fascinating
Bioshock in the Cave demonstration of the importance of the prisoners’ seeing themselves in the shadows on the cave-wall ((Burnyeat, 1999) 236-243.) The “ethical” gameplay of games that allow ethical choices is nothing more than an opportunity for the player to observe, remark, and make a prediction about how he or she can successfully finish the game according to the games’ rule-set.

Compare for example a choice in KOTOR, in the course of which the player must decide whether to kill Juhani, an NPC, or reason with her so as to make her a friend and, in due course, a member of the player’s party. The game reduces the decision to two gameplay consequences: 1) having Juhani still in the game with the potential to join the player’s party, and 2) the number of lightside or darkside points awarded to the player, a number which ultimately influences the skills the player can make use of in the course of the game. Neither of these consequences influences the player’s ability to complete the game-story, considered in an absolute sense, just as the prizes and honors awarded in the cave-culture-game for successful predictions do not influence the continuation of the cave-culture-game, but rather reinforce that continuation.

From the perspective of the cave-culture-game, then, the choices of a game like KOTOR do not teach ethics, but rather reinforce an existing cultural-ethical framework—or, in other words, the existing ideology. Even KOTOR’s climactic double ending, wherein the player makes an irrevocable choice either for light or for dark, is simply a larger version of the trivial choice with respect to Juhani: the player-character’s triumph is precisely the same whether he or she accomplishes it by dark or by light means, whether he or she receives the rewards laid up for him or her on the light or the darkside—powerful Jedi or powerful Sith, framed within the same ethical system either way, the bipolar system of light and dark, both of them ways of bringing order to the galaxy.

That system is of course based on our conventional “real world” ethical system of good and evil, and it is essential to note that we can part ways, should we wish, with Plato here and nevertheless retain the fundamental helpfulness of looking at games from the perspective of the cave. Indeed, should we wish to disagree about the complete inefficacy of choices made in the cave-culture-game or a game like KOTOR, we would be in the company of no lesser figure than Aristotle, whose Poetics can be understood as a refutation of Plato’s complete pessimism about mimesis as a way of accomplishing real, disruptive ethical education, and his famous concept katharsis as the formulation of a means that mimesises like the cave-culture-game and KOTOR might make use of to accomplish such education.

When we turn to other games possessed of some kind of ethical framework, we find different versions of the same closed system, but we also find what may be the potential for the same kind of disruption I seek to locate in Bioshock in this chapter’s final section. The systems of Oblivion and GTAIV are closed, like KOTOR’s, despite those games’ reputation for openness. Whereas Oblivion, however, seems to seek to provide a maximization of choice that effaces the boundaries of the system much in the way that the prisoners of the cave police their game, GTAIV seems to begin to use its boundaries to comment on the problem of the cave-culture-game in an incipiently disruptive way. Finally, World of Warcraft (WOW) provides a very interesting counter-example, in that its massively-multiplayer format is at once closed and boundary-effacing and potentially disruptive.

Oblivion’s system assigns points to a character’s quality on a scale of fame/infamy; the player’s values on the scale allow and disallow certain options in the story. The example of the Dark Brotherhood storyline, mentioned above, functions very well as a microcosm for this system. When the player has his or her character sleep, at any point after having killed an NPC whom he or she was not assigned to kill—that is, after having done murder, in the game’s terms—the player-character receives a visit from a member of a guild of assassins, the Dark Brotherhood;
this visit constitutes the beginning of a story-line not otherwise accessible. The act of murder and the story possibilities that follow from it are not directly related to the fame/infamy scale, but the values on that scale have story-consequences that work in precisely the same way. Although this mechanic is slightly different from KOTOR’s, it is immediately apparent that Oblivion’s system is just as closed, and resembles the cave-culture-game just as much. The player-character may choose “right” or “wrong” actions, as we conventionally understand those poles, but those actions are reduced to gameplay consequences that reward them, just as the prisoners in the cave are rewarded for their predictions about the shadows on the wall. If the player-character becomes infamous enough, the police will come pursue him or her, but from the perspective of the gameplay that very pursuit is a reward because the player chose to pursue the necessary infamy: in terms of the cave-culture-game, he or she made the prediction that the shadows would pursue him or her, and is proven correct.

Police pursuit as a reward brings us to the infamous Grand Theft Auto (GTA) series. Each of the entries in the series from GTAIII on has its own narrative with its own set of potentially ethical choices, while the broad outlines of the game-world and its associated gameplay (car-jackings, gunplay, etc.) remain nearly constant. Work has been done on what might be called the “rhetoric of choice” in GTA games, most notably by Ian Bogost ((Bogost, 2007) 112-119). Bogost, like other critics to be found on Michael Abbott’s very useful annotated bibliography (Abbott, 2008), takes for granted the closed nature of the game’s ethical system.

All the GTA narratives present interesting elements for a cave analysis, but none as much as the most recent game in the series, GTAIV. The role of the police in GTAIV is quite similar to that of the police in Oblivion, but the most important intersection of the cave with GTAIV is in the central narrative of the player-character Niko Bellic, a refugee of the Bosnian War who is dragged reluctantly into the criminal life of Liberty City by his social obligations—in particular his ties to the cousin who deceived him into coming to America.

Even if I had space in this chapter to perform an exhaustive “cave reading” of the narrative of GTAIV, that reading would not, I think, repay the effort, because GTAIV’s ethical system is in almost every respect the same kind of closed cave-culture-game system we saw in KOTOR and in Oblivion. On the other hand, the narrative itself, which plays over and over again with Niko’s reluctance to return to a life of violence, comes very close to introducing the disruptive element I will show as much stronger in Bioshock. Over and over in GTAIV the player is given to understand that despite GTAIV’s extremely open qualities (qualities often called “sandbox” or “emergent”; see Abbott’s annotated bibliography for full references on this topic (Abbott, 2008)) Niko does not have a choice but to commit the violent acts that carry the story forward. GTAIV, that is, almost plays the cave’s ascended man for the player, calling attention to the world outside the cave by pointing out the unfreeness of freedom. I would contend that GTAIV stops short of exposing its ethical system the way Bioshock does, but I do find that the ethical disquiet created by its narrative works admirably with the satirical framing of its game-world to create an ethical catharsis.

A final game whose ethical system seems to present an instructive comparison to the cave-culture-game is World of Warcraft (whose ethical characteristics are shared by most massively-multiplayer online games). WoW and other games like it show a deceptively simple ethical façade: MMORPG’s seem to base their choices around various ways to attain higher levels and better character equipment, numbers which in turn allow access to novel and usually more exciting content. That aspect of these games clearly matches up nicely with the closed immersive mimetic system of the cave-culture-game, and at first glance there
appears to be very little else to MMORPG’s except for the social interaction that is clearly extraneous to the ethical framework of the game. T. L. Taylor has admirably complicated this over-simple view of the social interactions of MMO’s ((Taylor, 2006); see esp. 67-92.) To leave WoW there, however, would be to mistake the extraordinary way in which the ethics of the game and the social aspect of the game have become intertwined—a way which is seriously underappreciated by players and game-makers alike.

The other players in MMORPG’s have the capacity to disrupt the mimesis as the ascended man of the cave tries to do. The commentary on gameplay that other players are constantly providing to one another has the capacity to be—in fact not uncommonly is—ethical training, though of a sort not quickly recognizable. Players learn their roles in the group; their ethical obligation is to fulfill those roles—that is, to participate in the same sort of interaction as the prisoners do in the cave-culture-game. But the presence of other players—other people from the world outside the game, the world outside the cave—ensures that the system cannot fully close on the player, because although most of the time other players are fellow prisoners, every one of them could be the one released and ascended and returned. One important opportunity for disruption comes in the advice and comment shared between players about the questlines along which player-characters progress: commentary on how best to progress often involves reaching a much deeper understanding of how the games’ rule-sets and stories function, and therefore allows for the kind of disruptive critique that can enact ethical education. (I owe this insight to my colleague Michael Young; compare Taylor’s discussion of player-ownership of their MMO worlds, (Taylor, 2006) 125-150.) Do many MMO players seek to be Socrates to their fellow players? Of course not. But the irony with which many players play their MMO’s—irony which leads to offshoots like a famous episode of South Park, (Parker, 2006) and the wonderful web-series The Guild (Day & Evey, 2009)—is far from un-Socratic.

Even if we repudiate Plato’s pessimism and say that players can and do learn ethics playing KOTOR, Oblivion, and GTAIV (as I would argue we should), this repudiation certainly cannot vitiate the ethical power for our understanding of video games of the relation to the cave-culture-game of the ascent from the cave and the descent back down into it. The task of making cultural subjects aware of the closed, mimetic nature of their ethical framework, which Plato’s Socrates undertakes over and over in the ongoing mimesis of Plato’s dialogues (we must never forget that Plato wrote almost exclusively in dialogue), is an act of disruptive ethical education whether or not non-disruptive ethical education, education within the mimesis of the game, is possible.

The Challenge of Bioshock

Here I think Bioshock must be our guide, because Bioshock seems to me to have the clearest instance in the history of video games thus far of a disruption in interactive mimesis that, read from the perspective of Plato’s cave, can produce ethical education. I showed above that Plato uses the ludic element of the prisoners’ relation to the shadow-puppet play to demonstrate how closed cultural systems prevent real, philosophic (that is, for Plato, ethical) education; when, in the myth of the cave, the philosopher returns and fails to educate the prisoners, the reader of Republic sees both how the cave-culture-game closes itself off and how Plato’s new game, Republic (and by extension philosophic dialogue as a genre) effects philosophic education in that very failure. The reader of Republic, that is, is invited to see that education can occur only in such disruptions as the philosopher makes in the cave-culture-game and as Socrates makes in Republic and as Plato makes in Athens.

Despite having only been on the cultural scene for a little more than a year, 2K’s Bioshock, directed
by Ken Levine, has already managed to generate a great deal of critical discourse. (Michael Clarkson has compiled an extraordinarily useful annotated list of readings of *Bioshock* (Clarkson, Critical Thinking Compilation: Bioshock, 2009).) A really fascinating element of the discussion, in my view, has been a debate over a term newly coined by Clint Hocking, himself a game-designer, to describe an element he found problematic in *Bioshock*’s the- matics, as embodied in the game’s narrative and gameplay: “ludonarrative dissonance.” (Hocking, 2007) This cogent term was almost immediately taken up all over the community of game-critics, since it seemed to fit a bill that had long needed such a formulation, and very quickly critics had located various degrees of ludonarrative dissonance in games from *Braid* (Jonathan Blow, 2008) (see (Abbott, Braid conversation--a reply, 2008)) to *Gears of War* (Epic Games, 2006) (see (Critical Distance, 2009)).

The basic notion of ludonarrative dissonance is of a tendency in a game whereby the mechanics of the game’s gameplay impair the thematics of the game’s story. Hocking specifically pointed to the choice given by *Bioshock* to its player of harvesting (that is, killing) possessed little girls, or of rescuing them from their possession. (This same element of the game will prove to be of crucial importance to my cave-culture-game reading of the game’s potential for teaching ethics.) Hocking argued that the meaning of the game’s story seems to depend on the choice between harvesting and rescuing making a decisive difference in the course the player is able to pursue through the game. On the other hand, Hocking pointed out, the player actually suffers no decisive effect of the decision whatsoever, because if he or she chooses to rescue rather than harvest the amount of ADAM (a kind of gameplay energy) he or she loses is made up to him or her by the seemingly empty game-mechanic of a character who rewards the player-character for his or her kindness.

The fertile critical discussion that has followed has tended either to criticize the game along the lines laid out by Hocking—that is, finding in the ludonarrative dissonance a fault in the design of the game—or to make tentative steps in the direction. Wesley Erdelack’s analysis, for example, criticizes the game on this basis (Erdelack, Essential Jargon: Ludonarrative Dissonance, 2008). I proceed now to give what I consider a new cogency: to argue that in fact *Bioshock*’s ludonarrative dissonance is fundamentally constitutive of the game’s meaning and effect. Michael Clarkson in particular has proposed that the equality of effect for player-characters of harvesting and of rescuing finally deploys a critique of video games themselves (see (Clarkson, You can’t put a price on your soul, 2009)); Leigh Alexander proposed that the critique tends more to force the player to examine his or her own calculus of desire (see (Alexander, 2007)).

These latter critics, I believe, are correct, but do not put the case strongly enough. The basic, closed ethical system of *Bioshock*, which I see as established not only in the harvest/rescue choice but also in the crucial sequence of the death of Andrew Ryan and the disarming of the self-destruct sequence that immediately follows it, when considered in light of the cave-culture-game, must, I propose, be understood, through its creation of the game’s ludonarrative dissonance to create a capacity in the game to effect disruptive ethical teaching. To put the point in terms of my analysis above of *KOTOR*, *Oblivion*, *GTAIV*, and *WoW*, *Bioshock*’s exposure of the closed character of its mimetic system (a la *KOTOR*) through the equality of gameplay consequence for the “right” and the “wrong” ethical choices, affords the opportunity for the disruption enacted in the death-disarm sequence—a kind of disruption not to be found in *KOTOR* and *Oblivion*, hinted at in *GTAIV*, and passing unheralded and perhaps ineffective in *WoW*.

Just as many have examined the harvest/rescue choice (as I detail just above), many have also examined the death-disarm sequence (most compellingly, I think, Erdelack (Erdelack, The
Bioshock in the Cave

Game Designer as Malignant Demon, 2008), though no one to my knowledge has brought harvest/rescue together with death-disarm in the close collocation I now propose. What I call by the shorthand death-disarm is the climactic sequence in the game (though this sequence occurs well before the final boss-fight, and thus poses a disruption of standard game-tropes which would be well worth examining in a farther-ranging essay), in which the player-character learns that he has been manipulated throughout the game: everything he has done has been at the behest of a figure named Atlas, whom the player-character was led to believe was a benevolent guide. In reality, Atlas has compelled the player to complete the narrative steps necessary to arrive at this moment of confrontation with Andrew Ryan. In a deeply disturbing cutscene (meaning as is usual in cutscenes that control over the player-character is taken away from the player), the player-character kills Andrew Ryan (who he has also learned is his father). Atlas then uses the phrase “Would you kindly,” which the player-character now knows controls him, to ask the player-character to disarm the self-destruct sequence started by Andrew Ryan before the player-character killed him.

From the standpoint of the player’s world (his or her culture, really), the player now has a choice of actions. He or she can cause the player-character to do any number—an infinite number, really—of different things in the narrow space of Andrew Ryan’s office, like running around, jumping, and shooting at targets. He or she may also cease playing the game at that point, and turn off his or her PC or console. From the standpoint of the mimesis of Bioshock, however, the player-character has only one choice: to disarm the self-destruct sequence, thus verifying and enacting Atlas’ control over him.

When read together with the ethical framework of harvest/rescue, what Bioshock enacts is a failed disruption of the closed ethical framework—a failed disruption that, like the doomed return of the ascended man to Plato’s cave—nevertheless constitutes what for Plato is the most important kind of ethical lesson: the moment when the player whose soul is, in Plato’s terms, “akin to philosophy,” (Letter VII) recognizes that he or she must seek the world outside the cave, and even if he or she never finds it must use the idea of that outside-the-cave world to create truer, noble mimetic representations like the cities of Republic and Laws.

For the thinking player of Bioshock, the crushing ethical blows of frustration in being unable not to kill Andrew Ryan, and then of being unable not to disarm the self-destruct, serve to expose the ethical system of the game—and thus of all such games—as being like Andrew Ryan’s objectivist dystopia: instead of a world where every man can be a king, Ryan created a world where that very notion made every man a slave. As he is accepting death at the player-character’s hands, Ryan repeats over and over “A man chooses; a slave obeys.” He, and Bioshock, however, demonstrates just as Plato’s cave-culture-game demonstrates, that the dangerous illusion of choice presents the true ethical problem.

Here the harvest/rescue choice comes into its own. Precisely in that it is not a choice at all, in terms of the actual fabric of the story of the game—that is, the gameplay, in which the ADAM is equal for “right” or “wrong” ethical choices—it enacts in the very ludonarrative dissonance to which Hocking calls attention the dangerous futility of choice. Choice, that is, is exactly analogous to the cave-culture-game, and to the ethical system of games like KOTOR. Bioshock and Republic, on the other hand, invite us to imagine a way to make ethical choices without presuming that those choices are freely made. There is no way to avoid being trapped in the game; but being aware of the experience of being trapped can teach us to make and play better games, with better, though never freer, choices.

How can we do that? The lesson of the cave-culture-game and the lesson of Bioshock are the same, paradoxical, frustrating precept: you can’t do it in the game you’ve got—it would break the
game to try; find, or make, a new game. *Republic* has the benefit of containing the cave-culture-game within its over-arching, brilliant performance of *Republic*. The reader of *Republic* can take some comfort in knowing that the dialogue he or she is reading is at least Plato’s best attempt at the new game with the better ethics. But Plato’s need to return to the ideal city in *Laws*, at the end of his life, indicates very strongly that the perpetually dissatisfying lesson that realizing a better ethical framework requires breaking the old one is as much a part of *Republic* as a whole as it is of *Bioshock*.

**REFERENCES**


Bioshock in the Cave


Chapter 7
Virtual Ethics:
Ethics and Massively Multiplayer Online Games

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ABSTRACT
Many of the opportunities in the virtual world are not available in the physical world, others open our eyes to real world opportunities we couldn’t imagine and teach us vocabulary and skills applicable to the real world. This chapter explores some of the connections between virtual decisions and real consequences, as envisioned in thought experiments of early philosophers from both eastern and western traditions.

INTRODUCTION
Massively Multiplayer Online Games (MMOGs) such as Blizzard’s World of Warcraft (WoW) or Sony’s Everquest 2 (EQ2) are worthy of investigation because of their cultural significance and immersive potential due to the interactivity within the game. MMOGs are great laboratories for ethics and can afford a better understanding of human nature. They allow for risks and rewards, social interaction and unique scenarios that can help provide insight into the consequences of our choices. Many of the opportunities in the virtual world are not available in the physical world. They raise many ethical issues that have existed since antiquity yet through a dynamic and interactive perspective.

For example, if you look at the MMOG subscriptions on the chart at MMOGChart.com (Sir Bruce, 2007), you will see that WoW has over 10 million subscriptions. The peak in subscriptions for Lineage, which is the next highest, was over 3 million. Most MMOGs are under 500,000 in total subscriptions but have many fervent supporters.

Moreover, MMOGs offer a venue for exploring philosophical ideas not readily or safely available in real life (RL). Through community raids, guild chats, Player vs. Player (PvP), fighting zombies, skeletons and other life forms including your own, and many other areas, the player is able to explore extraordinary choices and options; generally without
the dire consequences of Real Life (RL). Whether a player chooses to help, grief, ally with or fight a real or artificially intelligent character, ethics are embedded within each consequential choice. How the player communicates, shares, teases, and fights or rescues can demonstrate kindness, cruelty, bravery or recklessness and a host of other virtues or vices.

Games can provide a controlled exposure to ethics for kids, a point demonstrated by the PBS SHOW: “The Values in Video games,” (PBS, 2003).

Like movies and television, before them, MMOGs can be viewed as vitally important cultural influences and products, and their agendas and lessons can be understood, appreciated and criticized. As the Internet grows in popularity and computing resources steadily increase, more people worldwide will interact in MMOGs, be influenced by them and be able to mod(ify) them. This is especially true in emerging economies like Brazil and China where internet growth and online gaming are on the rise. For example, looking at the statistics on Internetworldstats.com (Miniwatts Marketing Group, 2009), you’ll see that China has the highest number of Internet users, with 298 million. India has the fourth highest numbers, with 81 million, and Brazil follows with 67.5 million but China and Brazil are two of the fastest growing fed in part by their a passion for computer games. Much of the internet growth in these economies is driven by MMOGs in particular and the players will be shaped by this new, engaging experience.

In this chapter, I review a number of philosophical frameworks that offer different ethical systems and options for considering the role of ethics in MMOGs. These frameworks aim to contribute to a better understanding of how to make informed choices in the real and virtual worlds.

Going through life without a philosophical framework is like playing WoW without QuestHelper. QuestHelper is a very popular tool from Curse.com for navigating quests and geography in Azeroth, the world of WoW. Many people use QuestHelper to help guide them through the overwhelming world of Azeroth; filled with multiple choices, paths, possibilities and dangers. Likewise, during our everyday existence, without a philosophical framework, we are left with inadequate information to make informed choices and an unclear map in which to plot a course of action. Using such a framework in the real world helps us make decisions and navigate through life’s challenges, questions and hopefully, not too frequent issues of life and death.

For example, in WoW, players may know why they are pursuing quests ranging from killing the undead, rescuing a wayward Non Player Character (NPC) or harvesting mushrooms, using QuestHelper to help them find the various waypoints. In contrast, in RL, do they know why they are going to school, building a family, or pursuing a career? Philosophy can help to navigate life’s quests with a clearer understanding of why and in some cases even how. Are you living a life toward self improvement (Plato) or empowerment (Nietzsche) or simply drifting from one pleasurable experience to the next (Parmenides)? In this chapter, I will use MMOGs as a jumping off point to elucidate those philosophical frameworks that will help us understand how to navigate life. Interestingly, our interactions with virtual worlds help us to better appreciate more about human nature.

An Overview of Some Philosophical Frameworks

“He who fights with monsters should be careful lest he thereby become a monster. And if thou gaze long into an abyss, the abyss will also gaze into thee” (§ 146) (Nietzsche, Beyond Good and Evil).

“Do not be overcome with evil but overcome evil with good.” (Romans 12:21).
In this section I will discuss Plato, and some contemporaries as well as some philosophers that influenced him and others that were influenced by him and some ethical frameworks that might be useful in analyzing how we make choices in MMOGs and in real life.

**Plato (428/427 BC – 348/347 BC) and the “Cave”**

Plato is one of the most influential writers of Western Civilization. He was a Classical Greek philosopher, mathematician, playwright and founder of the Academy in Athens, where he enjoyed a rank of high status and the luxury of time to write. He was a student of Socrates and a teacher of Aristotle. Plato wrote the first and still most important book in the arena of political philosophy, *The Republic*, a political treatise that discussed a social Utopia. *The Republic* included, in sub-book 7, a story called the “Allegory of the Cave.” which foretells many issues discussed in this volume and in modern day.

In Plato’s story, prisoners are chained in a cave. Their backs are to the fire, and they are watching as shadows are cast on a wall and generated by puppets held by people (proto-game designers?) behind a screen. The prisoners in the cave feel and believe that this is reality. Anything that distracts the prisoners from the shadow play is painful, especially movement and light. Socrates enters the cave and as an *agent provocateur*, encourages them to break free from the cave and this virtual reality. Yet they resist, except for one, who eventually leaves the cave and enters the light and is blinded by the sun light. He sees the real world as painful as and less clear than the cave, and he returns, quite displeased and kills Socrates. In Plato’s story, the provocateur is killed by the once-freed prisoner, a reference to Socrates who while unjustly imprisoned in jail in Athens, drank Hemlock as a means of protest, and died.

Plato’s argument was that like the prisoners of the cave, the citizens of Athens were in a rut, and they were forsaking the virtues of education, good living, and health for various public pleasures and distractions. They were forsaking the pursuit of the good and instead were seeking the pleasurable. Similarly, we could make the argument that when we interact in a virtual environment, we forsake the real world and all of its pain. We could literally be enslaved by the world of *WoW*, and by our choice to play. If you swap the Cave for a MMOG, you see they both have similarly compelling attractions: community, competition, story and abstract rewards.

**Allegory of the Game: The Allegory of The Cave meets World of Warcraft**

To think more deeply about this analogy, I put together a film. In “Allegory of the Game” (http://gallery.mac.com/johnnord#gallery), the shadow puppet theater is replaced by a Massively Multiplayer Online Role Playing Game (MMOG), Sony’s *Everquest 2* (*EQ2*). The *agent provocateur* takes the form of an ominous shadow by the door. The prisoners are held not by chains, but by the compelling and immersive nature of the MMOG.

In the film, three computer gamers are immersed in *Everquest 2: FallFromGrace*, a nurturing but over-demanded elf priest (healer); Mignomer, an erudite and patronizing mage; and Thane, an overzealous Paladin. They are playing together in a dark great room, sharing junk food and virtual adventures. They raid, loot, trash talk about each other and others in random Pick Up Groups (PUGs) and generally are unaware of the vast amount of time passing in Real Life (RL).

Suddenly, from just beyond their perception, a voice yells “Hey you are wasting your lives! Why don’t you go outside, or at least do your homework!” It takes a while for them to realize the voice is not from within the game, but from the kitchen.

The group turns on the shadow, the *provocateur*, lambasting and chastising him with their...
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much attuned skills of trash talking. However, the provocateur persists and eventually, one of the players, Sara, decides to venture outside, finding it vastly superior to the various regions of Azeroth. The beauty of her avatar becomes increasingly apparent in her as she adapts to the real world. Demonstrating that the hero we imagine to be is within us.

This film is an update of the classic story from Plato, instead of literal chains in a cave, the people are enslaved by their choices. The cave and the film ask: do we have free will if we are not really looking at the real world? What is it about alternate worlds that are so tempting? The players are chained by their own choices and addiction. They aren’t able to reflect on their choices because they cannot even look outside their cave to see that they are imprisoned. Their choices become actions and their actions become habits; an observation that has taken place in another raid far away and long before.

Hinduism and the Bhagavad Gita

When you first start WoW, you decide what gender, race, class and, later, what professions you will be throughout the game. Some folks believe that we make the same choices before beginning our lives on earth. Imagine you are on a cloud far above Earth, and you are choosing a lifetime. You can decide what you want to learn, love, and be challenged by, as well as your state of poverty. Let’s say you are born in a village in Bihar, India and your father is a trucker who is often away from home. You’d probably be tempted to reroll (aka be reincarnated), but since you are raised Hindu and believe you are destined for the same job as your father, you believe that the good Karma you get from living this life is its own reward. You later discover the Bhagavad Gita and although its message seems alien to the pangs in your stomach, concerns for your family or other daily challenges, its message is strangely comforting.

The Bhagavad Gita is one two classic scriptures for Hinduism. The other text being the much older, and generally monotheistic, nondualistic Upanishads. The Bhagavad Gita does not have a clear date of origin, but it is reported to be written in roughly 500 to 200 B.C., similar to the time of philosophers of Ancient Greece. The Gita is a sublime work that describes reality on multiple levels, ranging from the individual to the Universe. The climax of the Gita presents Arjuna’s confronting his self doubt in the midst of a raid on the battlefield Kuruseta. He is being consoled by his Charioteer, the divine Krishna. This story is metaphorically a story of man’s challenge to control his emotions and the difficulty of hard choices. Arjuna must either fight and be killed or kill his cousins, or not fight and face dishonor. On the battlefield, Arjuna and Krishna discuss the virtues and vices of battle, honor and destiny. Arjuna decides to fight.

The writers of the Gita knew the power of delivering a moral message in a battlefield. Today, millions of people participate in raids in WoW, often experiencing much of the same personal conflicts as Arjuna, and others rush blindly, none more famous that Leeroy Jenkins.

Leeroy Jenkins is now a celebrity due to an online video (http://www.youtube.com/watch?v=LkCNJRFSZBU) that captures a similar moment of preparation and raid concern, before ending up with his party running into a mob, bringing complete disaster. This noteworthy event has been parodied on South Park, inspired a Toyota Tacoma commercial, and even was a clue on Jeopardy.

The angst of battle has great ethical relevance and can have very divergent outcomes as these two examples demonstrate. Arjuna’s angst results in enlightenment, Leeroy’s results in frustration and trash talking. The potential for ethical choices in WoW is much more diverse than a typical day in real life and the opportunity to learn broader. Leeroy can repeat and fine tune his exploits, trying every possible alternative.
The message of the Bhagavad Gita is that this world is an illusion, as illusionary as the MMOG is to RL. This world, Maya, must be viewed with detachment in order to have peace and to glimpse reality, and by controlling our emotions and calming our minds we can reach this state of detachment. Paradoxically, this disciplined struggle is referred to as Yoga (meaning much more than stretching) and includes ethical action, disciplined breathing and meditation resulting in an alpha state similar to that of extended game play.

Athens and Azeroth

Roughly the same time as the Gita was being written in India, in Ancient Greece, Greek Philosophy got its start with the philosophers called the Pre-Socratics. The first philosophers were also anxious to understand reality. Unlike the tradition of the east, that looked inward, the Greeks began the western tradition of trusting subjective conjecture and pursuing objective truth. Toward that end, they sought the fundamental substance that made up reality. The earliest of these metaphysicians were Thales and Heraclitus.

Thales (ca. 624– BC–ca. 546 BC)

Thales believed that the world was made of water. He believed God shaped all things from water, which is a crude but insightful description of a world not long ago thought to have been made of hydrogen (which is two-thirds of water). By seeking explanations of reality in nature rather than superstition, Thales would create a framework for a more empowering and understandable way to approach the world. He also brought geometry from Egypt, much to the chagrin of many a student.

Heraclitus (ca. 535–475 BC)

Heraclitus believed that the world is made of fire and is constantly in flux. Chaos and war were forces for change, if not good. Although a mystic, he would have made a great Warlock or Mage. From battle, one can derive being powerful as a virtue. Heraclitus had a strict code of behavior: leading to a lonely life and a diet of grass and herbs.

From the Pre-socratic philosophers, the greatest philosophical traditions arose. “In all history, nothing is so surprising or so difficult to account for as the sudden rise of rise of civilization in Greece,” so Bertrand Russell begins the classic, The History of Western Philosophy. Couldn’t the same be said for Azeroth and WoW, particularly in regard to the behavior of the over 10 million subscribers? The Allegory of the Cave was meant as a criticism of Athenian life in during the 3rd and 4th centuries B.C. The city state of Athens is run by an autocratic leader, is multi-theistic, supported by a guild based market system, rewards fighters above other citizens and in the background of constant warring, has a discourse that was the foundation of a number of new schools of thought, but with an apathetic citizenship. The population of greater Athens is roughly estimated between 8 – 10 million citizens (Hansen). There is much to compare in population, the rapid growth and dramatically changing immersive and provocative worlds of Athens and Azeroth.

Friedrich Nietzsche (October 15, 1844 – August 25, 1900)

Friedrich Nietzsche was a brilliant and controversial 19th century German philosopher. He was heavily influenced by the Ancient Greeks, most notably, the pre-Socratics and chief among them Heraclitus. Like Heraclitus, Nietzsche had an ascetic ethic, believed in change and virtues of conflict and power. He repudiated Christianity, Buddhism (claiming they were dehumanistic), Kantism and history (claiming it favored the author), to name a few of his more provocative themes. Nietzsche later grew critical the Greek’s over-emphasis on reason in his Twilight of the Idols. He was a prolific writer, although, more appreciated posthumously.
Virtual Ethics

The Will to Power

Power is a driving motivator, as Nietzsche has detailed, in his seminal work, *The Will to Power*. Supreme power can make ethics obsolete; for without supreme power we are guided ethically primarily by the promise of penance and reward. In this he was contrasting the prevailing thought of the time, originating from Plato that man seeks good, which formed the basis for the same line of reasoning in Christianity. That Man seeks power, over that of being good, can be demonstrated easier in the virtual world than in the real world, where penance and reward are more immediate and power less ambiguous.

For example, imagine you are a level 80 Dark-night Troll, wandering around the Barrens Waste, and you come across a pair of level 4 newbie High Elves. They are lost and from the Alliance, and you decide they are just waiting for the sweet release of death. Although hardly sportsmanlike, you gank them, and before they even know what hit them, you run off to find more noobies.

Or, imagine you are a level 19 hunter, and you have a robust collection of high level fang armor and you are in a dungeon with a host of newly met comrades and a rare defender bow appears. It’s a slight improvement over your current bow, but you announce that you need it, as do some others, and you win it much to the disdain of some your fellow adventurers and you sell it for gold to round off your armor set.

Finally, imagine you are that much maligned player, a level 15 priest. While deep in the lower levels of a dungeon with a Pick Up Group (PUG), and a pompous Tank. The tank complains about your healing, gives you patronizing advice and repeatedly giving you tips on how to be a better healer. Soon he draws an especially large mob and you let his health bar get precariously close to death. He survives, but instead of taking the hint, he again lambastes you for healing too slowly. During the next battle, you neglect to heal him at all and he dies. You wave goodbye and port to safety before even resurrecting him.

All of these events could hardly be explored in real life. You are able to taste the delicious and forbidden experience of murder, theft and revenge with hardly any consequence in *WoW*. Yet Nietzsche describes this experience with uncanny foresight. In the *Will to Power*, Nietzsche argues that only punishment curtails us from our more base desires.

Do our behaviors reflect the game design or are they independent and just as easily manifested in the virtual world? In Asia, in the MMOG *Lineage*, a player lent his account to a friend, who sold off his prized sword. The original player later demanded his sword back, and when that didn’t happen, the player visited the other player and killed him with a real sword. Nietzsche would have described that leveling, twinking and the addictive nature of games, as realization of an instant gratification toward increasing one’s power, albeit virtual.

So despite never playing *WoW* nor having been chained in a cave with an entertaining puppet master, Nietzsche has suggested behaviors are generally about seeking power (improving the avatar’s statistics) and encouraging self aggressiveness (within the game) until thwarted by one more powerful. (ganked or penalized by a GM).

CONCLUSION

While MMOGs are great laboratories for ethics and can afford a better understanding of human nature they have even greater potential as they overlap real life. Not only can they allow for risks and rewards, social interaction and unique scenarios that can help provide insight into the consequences of our choices within game, they can impact our real existence with gains in real life relationships, vocabulary and reward.. Many of the opportunities in the virtual world are not available in the physical world, others open our
eyes to real world opportunities we couldn’t imagine and teach us vocabulary and skills applicable to the real world.

Whether a Chinese Gold farmer who works full time playing WoW for real money, a teenager who after playing a medic in America’s Army then is able to save his mother after a car crash, or simply a student that takes a vocabulary test and realizes the subtle difference between ameliorate, alleviate, and mitigate because they are common healing spells; like skills, vocabulary and objects that can transcend one world for another, ethics will also be necessary in Azeroth and when you turn off the computer or even whether or not you turn off the computer.

With characteristics such as emergent populations, virtual economies, complementary new media support, and improved AI for NPCs, MMOGs, like World of Warcraft and Sony’s Everquest franchise, offer a fresh and dynamic view to answer questions that have arisen for hundreds of year but hitherto not had such a venue for exploration and discussion.

REFERENCES


Nietzsche, F. (1886). Beyond good and evil.


Chapter 8
Sideways into Truth:
Kierkegaard, Philistines, and Why We Love Sex and Violence

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ABSTRACT
We often discuss the interactive medium as being possibly the ultimate in “meta” studies, touching virtually every discipline, and yet we rarely discuss it in serious terms of that other most comprehensive of humanities: philosophy. Correspondingly, philosophy and the traditional humanities have historically distanced themselves from games, relegating them to some curious and inconsequential sub-study of cultural anthropology if they are studied at all. Yet it is the very human foundational compulsion to contemplate death—as will be shown through the works of philosophers Søren Kierkegaard and Ernest Becker—that drives much of the violent content that makes the video game medium a lightning rod for cultural scrutiny and controversy. The chapter explores two video games—the controversial Super Columbine Massacre RPG!—through the lens of existential death-anxiety to show how video games represent contemplation of fundamental ethical concerns in the human experience.

INTRODUCTION
If we are going to properly talk about ethics, philosophy, and games, we should begin with death, the driver of the fundamental question of human existence, and the impetus for our definition as living beings. Without death—and with it, suffering—our questions about individual ethical relationships between human beings lack gravity. Without death, the central ethical question posed by Aristotle—how should we live?—becomes a trivial curiosity, an experiment lacking the time pressure that defines our existence as mortal beings.

Modern philosophy primarily concerns itself with what is called “analytic” philosophy, questions pertaining to the physical nature of reality and the nature of human consciousness. But when
we consider the relevance of philosophy as one of the humanities, and the role of philosophy in popular media, we’re really talking about what games say about the experience of being human in our present time. This chapter seeks to show how death perpetually lurks in our subconscious, and how our treatment of death in video games and popular media is fundamentally rooted in this concept, both clarified and illustrated by great thinkers of our past, namely Søren Kierkegaard, famed first existentialist—who may have managed, hundreds of years before their advent, to profoundly underestimate video games.

Because this chapter attempts to subvert the traditional limitations of linear media, you should also feel encouraged to jump between headers.

What We’re Doing When We Play

To begin thinking about what differentiates the mechanic of death in an interactive medium from its presence in linear passive media, we must begin with a definition and an understanding of the basic psychological phenomenon at work in interactivity.

The most concise description of the basic psychological exchange present in interactivity is provided by James Paul Gee in his work on games and literacy (“literacy” in the sense of symbolic representational thought, not just verbal language). Because Steven Johnson does an even better job of paraphrasing Gee, I’ll borrow his language:

The game scholar James Gee breaks probing down into a four-part process, which he calls the “probe, hypothesize, reprobe, rethink” cycle (Johnson, 2005):

1. The player must probe the virtual world (which involves looking around the current environment, clicking on something, or engaging in a certain action).
2. Based on reflection while probing and afterward, the player must form a hypothesis about what something (a text, object, artifact, event, or action) might mean in a usefully situated way.
3. The player reprobes the world with that hypothesis in mind, seeing what effect he or she gets.
4. The player treats this effect as feedback from the world and accepts or rethinks his or her original hypothesis.

Put another way: when gamers interact with these environments, they are learning the basic procedure of the scientific method. (Johnson, 2005, p. 45)

This process of interacting experimentally with a virtual environment, which characterizes the differentiating activity that defines a digital game, is not just the basic procedure of the scientific method, but is the basic procedure for human organized thought, for core cognition, learning, and the fundamental roots of curiosity, innovation, and—for our species, at least—survival.

This hypothesize-and-test cycle is the core of the play interaction; a series of play interactions linked together under a greater creative thesis constitutes a “game.” In the classic board game Monopoly, players test strategies for achieving the greatest amount of in-game wealth (game tokens, or “Monopoly money”) within the rules for obtaining it—money-token exchange for property-token items is the basic play interaction. The collection of total play interactions constrained by a rule set is the game—in this case Monopoly, invented by Elizabeth Magie (as “The Landlord Game”) in 1903 to illustrate a ludological—that is, game-delivered—thesis on the consequences of land monopolism (Magie, 1903).

Now that we have considered a specific definition of the play interaction, we can examine the appearance of death in the video game medium.
A Brief History of Death in Video Games

While non-interactive early video game prototypes were in development as early as 1947, the first publicly available video game was William Higinbotham’s Tennis for Two, developed at the Brookhaven National Laboratory in 1958. Other early interactive pieces from this era included MIT mainframe-developed tic-tac-toe simulators (OXO [University of Cambridge, 1952]) and an AI “mouse” that traversed a user-generated maze. Of note in these early game interactions is their nature as simulations of pre-existing game concepts—Tennis for Two and OOX were created to electronically replicate older games. In effect, these games were “practice” runs for the birth of a kind of game that could only exist with machine mediation.

Death makes its abstract appearance on the video game scene in 1962 in a game also developed by MIT students called Spacewar!, the first video game to use the medium for original content—not just simulation of existing real-world play. Developed for the DEC PDP-1—Digital Equipment Corporation (DEC)’s first computer—Spacewar! pits two human players against each other piloting spaceships around the gravity well produced by a star in the center of the screen. Players fired missiles at each other while moving to avoid projectiles aimed at them. A 1972 Rolling Stone article by Stephen Brand describing the emerging reach of computers into the average household as “good news, maybe the best since psychedelics” further describes Spacewar! as consisting “of two humans, two sets of control buttons or joysticks, one TV-like display and one computer. Two spaceships are displayed in motion on the screen, controllable for thrust, yaw, pitch and the firing of torpedoes. Whenever a spaceship and torpedo meet, they disapper in an attractive explosion.” (Brand, 1972) And voilà—death in video games.

Spacewar as a parable is almost too pat. It was the illegitimate child of the marrying of computers and graphic displays. It was part of no one’s grand scheme. It served no grand theory. It was the enthusiasm of irresponsible youngsters. It was disreputably competitive (“You killed me, Tovar!”). It was an administrative headache. It was merely delightful (Brand, 1972).

Death remained “delightful” and abstract for most of the early history of video games. Spacewar! can arguably be said to only tangentially involve death—after all, we aren’t entirely sure those spaceships aren’t unmanned drones—but what is most interesting is the immediate context applied by the human players (“You killed me, Tovar!”) even in the absence of explicit story. Throughout the “golden age” of arcade games, or the latter half of the 1970s and the early 1980s, most popular video games such as Pac-Man (Namco, 1980), Asteroids (Atari, 1979), and PONG (Atari, 1972) treated death in representational and whimsical form only, illustrating the loss-state in “attractive explosions.”

Will Crowther’s 1975 Adventure, later released as Colossal Cave Adventure in 1976 by CRL, provides a footnote in the history of death in video games by bringing interactivity into story-driven text-based media, with a second person format that places the player in an almost conversational relationship with the computer narrator. This provides us with the first opportunity to type the phrase “kill the troll” and experience death and violence in a new way. In this and later “adventure games”—games where the player embodies a specific fictional protagonist in order to solve puzzles and progress through a story—death results not from failures of hand-eye coordination, but from explicit contextual decisions made by players.

Don Daglow’s Dungeon (DECUS, 1975), an early prototype of the commercially released 1980 Dungeons & Dragons, is regarded as the first computer role-playing game, though for practical experiential purposes Adventure could be similarly
identified. In either case, 1975 was a big year for death in video games, bringing with Dungeon the first hand-to-hand turn-based combat system, and with Maze War (Colley, 1974) and Spasim (Bowery, 1974) the earliest 3D action simulators, technology that would later lead to some of the first significantly culturally controversial death-related video game moments.

Lingering on other games such as Zork (Infocom, 1977), the early anchor in the Infocom franchise of text-based adventures written by Marc Blank, Tim Anderson, and Dave Lebling, may seem excessive, but it is important to note that these games for the first time provided a player with directed action in a simulated world that could result in the phrase “You have died,” which simulated personal death. Unlike any other medium in history, video games now provided the means for individual people to experiment with simulated life experiences piloted by their own actions, but ultimately constrained by the rules of the simulated world. The immersive imagination-driven worlds of psychological embodiment created by books could now be driven by individual actors, bringing about the true philosophical impact of interactive art. That action adventure and death fast arrived on the video game scene, even in its most primitive incarnations, is significant when it comes to considering the basic drives and questions that lie dormant in the human psyche.

Zork also introduces the first descriptive contemplation of simulated death, along with the concept of resurrection for “another try”:

> north

The Troll Room

This is a small room with passages to the east and south and a forbidding hole leading west. Bloodstains and deep scratches (perhaps made by an axe) mar the walls.

A nasty-looking troll, brandishing a bloody axe, blocks all passages out of the room.

Your sword has begun to glow very brightly.

> attack troll with sword

The flat of the troll’s axe hits you delicately on the head, knocking you out.

The troll scratches his head ruminatively: Might you be magically protected, he wonders?

The troll hesitates, fingering his axe.

Conquering his fears, the troll puts you to death.

It appears that the last blow was too much for you. I’m afraid you are dead.

* * * You have died * * *.

Now, let’s take a look here... Well, you probably deserve another chance. I can’t quite fix you up completely, but you can’t have everything. (Infocom, 1977)

These games, perhaps because they were so philosophical and mechanical in their treatment of death, however, were not and are not commonly associated with the first death-heavy controversies in commercially published games. Despite the vivid language, the violence is delivered in text, lending itself to comparison with books, in which
far more graphic examples of violence existed. The game, while popular for its time, initially sold copies in the tens of thousands (Moreno, 2006), and so its reach was limited compared to future games that would reach higher levels of public awareness and scrutiny.

The first game to reach a notable level of negative public outcry was Howell Ivy’s *Death Race*, an arcade game developed by California-based Exidy and released in 1976. Unlike previous games, *Death Race* was direct and—by the standards of the time—flamboyant in its projection of death onto its audience. In it, the player controls a car and drives around the play area with the object of running down “gremlins,” which move and talk and squeak in agony when they’re mowed down by the car, leaving tombstones where they once were. In New York City, local PTA president Ronnie Lamm went on a letter-writing campaign and organized the first recorded protest against violent subjects in a video game (Borland & King, 2003).

If mowing down cartoon gremlins was going to make PTA moms rally in the late 1970s, one can imagine what games would do as graphics technologies increased throughout the 1980s and early 1990s. Controversy would follow, with notable peaks at game moments such as Mortal Kombat’s “blood mode” and spine-yanking decapitation and, in more modern times, Grand Theft Auto’s up-close-and-personal simulated felonies. But for the most part, the cat (of death, that is) was out of the bag, and when it came to video games, it showed up early and often.

**Death Online**

One of the most interesting recurring discussions about death in video games concerns “persistent world” games played online, and the concept of “permadeath”: the irrevocable termination of an online game character.

In an online immersive (e.g., non-casual or arcade-style) game, death is more personal because players do not typically pick up and play an out-of-the-box story character provided by the game creator and pound away for short periods of time. Whereas a competitive high-end single-player game today is considered satisfying with around 30 hours of total game time, massively multiplayer online games are “persistent,” and players play a character of their own selection and to some extent invention for weeks, months, or years at a time. The emphasis in play is on immersing in the online fantasy world as though it is a reality. Thus the experience of death in the game often goes beyond the minor penalization mechanic represented in traditional single-player games and it feels more personal. The relationship of the online player to the online game character is closer to an avatar relationship—a hand-selected distinctive visual manifestation of player expression and identity; an online “self” that represents them in the world. Due to this personal investment in the crafting of the character, and the amount of time involved in creating and inhabiting it (many players engage in collaborative storytelling, or roleplaying), the death experience takes on increased significance.

Interestingly, small groups of players throughout many MMOs have historically lobbied for what they call “permadeath”—the destruction of the player character, even when months or years have been invested into it. These players argue that full immersion can only come from taking the game “seriously,” and that the trivialization of death diminishes their immersion and the quality of the behavior of other players. They lobby for increased consequences of actions in the world, including increased penalties for death; Nick Yee’s research for The Daedalus Project notes in “What Do Players Want to See in MMOS?” that 2% of players request increased death consequences, and Richard Bartle identifies permadeath as “the single most controversial subject in virtual worlds” (Bartle, 2003, p. 415).

Lisbeth Klastrup, in “What Makes World of Warcraft a World? A Note on Death and Dying”
Sideways into Truth

(Corneliussen & Rettberg, 2009) addressed the phenomenon of death in an online game, and brings up some interesting points about the sanctification of death in World of Warcraft as a rite of passage reminiscent of real-world death rituals. She also addresses the comparatively ubiquitous presence of death in the game, through an entire character category of skeletal and grave-born avatars called the Forsaken. It is worth considering, as we look at the relevance of death and its relationship to popular media, why something that seems to exist for pure entertainment purposes would be so persistent in reminding us of that which we seem to want most to consciously avoid in our everyday lives.

Functional Death

Regardless of its place in the often linear narratives presented to contextualize the interactive experience, the history of death in video games seems to indicate that as a function it is not and was not originally intended to induce philosophical contemplation of actual real-world death. Game designer Randy Smith summarizes the functional purpose of death in games:

In a movie or book, even one about violent events, death typically carries significant narrative gravity: something to contemplate and reflect upon: mortality, tragic loss, the finite versus the infinite, all that jazz. In a videogame, by contrast, death is often just a temporary nuisance -- a failed jump or missed bullet, a lightweight frustration. The videogame version [of death] emerges from a collection of assumptions about what games are supposed to be: Games are supposed to be about goals; the goals are supposed to be judged and scored; consistent inability to achieve positive goals should lead to failure; games are supposed to be about dangerous and violent topics... altogether they mean that in a game, you should sometimes fail, and the failure should be death (Shamoon, 2009).

Thus, surely we can dismiss the function of death in video games, as it clearly served a mechanical purpose lacking philosophical consideration. In fact, many players are probably aware of this implementation of death in games: it exists as a difficulty modifier, a kind of frustration-balancing mechanic that provides symbolic and functional penalty without punishing the player so severely that they become frustrated and stop playing. It is, indeed, one of the more interesting differentiating features of interactive media that precisely because they are interactive any inaction from the player effectively ends the experience. This required emphasis on the continued participation of the audience—as compared to the tolerance for “wandering minds” in more passive media—naturally eradicates examples of the medium that do not effectively balance engagement and frustration.

Therefore, ludologically speaking, the “meaning” of death in most video games is “failure”. In reflecting on our own humanity, we might ask why our minds turn immediately to death rather than simple failure, as we saw so immediately in Spacewar! even without explicit death-reference; if failure is the core purpose, we might ask Randy Smith why games are “supposed to be about dangerous and violent topics” (Shamoon, 2009). But not all games accept the traditional convention of death-as-failure, and it would be remiss to discuss death in video games without addressing one very prominent recent example that acted against convention: Super Columbine Massacre RPG! ([SCMRPG!], Ledonne, 2005).

Super Columbine Massacre RPG

Super Columbine Massacre RPG ([SCMRPG!]) was a game released in April of 2005 that rocked the video game world and awakened controversy not just, as the game community had come to expect, from the outside, but from within as well.

The game explores the lives of Eric Harris and Dylan Klebold—teen shooters who killed eleven
of their peers and one teacher in a horrific act of real-world violence in 1999—immediately prior to the Columbine shootings. Players first observe the two expressing their frustration and hatred for their environment, and also constructing bombs intended for placement at the school. Then, via the cartoon-like representations of Harris and Klebold, players proceed to shoot and kill specific students at the high school before finally killing themselves. The second half of the game takes place in hell, where Harris and Klebold kill demons in an homage to DOOM (id Software, 1993), interspersed with a montage of the grieving and the intense social scrutiny that took place at Columbine and in the public media immediately following the massacre.

Video game enthusiasts, raised on a fantasy-based definition of death and violence presented by the video game context—the temporary and explicitly play-based frustration mechanic firmly embedded in the context of cognitive problem-solving—generally react to criticisms of violence in video games with blanket dismissal and citations of free speech. Video game players, being familiar with the symbolic language of video games, where death means temporary failure, react protectively when they perceive their medium attacked by outsiders who do not “speak” their symbolism. But SCMRPG was rare in that it touched a nerve within the video game community itself. Developers and gamers alike were divided: some rallied behind the game as a testing point for the validity of the game medium as an art form:

_While other gamers said that it crossed the line:_

_The problem with the game is that it glamorizes the killers.... And most people are not going to go through that game for a pretentious philosophical skew on the events that happened in Columbine ... Just because a game can be made doesn't mean it should_ (k1dsmoke, 2006).

_When the game hit the mainstream media, controversy followed, with similar assertions that the game glorified the evil elements of the tragedy—one Toronto reporter even suggested that the game may have helped inspire a 2006 shooting in Montreal:_

“On a three-way interview on Canoe Live, Mark Strobel of the Toronto Sun challenged Ledonne, saying: “I just wonder whether this guy maybe lost touch with reality with a little help from that game of yours (Dugan, 2007).”

_A 2006 comment by game enthusiast Patrick Dugan described what the game did, for good and ill:_

_It puts you in the mindset of the killers and provides a very clear suggestion of why they did what they did; they were enacting an ideological demonstration through a terrorist act, and the game shines light on this as an indictment of the American dream and way of life painfully close to the main nerve (Dugan, 2006)._”

Danny Ledonne, the game’s creator, who initially released the game anonymously and later came forward as controversy surged, explained that he created the game after poring through over 11,000 documents on the shootings as a way of expressing his own struggle with social alienation as a high schooler, and out of a personal need that he felt echoed but not adequately addressed in society to understand why Harris and Klebold did what they did. Ledonne was and is also actively aware of the traditional treatment of death in video games:

_I think the effort is brave, sophisticated, and worthy of praise from those of us interested in videogames with an agenda. The purpose of this game is not to celebrate the events at Columbine, but to attempt to represent them from the perspective of the perpetrators. This is a worthwhile effort, and one truly unique to videogames as a medium_ (Bogost, 2006).
Sideways into Truth

Death in videogames is, like other forms of gaming, generally a temporary sign of failure. It emotes more frustration than sorrow or loss. It typically has intangible loss associated with it and serves more as a complication than anything game-altering. Unless the game specifically tasks itself with exploring themes of loss (very rare) “death” in videogames is simply a reason to insert another quarter, restart the level, or choose another character. “Killing” is a related experience which generally represents itself as the subtraction of hostile pixels from the screen. Again, little sense of reflection or remorse. There is nothing contained in videogames as a medium that requires this to be the case, however often videogames model conflict for the sake of a game experience, not in order to understand the implications of killing, death, etc.

Because the subject of SCMRPG! was serious in nature, and because the game was a way to challenge many of the assumptions videogames make of their players, the concept of death in SCMRPG! was represented slightly differently. The player finds that the bodies of his victims remain, for example, which is an unusual feature of games since the “loss” of other characters is generally expedited to 1) minimize processing demand on the hardware of the console and 2) the dead body generally serves little aesthetic value to the playing experience. In the case of SCMRPG! - with the intention to invite reflection and introspection on the part of the player, the lingering bodies serve to ask the player to examine his actions. Furthermore, sequences such as the grieving montage of actual photos of the shooting, and the final sequence in which the boys look over the confounded pun- dits on Earth from their vantage point in Hell, place the player in a perspective beyond any of the individual characters for satirical effect and societal examination. (Personal communication, April 14, 2009.)

Ledonne, a film student and outsider to the game industry, nonetheless looked into the nature of death in video games and treated it with great deliberation in his specific implementation. Whereas other games remove evidence of death, SCMRPG! lingers upon it. Ledonne even actively understood the technological root of this surprisingly ethically suggestive action. For example, the fact that bodies typically disappear in games emphasizes their historical treatment of the concept of death, which SCMRPG! deliberately counteracted in numerous ways, including: leaving the evidence of killing action in the setting; utilizing a subject matter that was not fantasy, but real; and illustrating the consequences of the protagonists’ violent action. The game is therefore remarkable in its deviation from game mechanic convention, and in the way that public response, from inside and outside the game community, took umbrage at Ledonne’s breaking the “rules” of our fantasy death. In making death too real in the game, Ledonne stripped away our psychological defense mechanisms and brought our subconscious treatment of the death phenomenon forcefully to the forefront of conscious thought. His treatment of death, in a way, came from the perspective of an outsider to the gaming community, and yet his method of engaging them in debate was to challenge the ludological language of death on its own terms, and this deeply disturbed many game players.

The many controversial elements of SCMRPG! and its ripple effect throughout the game, film, and mainstream cultural communities surrounded the subject matter and the violence, which, though significant, belong in another discussion, as they deviate from the discussion of a philosophical structure to video game death. Of particular note during the course of the public response to the game’s release was an interview on the online game news site Kotaku with Richard Castaldo, one of the victims of the shooting. A stranger to the teenage murderers, he nonetheless was caught in their attack on Columbine High School and shot eight times in the arm, chest, back, and
abdomen, ultimately rendering him paralyzed from the chest down.

*It probably sounds a bit odd for someone like me to say, but I appreciate the fact at least to some degree that something like this was made. I think that at least it gets people talking about Columbine in a unique perspective, which is probably a good thing. But that being said there are a lot of things that are hard to play or watch. And it seems to partially glamorize what happened. It shows a stark-contrast between fantasy and real life in an interesting way* (Crescente, 2009).

Others close to the attacks felt differently. Roger Kovacs, a friend of one of the murdered victims, said, “One of the girls who died was a friend of mine … Rachel. We were in the same church group. Anyone playing this game can kill Rachel over and over again” (Vargas, 2006). Castaldo himself was with Rachel when she died. These two responses reflect the opposing viewpoints to those intimately related to the events.

*Super Columbine Massacre RPG!* and the responses to it are most relevant for the game’s unavoidable connection to the treatment of death in the interactive medium, and whether and where it moves from distanced fantasy to physical reality. It is of note that while death is casually approached by the average video game audience in a fantasy context, even when intensely graphic, when it comes to real subjects, the rules seem to change entirely. What this explicitly highlights is the symbolic meaning of death in video games as something other than the meaning of death—and violence—in other media and real-world treatments. If we are to ethically treat the subject of death in video games, we should be sure that we’re speaking their language—and then asking how that language develops, and why, in psychological terms. To inspect the actual function and treatment of death in video game language is nothing less than to peer into our multi-layered psychological contemplations of the most serious subjects known to our species.

**Philistines**

When we talk about death as the center of the psychological and spiritual human experience, we’re talking about existentialism—the philosophical study of what properties, distinct from empirical evidence (for example, chemical composition), define human existence. It is partially from an existential view that modern condemnation of popular media descends. This concept of the trivial nature of popular media and the “common” appears in the work of that alleged father of existentialism, Søren Kierkegaard:

*Philistinism tranquilizes itself in the trivial, being equally in despair whether things go well or ill. Fatalism or determinism lacks the possibility of relaxing and soothing, of tempering necessity, and so it lacks possibility as assuagement. Philistinism lacks possibility as revival from spiritlessness. For philistinism thinks it is in control of possibility, it thinks that when it has decoyed this prodigious elasticity into the field of probability or into the mad-house it holds it a prisoner; it carries possibility around like a prisoner in the cage of the probable, shows it off, imagines itself to be the master, does not take note that precisely thereby it has taken itself captive to be the slave of spiritlessness and to be the most pitiful of all things* (Kierkegaard, 1843).

Kierkegaard, in interesting resonance with early Buddhism, primarily concerned himself with the sources of what he called “anxiety” and “despair”—what Buddhists would call “suffering”. To an existentialist, the state of being in despair is both inevitable through existence and the state to be overcome if we are to rise above our base human nature. In this passage, Kierkegaard condemns what we might now euphemize as the Roman circus—the dazzling distractions with which we surround ourselves in order to escape from the inevitability of aging and death.

This notion of “tranquilizing [] in the trivial,” expressed by Kierkegaard in the mid-1800s, has
met opposition by modern work such as Steven Berlin Johnson’s *Everything Bad is Good For You* and Gerard Jones’s *Killing Monsters: Why Children Need Fantasy, Super Heroes, and Make-Believe Violence*. Johnson and Jones assert that mainstream society’s snap reaction to violent media does a disservice to the actual processes taking place through their exploration. We see this snap reaction in every manifestation of new entertainment technology: “X will rot your brain,” where “X” is radio, television, comic books, rock and roll, or video games, depending on your generation.

According to Kierkegaard, the crux of human suffering or despair is rooted in death-anxiety. He argues that the human condition of being is fundamentally beast-like in physical nature but fundamentally angel- or god-like in cognitive nature, and that the suspension between these two states is what creates anxiety, or existential dread. Because he was at core a Christian philosopher, many of his core analogies were biblical, and with regard to fundamental human nature and the origin of “sin” or human suffering, rooted in the Fall of Adam, to whom in Genesis God commands not to eat the fruit of the tree of knowledge, “lest ye die.” Kierkegaard reads this as the origin of sin, but interestingly not Adam’s sin, or Eve’s—since they, being innocent and like beasts in their nakedness, could not have known what sin, death, or loss of innocence were. Similarly, in God’s proclamation “lest ye die” Kierkegaard reads a warning, which perhaps God knows Adam and Eve cannot understand, about the nature of what comes with partaking of the fruit of knowledge—self-knowledge, self-awareness, and awareness of death, distinguished from literal death, which obviously does not instantly occur.

Although Kierkegaard comes at this from a foundation in Christian ideology and myth, the concepts are certainly not limited to the Judeo-Christian tradition. Buddhism, both religious and philosophical, also identifies self-awareness as the root of human suffering, though most branches of Buddhism approach this from the standpoint of grasping after illusion, and the inherently illusory nature of our perception of time and reality. While the resonances between these philosophies are quite fascinating, my aim here is to inspect the roots of death-obsession in modern western society (even if they are universal), and those roots go back to Kierkegaard when it comes to the intersection of death and human existence.

Also like the Buddhists, he identifies fixation with the present and all it entails—materialism, entertainment, luxury—as ultimately an attempt by the mind to distract itself from the death-anxiety or despair. Thus we see that the concepts of “escapism” and “distraction” have deep and branching roots in some of the most important works of philosophy in western and eastern culture alike. The subject of philistines arises when Kierkegaard considers “current” affairs in his lifetime, specifically with his essay “The Present Age” in 1846, though he also addresses philistines in his seminal *The Sickness Unto Death*.

As a philosopher, Kierkegaard was tricky, prone to writing in the voices of fictional characters he creates for the purpose of testing and demonstrating his arguments, and his life, though not nearly fraught with as much physical travail as some other existentialists, has its fair measure of heartache, and flat-out weirdness. But he was also probably a genius, and his impact on our modern worlds of psychology, psychoanalysis, conflict resolution, and cultural anthropology is still being felt, and even still being measured and processed. He is considered the father of existentialism (William, 2009) primarily for his orientation of human existence fundamentally around the nature of mortality and immortality, and the perpetual dualistic tension this exerts on the mind and soul. In so doing, he contextualized the biological within the philosophical and psychological, and so forever changed the study of both.
Denying Death

One of the most significant developments in the modern use and influence of Kierkegaard comes from Ernest Becker, who won a Pulitzer in 1974 for his final work, *The Denial of Death*, a masterpiece whose implications are, too, still being understood and explored. Becker died from cancer at age 49 in 1973, never seeing his Pulitzer, and he has the rather epic story-ending, having knowingly stared down death and quite literally his life’s thesis at the end of his existence.

*The Denial of Death* is filled with melancholy and strange beauty, symbolic resonance and agonizing peace. Becker critically synthesizes post-Darwinian comprehension of the nature of biology and evolution with mythically profound cultural artifacts of selfhood, heroism, immortality, and the eternal, bridging psychoanalysis with biology and religion with cultural anthropology. Dr. Dan Liechty, Associate Professor of Social Work at Illinois State University and Vice President of the Ernest Becker Foundation, argues “I generally see Becker as a post-Darwinian Kierkegaard, which is an important update given that the evolutionary paradigm has had such a deep impact on every discipline (Personal communication, April 20, 2009).” Becker himself asserts that his purpose with *Denial of Death* is to illustrate human nature as we now see it through the utterly transformative lenses of evolutionary biology and post-Freudian psychology to accentuate the “still-towering” importance of Kierkegaard (Becker, 1973).

In short, Becker’s thesis asserts that:

- Human beings evolved from non-self-aware ancestors (Darwin);
- Modern humans retain the survival instincts of their non-self-aware ancestors (Darwin);
- Consciousness allows us to possess the concept of the eternal and therefore also realize we do not have it (Kierkegaard);
- We are not able to consciously retain awareness of inevitable death and also continue to function and survive;
- The death-awareness is repressed into the unconscious, where it creates emergent behaviors;
- Defense mechanisms against the realization of death emerge from its constant presence in the subconscious, including:
  a. Heroism and the value of the heroic—the need for one individual to overcome others to validate their survival and existence;
  b. Immortality and the notion of the eternal, of life after death and its accoutrements;
  c. Aggression and the need to negate or destroy ideologies that oppose our own defensive constructs of the eternal.

Taken at face value, these concepts seem deceptively intuitive. Yet Becker, and Otto Rank, his predecessor, are unique in synthesizing “humanities”-based concepts of the mythic and mystical with a corresponding grounding in post-Darwinian science, the implications of which are profound. These concepts provide a comprehensive biological and psychological explanation for the presence and importance of the heroic and the violent in storytelling and legend throughout human history:

*Since the terror of death is so overwhelming we conspire to keep it unconscious. “The vital lie of character” is the first line of defense that protects us from the painful awareness of our helplessness. Every child borrows power from adults and creates a personality by introjecting the qualities of the godlike being. If I am like my all-powerful father I will not die. So long as we stay obediently within the defense mechanisms of our personality, what Wilhelm Reich called “character armor” we feel safe and are able to pretend that the world is manageable. But the price we pay is high. We repress our bodies to purchase a soul that time cannot*
destroy; we sacrifice pleasure to buy immortality; we encapsulate ourselves to avoid death. And life escapes us while we huddle within the defended fortress of character (Becker, 1973).

In this fusion of the Darwinian with the philosophical, Becker draws a grand vision of the nature of humanity as defined by its Kierkegaardian death anxiety that encompasses a world of human behavior ranging from war to heroic storytelling to religion. Our manifestations of heroism in art are, in Beckerian terms—and therefore Kierkegaardian and Darwinian terms—our attempts to seize immortality through the creation of fiction in which we may suffer but we never die. From Shakespeare to the Bible to World of Warcraft, we see how fantasy allows us to confront and defeat even our own mortality. And violà—death in video games.

In creating “character armor” and our “lie of character”—a self-identity, an occupation, a fictional elf with a shield and a sword—we reach for the immortal and so attempt to deny our own impending demise. Where we are threatened with mortality and harm, we respond with constructions of heroism and strength: “As Santayana once put it, a lion must feel more secure that God is on his side than a gazelle. On the most elemental level the organism works actively against his own fragility by seeking to expand and perpetuate itself in living experience; instead of shrinking, it moves toward more life (Becker, 1973).” In video games, our lions are literal, and so is our overcoming of death. What can be dismissed as trivial is in fact perhaps the only eternal feature known to humankind: our desire to transcend, rather than shuffle off, the mortal coil.

In every heroic symbol—the lion on the medieval shield, the stone monolith in the moor, the armored astronaut defeating aliens with the laser rifle—we see human beings’ resistance to the inevitable. By constructing and repeatedly defying death in a video game, we are perpetuating an ancient drive that defines our very existence as conscious, thinking animals, perpetually suspended in the paradox of knowing mortality. And this is never more difficult than when we make that precarious transition from animal childhood to anxiety-ridden adulthood.

The Age for Death

“To grow up at all is to conceal the mass of internal scar tissue that throbs in our dreams.”

—Ernest Becker

Beginning at around age five and continuing through adolescence and early adulthood, young boys especially are magnetically drawn to both video games and violence, and the implications of this attraction are still in the process of being understood. Excellent texts such as the aforementioned Gerard Jones work and its newer cousin Grand Theft Childhood: The Surprising Truth about Violent Video Games, and What Parents Can Do, compiled from the research of a $1.5 million study undertaken by Lawrence Kutner, PhD, and Cheryl K. Olson, ScD, closely inspect the relationship between childhood and interactive violence, and other studies continue to be undertaken.

From an existential perspective, Becker asserts that it is entirely predictable that as the psyche coalesces into a thinking, self-aware being out of the nothingness of pre-existence, a fixation with this inevitable, implacable, terrifying phenomenon of the termination with that existence will result. As adults, we sand over our memories of childhood, being perhaps even cognitively incapable of remembering this onset of the notion of death and how we incorporated it into our subconscious. Only when we are forced to consciously view and contemplate it do we succumb to our terror. For children, this contemplation is purely conscious and has not yet submerged, and viewing violence in the hands of children is therefore one of the most deeply disturbing things we can
imagine, as it threatens our cognitively structured
sanity-maintaining illusions about the innocence
and idyllic nature of childhood. In reality, nature
itself, from which children emerge, is a brutal,
dangerous, elemental force, which we reconcile
in modern civilized society only through great
tribulation and conflict (Becker, 1973).6

Both Becker and Freud understood the coping
mechanisms with which human beings respond to
their fundamental death-anxiety (Freud, 1949)7.
In these “character defenses,” formed throughout
the solidification from childhood to adult, Becker
almost eerily foretells the heroic video game
experience:

*He learns to embed himself in other-power, both
of concrete persons and of things and cultural
commands; the result is that he comes to exist
in the imagined infallibility of the world around
him. He doesn’t have to have fears when his feet
are solidly mired and his life mapped out in a

Becker’s illustration of this “ready-made
maze” of fantasy calls to mind an iconic phrase
from *Colossal Cave Adventure*: “You are in a
maze of twisty passages, all alike.” Throughout
the history of video games we see the deeply
psychological reflected in the electronic, as the
demons of our dreams, created from our suspen-
sion between the angel and the animal, take shape
within the machine and the visions we project
through it.

From this standpoint, the notion of removing
those objects of childhood contemplation takes on
a different nature. Many child psychologists, in-
cluding Kutner and Olsen, in this respect agree with
existentialists concerning the inevitability of the
childhood fixation with violence and conflict—but
from an existential perspective, it is only through
confrontational contemplation that we can truly
come to grips with the phenomenon of death. It
becomes critically and ethically important that
we consider the philosophical and psychologi-
cal value of socially “disturbing” content and its
brutal, confrontational approach toward the deeper
concept of death, rather than repressing its pres-
ence through regulation and omission. Whereas
violence in media, especially children’s media, is
primarily considered in terms of entertainment,
inappropriateness, and controversy, it is necessary
to recognize the deep death contemplation that
exists at its core.

Philistinism, which in Becker’s parlance was
the “automatic cultural man,” represents a natural
response to the anxiety of death. Both Becker and
Kierkegaard regard this as a force to be avoided
and mitigated, as a fundamental distraction from
the truths about reality, and one which, left to run
wild, ultimately blocks us from reaching a true
sense of inner peace through the acceptance of
life’s temporary nature. These deep philosophical
approaches to psychology and understanding
humanity are at the root of our modern dismissal
of entertainment media, the most current of
which is the dismissal of the validity of interac-
tive fantasy.

What we do know, and what the prevalence
of death in video games underscores, is that the
primal theme of death and its related fantasy
refutations through character, heroism, and con-
quest, represents a deeply rooted human concern.
Though video games, like comic books and televi-
sion before them, are considered the domain of
the cognitively underdeveloped, that transition
period represents one of the most crucial phases
in psychological development, as we first encoun-
ter and attempt to overcome existence’s greatest
enemy: death itself.

By this token, we should consider the role of
death and fantasy violence in media as not merely
frivolity or something to be avoided. Only through
engaging with these manifestations of our death-
anxiety can we have any real hope of coming to
a higher conscious acceptance of them. Whereas
Becker and Kierkegaard would seem to recom-
mend diminishing or altering “distraction” media
in society, perhaps these existentially troubling
manifestations are in themselves a route toward discourse and greater understanding. When we don our character armor, it is to take on death itself—knowingly, consciously, and with no real faith in our ability to succeed.

CONCLUSION

As interactive media continues to expand through society, modern educators are coming to the realization that, rather than being an enemy, interactivity represents a heretofore unseen and powerful tool for instruction and comprehension. This approach, however, does not currently include facing the object of death and violence in games head-on and instead dismisses violence as a kind of unfortunate side effect of the underdeveloped psyche. Rather than shying away from contemplating death and violence in interactive media, a more compassionate and ethical approach would be to attempt to overcome our own aversions to reminders of mortality and inspect how this media consoles us, in ways that conscious thought cannot, against the specter of our inevitable demise.

By including a greater philosophical and psychological understanding of death in both the crafting of video games and the use and consumption of them by game creators, educators, and the public, perhaps this powerful tool can be used for a greater ethical purpose: understanding ourselves and our reality.

When we understand the treatment of death in any medium, but especially one so intrinsically agent-based as video games, we understand that in our thoughtful treatment of mortality we seek to answer deep questions about human existence. As game designers, what are our questions, if not our answers, and what do they say about us as individual human artists? When we are drawn to depict violence and heroic overcoming of death, what process is occurring within our psychological selves? By compassionately asking these questions, and especially by asking them of children, we tame the beast of anxiety and help ourselves to become more completely, as Nietzsche would entreat, who we are.

REFERENCES


**ENDNOTES**

1 See the work of Raymond W. Gibbs, Jr., esp. *Embodiment and Cognitive Science*.

2 Note also that this is presented in “text adventure notation”; the courier text after the bracket (>) represents the command typed by the player, while all other text represents the response of the computer.

3 This is a generalization, of course, but is an accepted and cited average in the industry. See “Makers of Violent Video Games Offer Rare Defense of their Work”, http://www.mtv.com/news/articles/1560100/20070521/index.jhtml: “At Sony’s PlayStation Gamers Day, the usual tactics of silence, defensive-
ness or above-it-all cool that game companies enlist in the face of attacks on violent video games were replaced with two less common approaches: satire and gory but thoughtful detail.”


“Heidegger’s 1927 *Being and Time*, an inquiry into the ‘being that we ourselves are’ (which he termed “Dasein,” a German word for existence), introduced most of the motifs that would characterize later existentialist thinking: the tension between the individual and the ‘public’; an emphasis on the worldly or ‘situated’ character of human thought and reason; a fascination with liminal experiences of anxiety, death, the ‘nothing’ and nihilism; the rejection of science (and above all, causal explanation) as an adequate framework for understanding human being; and the introduction of ‘authenticity’ as the norm of self-identity, tied to the project of self-definition through freedom, choice, and commitment.”

*Ibid.* “This is the paradox: he is out of nature and hopelessly in it; he is dual, up in the stars and yet housed in a heart-pumping, breath-gasping body that once belonged to a fish and still carries the gill-marks to prove it. His body is a material fleshy casing that is alien to him in many ways—the strangest and most repugnant way being that it aches and bleeds and will one day decay and die. He is literally split in two: he has an awareness of his own splendid uniqueness in that he sticks out of nature with a towering majesty, and yet he goes back into the ground a few feet in order blindly and dumbly to rot and disappear forever.”

*See also* “Anxiety and Two Cognitive Forms of Resistance to the Idea of Death”, *Psychological Reports*, (1966).

In Freudian terms, the Id represents the animal death-unaware half of man’s existence; the Superego is aware of death, and the Ego mediates between these two states, with coping or “defence” mechanisms developing to assuage resulting cognitive dissonance. For further note, see Anna Freud’s *The Ego and the Mechanisms of Defence* (1936).
Chapter 9
What Videogames have to Teach us about Screenworld and the Humanistic Ethos

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ABSTRACT
Recent societal critiques charge that the pervasiveness and ubiquity of screen-based technologies place the emotional, social, and cognitive development of their users at stake. Many of these critiques suffer, however, from a sensational and moralistic formulation. To move forward ethical investigation into sophisticated inquiry this essay closely examines one screenworld technology, videogames, with an aim of (a) categorizing videogames’ active and performative features and (b) assessing how these features present themselves during gameplay as compatible, incompatible, and antithetical to our humanistic needs. These needs form a value system termed the Humanistic Ethos which is further articulated into measurable characteristics along four dimensions—the Poetic Imagination, Dialogic Relations, Systemic Thinking, and Existential Vigor. A survey of videogames along with two case studies develop these dimensions within their technical, social, and personal contexts revealing the delicate interplay between designer, game and player. Design principles compatible with the Humanistic Ethos are discussed. Limitations and future directions are also considered.

WHAT DOES A VIDEOGAME WANT?
Imagine if a videogame were a human being. Imagine if it had its own rights, its own desires, and its own human needs. When humanizing a videogame in this respect, we would not ask whether the videogame is a good or bad thing, but rather we would ask gentle questions that unveil the videogame’s nature and its characteristic possibilities. To reach a robust understanding we would have to first tease apart the videogame from the commercial ethos and the hedonistic impulse that has generally driven its production and uptake over the past three decades. Then we would have to look beyond the prophetic reports of the videogame’s fanatics and detractors alike. Last, we would have to summon up the cour-
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age to approach the videogame on its own terms and address it at its own leisure asking, “What do you want?” (this approach is inspired by Turkle, 2009). If we pay close enough attention and patiently attune ourselves to the videogame’s needs we may be graced with an answer, “I want to be imaginative: please give me symbols, rhetoric, and phantasy.” This is the videogame’s poetic human need. If we listen further yet, the videogame may also reveal, “I would like very much to be sociable: please give me playful characters, progressing stories, social interactions and cultural significance.” This is its dialogic human need. If we linger longer still, “I would like to be understood” we hear it say, “please give me rules that are consistent, persistent, and interactive, yet also discernible to others.” This is the videogame’s systemic human need, to be a dynamic system that is comprehensive in scope yet comprehensible in nature. Finally, the videogame might speak to its existential need for designers and players “who have the patience to legitimately meet and draw meaning out of the game’s challenges as well as the gratitude to appreciate its rewards.” If we ourselves are imaginative, sociable, understanding, and gracious we may be able to answer to the videogame’s humanistic needs.

The history of videogames, however, is all too often a history of its humanistic needs not being met, or rather, of being jeopardized by a constellation of commercial needs, social behaviors, and personal impulses and drives (Herz, 1997). Worse still, rather than tracing the effects of videogames through the interplay of commercial, social and personal dynamics, critics have largely been content to project their fears and disgust onto videogames directly. As such videogames are discredited as crude, anti-social, mindless, and indulgent. They are argued to bring out the worst in us—violence, narcissism, restlessness and addiction (Anderson, C.A., & Bushman, B.J., 2001; Funk, Hagan, Schimming, Bullock, Buchanan & Myers, 2002; Furedi & Lewis, in press; Mercogliano, 2007). The earlier attacks and critiques of videogames were frequently catalyzed by sensationalized-publicized incidents involving acts of violence or negligence whereby the perpetrator held an affinity for videogames (Kutner & Olson, 2008). At that time fewer people played games and gameplay was stereotyped as an anti-social activity (Kutner & Olson, 2008). Now that videogame playing is pervasive, the critiques have shifted to speculation of the harmful effects of ‘media saturation’ on children lumping videogame playing with television viewing and online socializing (Guldberg, 2009). Yet, researchers drawing from their own work find these accusations to be overhyped, misinformed, and not empirically grounded (Buckingham, 2005; Kutner & Olson, 2008; Livingstone & Bovill, 1999; Marsh, Brooks, Hughes, Ritchie, Roberts, & Wright, 2005). How then are we to make sense of the “epidemic of confusion” as Peter Marsh (2005) puts it regarding the litany of voices, speculation, and misinformation that surrounds our interactions with screen-based technologies?

First, we must take these concerns seriously and recognize that they fit into a wider societal discussion about the precarious effects of living and interacting within a world that is increasingly computerized and virtual: screenworld (Borgmann, 1992; Greenfield, 2008; Jackson, 2008; Lightman, 2005; Siegel, 2008; Turkle, 2009; Ventura, 2009). Screenworld refers to the character of our interactive technologies and immersive online worlds as distinguished from the structure and nature of the real world. Screen-based environments, for example, are home to different kinds of symbols and ambiances than physical landscapes. Online interaction is different than face-to-face contact. Likewise, decision-making holds different implications and consequences in the systems of virtual worlds than in the real. Further still, virtual reality is not marked by the same boundaries and burdens as tangible reality, nor by the same circumstances and contingencies (Borgmann, 1999; Ventura, 2009).
To be sure then both experiences—online and off—are real, but their structures and possibilities for humanistic engagement uniquely differ. More importantly, both types of experience offer affordances and constraints for developing our humanistic sensibilities and humanistic needs. This leads us to a second point for dealing with the epidemic of confusion: we must advance fields of study and ethical analysis that can empirically grasp how the decisive features of interactive screen-based technologies are compatible, incompatible, and antithetical to human growth and development. One possible direction is detailed below.

**WHAT DO VIDEOGAME AND ETHICS STUDIES WANT?**

When faced with sensationalistic and moralistic claims such as ‘videogames are good’ or ‘videogames are harmful’ several questions arise. First, what exactly is taken into account when we say videogame? More precisely, what exactly is measured? Second, how are these statements falsifiable or testable? Last, how exactly do we define good and harmful? By what standard or value system do we derive notions of good and bad, and what criteria inform this standard or value system? In other words, sophisticated ethical inquiry into our everyday interactions with videogames wants (a) a unit of analysis proper, (b) falsifiable research questions, and (c) criteria for value judgments.

**Unit of Analysis.** A quick sampling of lay criticism of videogames reveals differences as to whether critics are addressing the content of games, the narrative of games, the message of games, the genre of games, the ratings of games, the tasks of games, the medium of games or the trade-offs between playing games and doing something else. Given this variability we must ask, wherein resides a useful standard unit of analysis? I propose that a meaningful view will center not on the videogame itself per se, but rather at the very edge of the game, at the very locus of activity that emerges when the game’s design features, the social practices that grow around it, and a player’s own personal mode of engaging the game come into contact. Our unit of analysis, then, exists latently at the periphery of the game itself waiting to be brought to life through game-mediated activities. Once animated, we can begin to study the “active nature” of gameplay. That this activity is an emergent property of multiple factors and agents—mainly a videogame’s own technical design, social and commercial practices, and a player’s own purposes and attitude—helps us appreciate the uncertainty, ambivalence, and multiplicity of the effects of videogames. This complex of factors also helps explain why narrow searches for simple causal explanations leads to an epidemic of confusion.

Centering one’s analysis on the activity summoned forth from the interplay of the media at hand, the social-historical context of the media, and the user’s uptake of said media originates, to my knowledge, in Kenneth Burke’s (1937/1967) “Literature as Equipment for Living,” as detailed in his *Philosophy of Literary Form*. On analyzing proverbs he writes, “The point is not to find categories that “place” proverbs once and for all. What I want is categories that suggest their active nature” (p. 2). These categories do not reveal the underlying messages of the proverbs so much as depict the activities required of the reader who is attempting to become adequate to their meaning (activities such as understanding through daily recitation, contemplative meditation, practiced memorization, life application, etc.). Likewise, Tracy Strong (1996) asserts, “a text must also be looked at in terms of its activity, not “just” its meaning” (p. 125). Strong (1996) finds significance in provocative philosophical literature and unconventional musical compositions that require their audience to ask profound questions for which there are no straightforward answers. John Lysaker (2008) refers to such activities as the text’s “performativity” (p. 11). Performativity is the performance a text requires of us to make
in order to become adequate to its meanings. A Zen koan, for example, is not so much a riddle to be solved as it is an evocative statement that ‘performs us’ into a state of contemplation and meditation.

Switching from literature to screen-based media, Stephen Dine-Young (2000) in his “Movies as Equipment for Living,” advances Burke’s (1937/1967) request for categorizing the ‘active nature’ of our media. Dine-Young’s (2000) empirical analysis considers both the active nature of movies and the implications of participants’ activity for issues of human development. His work provides an adequate starting point for videogame and ethics studies. Videogame scholar James Gee (2005) anticipates this research direction with his claim that videogames can also be viewed through Burke’s lens as “equipment for living” (p. 105).

_Falsifiable research questions_. In addition to a viable unit of analysis, a study of videogames and ethics needs falsifiable research questions appropriate to their subject matter. Asking whether videogames (or their creators or users) are humane or inhumane ignores the interplay of factors that surround a game’s active nature. Instead, we may wish to ask what properties or features of the videogame’s design, the social forces at play, and the personal modes of engagement lend themselves to experiences compatible with, incompatible with, or antithetical to our humanistic needs. This is the qualitative approach taken by ethnographers and memoirists of videogames (see Julian Dibbell’s (2007) “The Life of the Chinese Gold Farmer” for an example of this type of study). Alternatively, we could take a quantitative approach, quantifying some aspect of our humanistic needs to observe and measure. We may ask, for example, what distinguishes episodes of non-aggressive gameplay (as numerically scored) from episodes of aggressive gameplay. We may then search for patterns across players, across games, and across contexts asking why certain combinations of game-player-culture are associated with humane and inhumane game-mediated actions.

_Criteria for value judgments_. For this analytic task to be significant or meaningful we must clarify precisely what is meant by the notion of humane activity, identifying the observable principles of such an activity. In other words, if we are to make a value judgment about the humane nature of our interactions in screenworld we are in need of measurable and valid criteria. Unfortunately, the traditional humanistic paradigms—Maslow’s hierarchy of needs and Kohlberg’s stages of moral development—do not give us criteria to measure humanistic needs so much as sequential stages of humanistic development whose vagueness, mutual exclusiveness, and even orderliness have come under serious scrutiny (Gilligan, 1977; Noddings, 1984; Douglas and Ney, 1998). In place of these humanistic paradigms, I propose four non-mutually exclusive yet distinctly discernable threads of what I am calling the Humanistic Ethos. We candidly visited these four threads at the opening of this essay calling them humanistic needs. We may now characterize these threads as the poetic imagination, dialogic relations, systemic thinking, and existential vigor. Together they form the healthy pulses of a rich Humanistic Ethos.

To further formalize these threads into meaningful observable principles, the following discussion on videogames draws guidance from philosophers and naturalists such as Ralph Waldo Emerson, psychotherapists such as Mary Watkins, and ethicists such as Joseph Selling. As we journey into screenworld we will also encounter many contemporary theorists, users and designers of media technologies whose work can contribute to our understanding of the Humanistic Ethos. Perhaps their work is so fortuitous because one of the central dilemmas screenworld presents us with is the daunting question of what it means to be human. One might even offer the conjecture that in order to understand screenworld we must understand ourselves; our own humanworld. Not because our humanworld is so utterly different and foreign from screenworld but, on the contrary, because our humanworld—with its inconsistent
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Table 1. Active categories of videogames as framed by the humanistic ethos

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<tr>
<th>Poetic Imagination</th>
<th>Dialogic Relations</th>
<th>Systemic Thinking</th>
<th>Existential Vigor</th>
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<td>Expressive Tools</td>
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needs and desires—is what fashioned these screens and what keeps drawing us to them.

These new experiences in virtual worlds are unique enough and novel enough yet also regular enough as to warrant novel vocabulary terms to help capture them. Several terms originate from the theorists who studied older forms of media such as literature, while other terms have been invented or re-envisioned by analysts of our new media in screenworld. Although these terms may sound strange or foreign, they will be defined, clarified and illustrated with examples when appropriate throughout the essay. With this disclaimer in mind I will present the active features of videogames that appear compatible with the Humanistic Ethos. This table serves as a roadmap for the remainder of the essay.

What follows is a selective survey of videogames including case studies of Portal and Rock Band 2 that help ground, illustrate, and develop the categories of the active nature of gameplay as well as the character of the first three humanistic threads of the Humanistic Ethos (note: existential vigor—the ability to legitimately suffer through the hardships of life while drawing meaningful and rewarding experiences from them—will not be fully developed in this essay).

These categories and principles are not conclusive or exhaustive—they are up for refinement, reorganization, and debate. Their aim is generative. To generate identifiable, measurable, and falsifiable moderator variables for future studies in games and ethics that can help explain the varied and ambivalent effects of videogames at multiple levels of analysis, as well as to generate new ways of thinking about, designing for, and interacting with and within screenworld.

THE POETIC IMAGINATION

Symbolic, Rhetoric, and Phantasy

When evaluating the poetic significance of gameplay it is worth asking the following questions: Are the in-game symbols moving and inspirational or are they pseudosymbolic and idolizing? Is the game’s rhetoric made explicit and opened to critical questioning through gameplay choices or does it remain implicit and ideologically-accepted? Do the phantasy elements allow for players to relate to the darker aspects of human nature at an allegorical distance, or do they simply provide an excuse for players to guilt-free and make-believe kill one another? These characteristics are not inherent to the videogame itself, but arise from the interactions of designer, game and player. By listening closely to the poetic aspects at play we can begin to measure and observe whether a gameplay experience is poetic or trivial, illuminating or idealizing, moving or crude.

Poetic as Symbolic: Inspirational Videogames

As creative expression informs us about the creator’s feelings and scientific notations inform us about the laws of the universe, poetic symbols awaken us to the mysteries of the human condition—the contingencies of our existential situation that lead to joy and suffering, beauty and decay, love and redemption. These mysteries imbue our lives with wonder and awe, anguish and fulfillment. The poet helps us legitimately accept our existential situation and to empathize with our fellow beings by gracing us with sym-
bols—images, monuments, and metaphors—that invigorate our deepest questions and curiosities. The poetic imagination reaches beyond the logical binaries of the mind to inspire a life of compassion and wonder.

Ralph Waldo Emerson proclaims that art “should exhilarate, and throw down the walls of circumstance on every side, awakening in the beholder the same sense of universal relation and power which the work evinced in the artist,” adding that, “its highest effect is to make new artists” (p. 437). For Emerson, art that awakens us to our universal relations with one another can take the form of statues, books, and even of graceful lives. Similarly, Thomas Merton (2002/1967) writes that symbols go beyond mere communication to awaken in us communion for one another. Yet symbols do not always engage our empathy as Emerson warns, “Books are the best of things, well used; abused, among the worst. What is the right use? What is the one end, which all means go to effect? They are for nothing but to inspire” (p. 57). Likewise, Merton (2002/1967) cautions of art that takes the form of pseudosymbols and propaganda, a form whereby a symbol is, “reduced to the trademark or the political badge, a mere sign of identification” (p. 58). Merton reminds us that “Identification is not identity,” but rather “Rubber stamp” identification is actually a diminution or loss of identity, a submersion of identity in the generalized class” (p. 58). If symbolic objects deprive us of our sense of compassion and universal relation and instead deliver us a conformist, kitschy or polarized worldview then we are abusing these symbols and ourselves. Emerson leaves us with a potent proclamation, “The imaginative faculty of the soul must be fed with objects immense and eternal” (p. 128).

Of Death and Dying

Can videogames be one of these objects that feed our souls? A 2008 article in Esquire, entitled “The Video-Game Programmer Saving Our 21st-Century Souls” provides an optimistic answer. The article profiles video game creator Jason Rohrer, a videogame designer whose modest off-the-grid house and lush yard-turned-meadow suggests that he is anything but. His first game, Passage, a two megabyte pixelated-allegory was received with critical acclaim upon its release in 2007. Passage explores the trade-offs between companionship and independence as well as the realities of ageing and death in the confines of a five-minute treasure-chest hunting game. As the Esquire article puts it, “Passage was sad, it was sincere, it was personal, it was mysterious, it was existential, and for all these reasons, it was new” (p. 2). Passage left game-designer Clint Hocking (Tom Clancy’s Splinter Cell) addressing his fellow designers during a speech at the Game Developers Conference, “We wonder all the time if games are art, if computers can make you cry, and all that. Stop wondering. The answer is yes to both” (p. 2). As videogame columnist, Clive Thompson put it in a 2008 Wired article, “it illustrates how a game can be a fantastically expressive, artistic vehicle for exploring the human condition” (p. 1).

A year later the Belgian company, Tale of Tales, released The Graveyard which received similar critical acclaim including the European Innovative Game Award for 2008. Allow me to share my experience playing The Graveyard. I enter the game guiding the movement of an elderly woman along a graveyard path. The elderly woman walks slowly resisting my fast paced clicking. As I incessantly click she begins to limp. During the slow journey I hear a siren in the background and birds in the foreground reminding me that life goes on—its pitfalls and melodies—despite me. We approach a bench in front of a chapel and I wait for the old lady to sit. Two and a half minutes pass and I am still waiting. I grow irritable, wondering if I am playing the game wrong. I wait longer. I check the game instructions—she is supposed to sit at the bench. I press keys, maybe the space bar makes her sit, or enter. I have lost my sense of volition and am forced to let go of my desire for control.
I begin to empathize with her. She finally sits and I reflect on why I am so frustrated with her fragility and my own lack of control. Perhaps there is more to life than speeding through it. The game has no conventional goal or measure of success, you are simply being—a bird chirps—while the rest of the world is being as well.

To unpack the qualities that imbue these games with poetic significance we must not focus just on their in-game messages and meanings, but also analyze the ‘activity’ the game requires of us as players. If most mainstream games require little more of their players than frenetic battling and collecting—an activity that can come to look more like work and less like fun—Passage and The Graveyard slow players down in order to ask, in the face of such hurried activity, “why?” and “to what end?” Likewise, if most mainstream games offer players escapism through the illusion of control, kitschy happy endings, and multiple lives, Passage and The Graveyard demand that their players confront their own mortality through constrained volition, inevitable endings, and only one life. Indeed, Rorher refers to Passage as a memento mori game, a Latin expression that means “remember you are mortal.” Passage and The Graveyard can be thought of as games that perform us into a state of memento mori depending on how we make ourselves adequate to their gameplay.

Memento mori games may be objects that feed the soul, but their popularity and success begs a timely question: will they ever reach large-scale commercial success? The mainstream market after all is driven by a commercial ethos, not a humanistic one. As J.C. Herz (1997) in her Joystick Nation describes the focus of most videogame producers, “[their] audience numbers in the millions, and the object is not to celebrate ancestors or teach lessons to curry favor with the spirits. It’s commerce” (p. 170). Likewise, the consumers of mass-marketed games find escapist fantasy and replayable experiences more appealing than reminders of their own death (see Susan Greenfield’s (2008) id: the quest for identity in the 21st century). Yet, there are several ways forward to a market for poetic games. Commercially successful game franchises that reign in sequel after sequel could introduce memento mori by simply aging their iconic characters. The producers of Metal Gear Solid 4, for instance, not only aged their infamous title character, Solid Snake, but also inserted machinima clips of Solid Snake reminiscing of his past youthful experiences in the previous Metal Gear Solid games. Our hero is no longer portrayed as ageless or immortal. He is human.

Just because there will always be a market for mass-produced escapist games—as there is a market for mass-produced pulp fiction—does not mean that there will never emerge counter-cultural game makers or a sub-market niche for their products. Indeed, if the current market continues to produce generic pulp-games with predictably recognizable norms and forms it seems likely that alternative game-makers will tinker and experiment with these forms, layering in symbolism of their own design. It is in this spirit that we welcome the contributions of game-makers Danny Ledonne and Brendon Chung.

Beyond Morality Tales and Heroic Idols

Danny Ledonne knew he was breaching a sensitive subject when he began creating the game Super Columbine Massacre. The school shooting rattled him deeply and the sensationalized treatment and mistruths of the event as portrayed by the public media frustrated him even further. This anguish combined with a disdain for videogames of the fantasy dribble variety led Ledonne to craft an RPG (Role-playing game) videogame that was at once satirical of the RPG genre of videogames, critical of sensational media coverage, and true to the events of the Columbine school shooting. Although this particular combination of motives made the message of Super Columbine Massacre...
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unnecessarily opaque and drastically misunderstood by the media at large it provided for an arresting and unforgettably moving gameplay experience. As Danny Ledonne explains in his artist’s statement: “The game had to be told from the perspective of the shooting’s greatest enigmas of all: Eric Harris and Dylan Klebold. They left behind many of their thoughts—some frightening, some deplorable, some comical, and some deeply enraged. I collected all of them and assembled them into a role-playing game…it only made sense, I thought, to make this game feel like a combination of reading, playing, and thinking.”

Instead of leaving players with a didactic message or trivial gameplay, Ledonne desires to evoke the activities of reading, playing, and thinking within his players.

Playing as the shooters—living out their ordinary lives, their daily frustrations, and their extreme actions—I came to drop all the pseudosymbols and propaganda that had filled my head from the media: images of the shooters as monsters, as recluses, as Marilyn Manson freaks, as militaristic, as inhuman. Instead I came to see Eric Harris and Dylan Klebold as human, sharing the same human condition I do. Even more movingly, the game allowed me to drop my pseudosymbolic impressions of the victims as mere statistics and media reports—I came to see the victims as actual human beings. The event was no longer a black-and-white morality tale but a real-life tragedy causing me to sympathize with the fragile and vulnerable nature of human beings.

Despite the unquestionably sensitive subject matter there are poetic principles to be unearthed from this game: by showing players the mixture of human experiences of the main characters—their hobbies, their jokes, their frustrations, their fantasies—and by placing us directly in their shoes and giving us volition over their own movements we can come to (not glorify or justify their actions as many media critics fear but) live out our own bewilderment through the shooter’s own eyes. This volition does not force us to internalize or sympathize with their cause, but rather, as James Gee (2004) writes of controversial videogames, “…it would mean that, far more interactively than you could in any novel or movie, you would have experienced the “other” from the inside” (p. 150). These poetic principles are not incompatible with commercial success. Many popular books and films as far ranging as *Madame Bovary* to *Crash* have achieved commercial and critical success by casting societal figures, that are traditionally demonized and stereotyped, as otherwise ordinary human beings whose lives—despite moments of tragic or comic significance—appear quite similar to our own. These stories demand an activity that awakens us to our own prejudices and biases.

Conversely, many current popular television series and films feature figures normally idolized—from action heroes to celebrities—and instead show us their fallible human side. Although many of these shows commercially profit off the scandalous nature of human affairs and celebrity blunders, many genuinely try to show us the internal inconsistencies and self-worth struggles of otherwise idealized human beings. Consider Darren Aronofsky’s *The Wrestler* or Superhero prequels such as *Smallville*. It is in this spirit that Brendon Chung’s videogame *Gravity Bone* draws its emotional valence. Playing as a slick espionage spy smoothly infiltrating cocktail socials and knocking off tuxedo-clad characters we feel all the fun and power of being James Bond until one of the characters smoothly knocks us off. As our life flashes before our eyes a series of images unfolds showing our character in his youth as an everyday human being dressed in ordinary clothes participating in ordinary events like running marathon races. The effect is moving. Once again we feel sympathy for the human condition—both its fragility and its inclusiveness of those we might otherwise demonize or idolize.
Poetic as Rhetoric: Ideology-Bursting Videogames

In addition to opening us up to the mystery of our human condition, the vulnerability of life, and our relatedness to one another, videogames can also poetically demystify the rhetorical ideologies that otherwise block our sensitivity to the human condition and our fellow human beings. A rhetorical ideology is an unquestioned prejudice or value system. Sherry Turkle (1997) in her Life on The Screen: Identity in the Age of the Internet argues for “the development of simulations that actually help players challenge the model’s built-in assumptions. This new criticism would try to use simulation as a means of consciousness raising” (p. 71). Following Turkle’s consciousness raising, Gonzalo Frasca (2001) advocates for videogames that embody Paolo Freire’s (2000/1970) conscientization—a term that describes the ambit of consciousness raising; the movement from being under the spell of an ideology to critically examining that ideology to endeavoring to overturn it.

Such a movement articulates the poetic ethos, of paradoxically disregarding our ideologies in order to more fully regard them and if need be discard them. Or, to put it with less sophistication—it’s ideology-detox. No longer intoxicated by our ideologies we may finally gain the distance to reasonably reflect on them. Frasca (2001) is clear, however, that although videogames can support the first phase of the movement its completion is up to human hands alone,

“\textit{When I describe these ideas to fellow researchers or game designers, they usually ask me if I really believe that social and personal change is possible through videogames. My answer is always a straight \textquoteleft no.\textquoteright\ Neither art nor games can change reality, but I do believe that they can encourage people to question it and to envision possible changes.}” (p. 93)

Although a game cannot force us to uproot our prejudices and ideologues, a videogame can be compatible (or not) with such an experience. Once again we are encouraged to not just look at the meaning of a videogame, but to investigate the realm of activity it opens us up for.

Big Brother, Expansionism, and World Hunger

Let us begin with Ian Bogost’s 2006 article, “Videogames and Ideological Frames,” in which he analyzes the ideology-bursting game \textit{Vigilance 1.0}. Players assume a god-like role tasked with monitoring a town and correcting citizen’s inappropriate behavior (both public and private) through digital surveillance. As the game unfolds the frequency of criminal acts appears to be decreasing but paranoia and restlessness are on the rise. The player witnesses the negative consequences of constant surveillance as embodied by the weary behavior of the obsessively-observed citizens. Videogames can teach by making us living examples of their lessons. We play out their conflicting value systems and internal contradictions so long as the game follows Turkle’s (1997) dictum by helping “\textit{players challenge the model’s built-in assumptions}” (p. 71). Further examples of both didactic and poetic approaches in videogames can be found in two more recent publications by Bogost, his \textit{The Rhetoric of Video Games}, and his \textit{Persuasive Games: The Expressive Power of Videogames}.

Of course, not all videogames openly air their underpinning ideologies. Videogame scholars Katie Salen and Eric Zimmerman (2003) note many videogames that suffer from not exposing their deeply embedded “cultural rhetoric.” Alexander Galloway (2006), in his \textit{Gaming: Cultural Algorithms}, invites us to consider the underlying expansionist ideology of the popular historical-adventure game \textit{Civilization} and its sequels. \textit{Civilization}’s unquestioned assumptions can be experienced in its “explicit logocentrism, its nationalism and imperialism, its expansionist
logic, as well as its implicit racism and classism” (p. 96). Drawing from Ted Friedman’s “Civilization and Its Discontents,” Galloway quotes, “At the beginning of the game almost all of the map is black; you don’t get to learn what’s out there until one of your units has explored the area. Gradually, as you expand your empire and send out scouting parties, the landscape is revealed,” equating expansion with security, with adventure, and with success (p. 96). Whereas the multiple effects and consequences of Vigilance 1.0 displayed the internal inconsistencies of its ideology, all the effects and consequences of expansionism are portrayed as ‘good’ and ‘progress’ in Civilization.

Remember Emerson’s caution that forms of art can be just as deadening as they are inspiring. Take the game Food Force for instance. It portrays the values of the United Nations World Food Programme, but unfortunately fails to do more than didactically transmit these values by giving players superficial and unproblematic tasks to complete. World hunger issues are boiled down to technical problems of maneuvering a helicopter while clicking the mouse as fast as possible on starving populations to save them, or driving a truck as efficiently as possible through minefields and other dangers. The game plays as an ideologue, championing the brave WFP heroes without ever stirring our imaginative sensibilities.

Just as Frasca (2001) claims a videogame cannot force us to reject our prejudiced ways of viewing reality we must remember that likewise a videogame cannot cajole us into internalizing its own ideologies. The key question again for designers, scholars, and players alike is how videogames can be made and played to portray their own ideologies while reflecting our own prejudices back at us.

Towards More Rhetorically-Transparent Videogames

James Gee (2004), in his What Videogames Have to Teach us about Learning and Literacy, offers a useful approach for helping us to challenge what he terms our cultural models. Taking a lesson from Sonic Adventure 2 Battle—in which Gee observes a six-year-old challenge his ‘cultural model’ of the meaning of good by playing the game as both Sonic and Sonic’s dark alter-ego ‘Shadow’—Gee suggests that politically controversial games such as Under Ash, which feature the ongoing violence between Palestine and Israel, might benefit by allowing you to play the game twice as characters from both sides of the conflict. “My guess,” Gee writes “is that if you had taken on both the projective identity of you as Ahmed [Palestinian] and you as Israeli settler, you would find the whole thing much more complex than you do now and would be a bit more reluctant to take the death of either side for granted” (p. 151).

Food Force, despite its noble goal to use a commercial medium to address politically significant issues, could be poetically improved. Had the game led the player to meaningfully call into question the political ideologies that lead to food shortages in the first place, or to demonstrate the human costs of competing value systems, or even to allow us to experience the game through the eyes not only of the U.N. heroes but of the actual sufferers then the game may have had the power to pull us out of our own assumptions and rekindle our affinity with humanity. Such gameplay experiences would perform us away from the activity of mindlessly endorsing rubber stamp identity towards the activity of critically thinking through multiple sides of a conflict.

Poetic as Phantasy: Sorrow-inducing Videogames

Phantasy, used here, is purposely distinguished from fantasy. Whereas fantasy is a playful presence of unreality, phantasy is a sorrowful absence of reality, reminding us of what once was by showing us the impact of its absence. In this way we can consider a world with dragons and mermaids as fantasy, whereas a world without laughter or
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a world without suffering is phantasy. It’s the absence of something that should be there or once was there that distinguishes it as phantasy. Works of art that show us the consequences of a world without children (The Children of Men), critical reasoning (Plato’s Allegory of the Cave), or a world without conflict, rainfall, or even color (Pleasantville; The Giver) are all examples of phantasy worlds. Furthermore, some artifacts and rituals have fantasy elements (rabbit’s feet, crop-circles and unicorns), while other artifacts and rituals have phantasy elements that denote the memory of what once was (tombstones, memorials and vigils). Just as our sensibilities for inspirational symbols can be deadened by our prejudices so too can our sensibilities for the ambiances of nature and the qualities of the human spirit wane. This is why we need phantasy objects and ceremonies to remind us of the aspects of humanity and our landscape that imbue our life with regularity and meaning.

Although there are plenty of rituals and artifacts that identify human accomplishments or the passing of individual lives, it is invaluable to ask how we might commemorate or mourn the passing aspects of our own humanity and landscapes. As we create a noisier, busier and over-stimulated world will silence and stillness be given a respectful burial? Starlight a eulogy? Or birdsong a wake? As we spend more time at screens and behind machines than outdoors what will happen to our meandering thoughts, inward lives, and sense of uninterrupted time? And as undeveloped lands and wild animals succumb to our pace and waste what will happen to recognize their loss? The disappearance of our landscape may be granted in our contemporary world, but oddly our ability to feel sorrow for this disappearance is taken-for-granted. What happens when we lose our capacity to feel loss? Jared Diamond (2005) calls this absence of affinity and memory for the past features and characteristics of our ambient environment, “Landscape Amnesia” (p. 425).

The works of artist Maya Lin, designer of the Vietnam War Memorial, offer some guidance for these dilemmas. Her most recent offering is a multimedia multi-site installation entitled, “What is Missing?” The piece honors and grieves for the now extinct birds, plants, and animals whose lives are chronicled by photography and video broadcast across countless screens. Yes, screens—the same screens that critics claim disconnects us from the world will paradoxically bring us back to mourn that same world we have dethroned. Likewise, film-maker Terrence Malick has done a wonderful and masterful job at capturing the sounds of nature and antiquated ways-of-life in his Thin Red Line and The New World, two movies that are striking for being filmed almost entirely outdoors with long meditative shots of the natural environment. Further still, a new television series offers to show us Life without People and an upcoming film will present the World Without Us based on the book by the same name. Again more screens, this time enhanced with CGI and state of the art graphics, will help us commemorate that which we have lost and lost sensitivity for—nature un-impacted by our creations.

That large-scale poetically rich projects are earning commercial success points one way further for the direction of videogames. Indeed, in February of 2009 ThatGameCompany released Flower a commercial game played from the point of view of a lonely flower stuck in a flowerpot on a windowsill high above an incredibly dull and dreary cityscape. When the flower dreams, however, it dreams of petals, as controlled by the player, exploring distant vibrant fields and landscapes. Referring to the videogame screen as the “portal in your living room [that] leads you to somewhere else,” Flower’s designer Jenova Chen (2009) remarks, “I thought wouldn’t it be nice if it was a portal that would allow you to be embraced by nature” (p. 1). By engaging with the phantasy of the worldly landscapes that use to be this game can engage our sense of appreciation.
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Humanscape Amnesia

If videogames can help revive our capacity to feel sorrow for the landscapes we have lost, can videogames help us mourn the loss of and even reclaim those things we have yet to lose? Can videogames forewarn us of how our human experiences may come to be strained or betrayed in near-future worlds? Can videogames provide a window into the human qualities we take for granted—playfulness, uninterrupted time, face-to-face contact, solitude—in light of a changing world? In other words, can videogames help cure us of what can be termed our Humanscape Amnesia—those qualities lost or forgotten in the wake of our increasingly technologized and commodified existence? Dystopian novels and dystopian movies—those works of art we call 1984, Fahrenheit 451, A Brave New World, and Gattaca—have paved the way forward by showing us worlds lacking in some basic humanscape feature such as privacy, pleasure reading, free will, and free chance. This portrayal of phantasy through dystopia centered on the human experiences most taken-for-granted is how I came to be moved by the late 2007 videogame Portal.

Portal: A Case Study

Portal is a puzzle game in which players progress through a series of instrumental tasks in a futurized scientific-laboratory test chamber. The player is directed by an unseen authoritarian AI voice as well as aided by a portal launching gun, the clever use of which allows the player to traverse a wide array of spatial-conundrums. Upon completion of the tasks the player is promised cake by the AI. For all the fun of teleporting through portals the game proceeded rather monotonously and chore-like, as if some physics professor devised a series of three-dimensional spatial-math problems and somehow summoned them into game-form. The game lacked character development, story development, emotional development, social development—it only engaged my cognitive faculties. When these cognitive faculties began failing me during test chamber fifteen I began to hate myself and the game, triply so when I went online to ‘cheat’ and learn how to solve the puzzle that so bewildered me. In fact, I had trouble picking up the game again knowing that any future achievements would be built from the strength of my shortcomings. I surrendered to the urge to alleviate myself of accountability, and thus to save face, by blaming the game—who can be expected to successfully navigate all the levels when the levels contain nothing new and exciting, no surprises or intrigue, just a more difficult space to teleport through? Isn’t this why videogames are berated in the first place, because players just mash buttons while their emotional, social, and expressive self withers?

I began to play again, cheating my way through level fifteen, only to find something quite mysterious in level sixteen—something out of place in the test chamber. A small secret room of empty food items and a phrase scratched into the wall, “the cake is a lie.” I began to wonder what other hidden rooms were awaiting exploration in future levels and I actually began to look forward to achievement and advancement. At the same time the portal-slinging tasks became more and more unusual, with laser-wielding robots, athletic acrobatics and a tantalizingly moving moment with something called a companion cube (that I dare not spoil). Furthermore, the narrative and the characters develop as I explore more secret rooms and am faced with a choice in the last test chamber to disobey the AI. Disobedience was the first true choice the game gives me, and with it I began to feel human again. Under the weight of the consequences of my choice I began to feel the thrill of the game; the motivation to work through...
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my hardships and the joy of running the circumference of my learning curve. The portal gun is no longer a tool to turn me into a docile instrument for the purposes of the in-game laboratory, but rather it is my means of escape, of finding those emotional and expressive aspects of myself that the AI denied.

Although I enjoyed the game, I no longer think of laboratory experiments and, by way of analogy, school testing the same way. As James Gee commented during his opening talk at the Games, Learning, and Society conference in 2008, Portal serves as a parody of traditional schooling (as in relentless instructional testing and drilling). My colleague Matt Haselton points out that if Portal were to really reflect the flaws and frustrations of the school system it would not allow the freedom to repeatedly make mistakes and learn from them. Rather the AI would chastise your failures and confiscate your portal gun as punishment. Perhaps the government would shut down the whole laboratory for low scores and high dropout rates. Then Portal would be a truly cautionary allegory of assessment- and accountability-based schooling practices. Nonetheless, Portal does more than burst open the ideologies inherent in schooling—it equipped me to experientially feel the costs of achievement pressure and isolation (as in alienation) so that I may better relate to fellow human beings suffering from such pressures.

The commercial and critical success of Portal demonstrates that popular large-scale videogames can awaken us to the fragility of our human spirit, reminding us of what makes us human as well as what it means to be human. Portal also offers an ingenious marketing strategy—the game was packaged with two other commercial mainstream titles in a 3-for-1 deal called The Orange Box. Perhaps similar or other innovative marketing strategies will prove invaluable for bolstering the success of future poetic titles.

DIALOGIC RELATIONS

Expressive Tools, Varying Play-Styles, Shared Experiences and Collaborative Activities

Does the videogame give users tools to express themselves through avatar customization, level design kits, emergent narrative, or chat features? Does the videogame encourage different types of users and styles of play? Do the player’s experiences, goals, and activities overlap enough to ground communication and anchor collaborative meaning-making? Does the game feature activities that can only be completed through group collaboration?

The Dialogic Ethic of the Humanistic Ethos

At the heart of dialogic relations is the debate over whether screenworld is replacing our face-to-face relationships with anonymous, superficial and indulgent connections or if screenworld is networking us to become connected in new ways. Sherry Turkle (1996) in “Who Am We?” opts for a third option—that our screens are making us more aware of how delicate and vulnerable our relationships are, inciting us to develop a practical, moral and stewarding philosophy. “Our need for a practical philosophy of self-knowledge has never been greater as we struggle to make meaning of our lives from the screen” and again “the culture of simulation calls forth a new moral discourse” (p. 10). Turkle continues,

“The imperative of self-knowledge has always been at the heart of philosophical inquiry. In the 20th century, it found its expression in the psychoanalytic culture as well. One might say that it constitutes the ethic of psychoanalysis. From the perspective of this ethic, we work to know ourselves in order to improve not only our own life, but those of our families and society.” (p. 10)
For Turkle, (1996) screens offer the potential for meeting the imperative to self-knowledge as we use “life on computer screens to become comfortable with new ways of thinking about evolution, relationships, sexuality, politics, and identity” (p. 1). This identity play represents a crucial shift, “we are moving from a modernist culture of calculation towards a postmodernist culture of simulation” where identities are multiple and distributed (p. 1).

A guiding ethic for screens then resides in knowing ourselves in order to improve our relations with others. Let us build on this idea and ultimately refer it back to videogames. We may begin with psychotherapist Mary Watkin’s (1986/2000) concern that modern psychoanalytic theory in the West treats the sane rational self as a unified homogenous whole. Such a conception of the self, however, fails to capture the sense that our self is constituted by a multitude of selves; differing aspects of our historical and social experiences as well as of our personality. Some aspects are dark. Others lighthearted. Some are social, others introverted. Some are exuberant, others grounded. Some are responsible, others negligent. Some are constantly changing, others remain still. Some are over-developed, others under-

Yet, Watkins (1986/2000) in her Invisible Guests warns that proponents of rational theory rarely encourage these different elements of our self to dialogue; to co-ordinate and develop together. More often, they write off pretend role-play, invisible friends, and fictional life narratives as irrational if not delusional (Mary Watkins, 1986/2000). Yet, it is through these playful and expressive means that we can give voice to and listen compassionately to our disparate identities without silencing or neglecting those impulses, voices, and features of our personality we would rather not deal with. Indeed, if we are ever to control our impulses and temper our desires, it is not by denying them or giving into them, but by facing them honestly. This is the credence of what I would like to term the dialogic ethic.

In proper dialogue we do not deny the Other, nor give ourselves wholly over to the Other, but rather we receive the Other, responsibly and respectfully. Once we receive the Others within and distributed across our own self as gifts, or as Watkins refers, invisible guests, we can learn to nurture and respond to others and to society at large. As professor Heather Menzies (2005) observes this process in her own students at Carleton University, “this practice of becoming engaged, through thoughtful dialogue with a professor and fellow students in a seminar, can cultivate the confidence to become an “implicated participant” in society – that is, a participant with a sense of something to give, and with this, some feeling for and commitment to the common good” (p. 184). Menzies cherishes then the academic halls, the seminars and the informal office-hours chats where these communication skills can develop. We may now ask is it possible to develop these intra- and inter-personal skills in our screens—over chat windows and in inboxes, across message boards and even during our videogame play? Indeed, when we consider the role of play and the value of role-playing for intra- and inter-personal development videogames becomes a plausible candidate.

For decades now therapists have noted a correlation between an absence of play and a severe under-development of intra- and inter-personal relations (Belenkey, et al. 1986; Winnicott, 1971; Selman & Schultz 1990; Watkins, 1986/2000). Selman and Schultz (1990), find play to help troubled children adopt each other’s point of view and thus deepen their relationships with others, even when these children typically hold steadfastly to their own perspective, “When it is just play, children can dress rehearse for changing roles on the stage of real-life interaction” (p. 171). Likewise, Belenkey et al. (1986) discuss the importance of developing play metaphors, “a consensually validated symbol system” for allowing a “more precise communication of meaning between persons,” noting that, “Outer speech becomes increasingly internalized as it is transformed into inner speech. Impulsive
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behavior gives way to behavior that is guided by the actor’s own symbolic representations of hopes, plans, and meanings” (p. 33). Anthony Pellegrini (2005), in his extensive and longitudinal research on playground behavior finds that even rough-and-tumble play allows for compromise, cooperation, and control of impulses amongst children. Belenkey et al. (1986) caution, “without playing, conversing, listening to others, and drawing out their own voice, people fail to develop a sense that they can talk and think things through” (p. 33). Mary Watkins (1986/2000), who brought my attention to these therapists in her clear articulation of what I call the dialogic ethic writes,

“Without play or dialogue the child is constrained within a narrow band of reality. Both play and dialogue allow the child to visit the perspectives of others, as well as to dream of that which has not yet come into reality. “What is” and “who one is” become radically widened as one de-centers from the ego’s perspective and the given.” (p. 185)

As Stuart Brown (2009) explains in his book entitled Play, “when someone is deprived of true play, they are more likely to engage in narcissistic play” (p. 169). To distinguish between true play and narcissistic play, Brown (2009), employs the terms player and Player respectively. “The kind of person who is called a Player is someone who is entertaining himself or herself in narcissistic, strictly manipulative play. For Players, there is no sense of attunement with the other” (p. 169). Referring to relationships, Brown remarks, the Player “is not really looking at the date’s life and needs. Narcissistic lovers are intensely entitled, goal-driven, with orgasm, entrapment, guaranteed lifelong dependency, or domination as the goal” (p. 169). This simple yet illustrative taxonomy of play makes it clear that merely playing is not enough, one must be involved in dialogic play; in becoming attuned to the other and to the self. This is the dialogic ethic.

Videogames as Expressive Tools

What might a videogame that encourages dialogic play rather than narcissistic play look like? Justine Cassell (1999) offers one possibility. Believing that, “children can use computers in order to try out identities and to explore the possibilities of expression,” and in doing so, “make sense of their social sphere and develop an understanding of themselves,” Cassell lays out five tenets for the design of computer software and computer games: (1) Transfer design authority to user, (2) Value subjective and experiential knowledge in the context of computer use, (3) allow use by many different kinds of users in different contexts, (4) Give the user a tool to express her voice and the truth of her existence, and (5) Encourage collaboration among others (p. 300; 305). Computer games, then, are to become the site of interactive storytelling if they are to enable users to share and make sense of their own experiences. Indeed, Cassell’s (1999) work with Renga, Rosebud, and SAGE which enable children to interact with a computer by sharing their personal stories about meaningful childhood experiences holds promise for future games. Many popular commercial games are compatible with at least one of Cassell’s (1999) five tenets. Consider how The Sims and Second Life allow the user to not only customize their environments, but also to play out their own activities in their own unfolding emergent storyline (Jenkins, 2004). Or watch Red vs. Blue, to see how users of the first-person shooter game Halo fashioned their own comic-epic storylines using computer tools applied to the Halo environment. LittleBigPlanet and Spore, both released in 2008 to wide commercial success, are difficult to box into any specific genre because their in-game design tools are so expansive and accessible players can basically design whatever kind of game they want. Self-expression becomes a defining activity of these games.
Videogames as Communities of Practice

James Gee (2008a) offers another possibility. Gee encourages us to expand our notion of “games” to include “gaming.” Gaming involves “socially shared practices like FAQs and strategy guides, cheats, forums, and other players (in and out of multiplayer settings)” (p. 24). Here the metaphor of ‘windows’ comes through full force when we think of windows as supplementing and augmenting our capacity for dialogic play and interaction built around the shared common experience of a video game. As Gee phrases it, our collaboration, interaction, and participation extend beyond in-game interactions with NPCs as “the player enters Web sites and chat rooms, or uses guides, as part of a community of practice built around the game” (p. 25).

It is telling that Gee’s insights hold true for not just massively multiplayer games but also single-player ventures. Consider, for example, the cyberculture that has built up around Portal with appeal to players of varying types: competitors, achievers, explorers, and socializers alike (based on Bartle’s (1996) taxonomy of game players). Portal fans are challenging one another with user-designed maps (Competitors), embellishing their fastest completion times and walk-throughs as YouTube videos (Achievers), musing on the intersection between the Half-Life storyline and Portal’s Aperture Science (Explorers), and sharing Portal-inspired comic books and companion-cube experiences over discussion boards (Socializers). Avatars, objects, tutorials, narrative, and symbology are taken up in the online space and reinvigorated with new meaning. Game-playing becomes a multi-media experience that no longer begins and ends within the store-bought box of the game.

Videogames as Collaborative Activities Encouraging Varied Play-Styles

Douglas Thomas and John Seely Brown (2009) develop the social aspects of videogames even further in their discussion of online guilds that build up around massively multiplayer online role-playing games (MMORPGs) such as World of Warcraft. In these games high-level tasks (such as defeating a highly powerful creature) are constrained so that their completion can only be realized through large groups of players with diverse play-styles working together. (Thomas & Brown, 2009) Coordinating this activity usually requires online communities whose members undergo daily and dynamic negotiation practices (for membership, for playtime, for status, for rewards, etc.) (Thomas & Brown, 2009). These wide-ranging activities—from self-expression to collaborative team-work—including the narcissistic and compassionate forms they can take demonstrate that the experiences of gameplay are profound enough to complicate any simplistic approval or dismissal of games as good or bad.

Rock Band 2: A Case Study

My familiarity with Rock Band 2 grew as I witnessed its potential to sustain the life of work parties, to organize the activities of Tuesday game nights with colleagues, and to launch a room full of pre-adolescents into uninterrupted joy and motion at a local Boys and Girls club. At the time I could not precisely identify what made Rock Band 2 so inviting and appealing to large groups of people. I was mostly just lost in awe especially as I watched my girlfriend, Jasmine, who shies away from party games pick up a Rock Band 2 guitar to try it out. After becoming adept at guitar and bass (if you can call medium level adept) I became fixated on getting high scores to unlock new songs. Rock Band 2 flows with tell-tale signs that
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immediately indicate the quality of your playing, of your group’s efforts, and of the overall score. Unlike my early experience with Portal, in which I did not look forward to each new level simply because finishing levels was not rewarding (save the chance to hear some quirky AI dialogue about how I might receive cake), Rock Band 2 offers tempting rewards—new songs—along with the fantasy of being the rock star triumphant enough to unlock said song. I bought into the fantasy and was hit hard—blindsided—for just when I thought I was improving I became unable to unlock any more songs.

In response to this sudden failure my sensitivity to scoring heightened. I went beyond looking for the outward signs of success—listening to fan feedback and collecting star power—to trying to detect the underlying rules of scoring points and unlocking new songs. I paid close attention to individual score multipliers, star power group score multipliers, and how these affected the rate at which our band’s score increased. I paid attention to the relationship between star power, notes hit, and of the resultant score. Yet, I could not devise the relationship between overall band score and song to be unlocked.

Rather than internalizing the learned helplessness typically contingent to prolonged exposure of inconsistently given rewards despite persistent effort I began conducting mini-experiments to test further hypotheses of the game’s reward system. Perhaps the band needs to play a single song and receive 4 stars? Perhaps we must all play on medium or hard difficulty? Maybe we have to choose a more difficult song? These choices, however, did not give me the feedback I wanted. I became frustrated. I began making stupid mistakes amidst my constant monitoring of in-game semiotic information. I felt the urge to blame the game’s indecipherable reward system (an error of discernment, see Salen and Zimmerman (2003) discussion later on), but felt my own inability to form adequate hypotheses as a rock-band-player-turned-part-time-scientist to be at fault. Or worse, perhaps I am just not a good enough player to keep unlocking songs.

During the following Tuesday I met up with Zach, Sara, and Grant to resolve this issue. We began an eight song set and I told myself, ‘surely, if we all play consistently well over eight songs we’ll have to unlock a new song. If we play well and don’t unlock a song then I’ll quit this stupid game.’ I did not share my thoughts out loud with everyone else—instead I tried to make encouraging comments like, “yes we just hit 3 stars, only 2 more to go.” After a few songs in a problem occurred. Zach, to challenge himself selected a harder difficulty than he normally does which is great for receiving higher scores, but midway through the songs picked up in their difficulty causing Zach to fail out. After three fail outs the song ends—it can be replayed, but in the middle of the set the difficulty level cannot be adjusted. And so the rock-and-roll star is likely to remain over their head—excruciatingly failing out every time. Sara, however, was able to keep up everyone’s spirits. Championing teamwork, learning through practice and repetition, Sara believed that we could become unstuck, while I began to feel another night had been wasted. Sara spoke about the Zone of Proximal Development (development of expertise through the help and contribution of others; ZPD for short), and she developed an elaborate system for ‘saving’ Zach every time he failed out.

To briefly detail Sara’s impressive semiotic work: If one member fails out the rest of the band fails out shortly thereafter unless they are saved within a brief span of time. Rather than saving band mates immediately, Sara argued that we could wait to save them until the very last moment, as indicated by when the fans start booing in unison. It was risky, but it worked. Too often when band mates fail out they are brought right back into the same difficult chords or section of the song that caused them to fail in the first place. Her semiotic work goes further still—Sara realized that if you use your star power as soon as a band
mate’s rifts turn red it boosts them back towards the top of the green column. As such we developed a new elaborate system of ‘pre-emptive’ saving. These efforts moved us a little bit forward, but ultimately we became stuck and had to quit. We began a shorter set and so I bottled my frustration of not being able to test my hypothesis of whether completing an 8-song set was key to unlocking even more songs. Yet, even in this new set we got stuck again. Another player chose to challenge themselves and we could not make it over the long haul. It was at this point that I snapped.

I made some snide comment such as ‘why do you challenge yourselves when the whole band is relying on you to get over the long haul?’ Sara, who had been a beacon of communal effort, of framing our dilemmas in Rock Band 2 opportunistically, of championing the importance of ZPD, stopped speaking to me after that comment. She left the room and I felt terrible. I should have seen it coming. The frustration mounting. The fixation on scoring. The diminishing returns of enjoyment. How long had I been playing Rock Band without actually enjoying the songs because I was too bent on reading the ‘semiotics’ of scoring, of star power, of combined individual multipliers/star multipliers/and extended note streaks? How long had I been listening to myself tally the scores, and not listening to the songs; not listening to my friends? Further still, if I had unlocked a new song would my excitement be immediately tempered and relatively short-lived as I fixated back on the score in a neurotic urge to unlock the next song? What happened to the parties? To the Boys and Girls Club? To being lost in awe? To watching my girlfriend approach her first video game? Those are the moments I cared about. But I had screwed it up. Worse, I took Sara down with me.

After some time had passed I apologized to Sara. That following Tuesday, Grant, Sara and I tried our hand (and plastic instruments) at Rock Band 2 one more time. Only this time I was having fun, cracking jokes, and concocting new team-mate saving strategies to get us through the 8-song set. When we completed the set something odd happened—the screen signaled for us to keep playing our instruments. As we did, our buttons triggered fireworks on the screen. Blues, reds, greens. What were we celebrating? That we had just beaten the game! Sara announced, “That’s why the game would not let us unlock any new songs, we had unlocked them all.” I had to laugh at myself. This is how I came to experience firsthand that despite the developers’ best efforts to reward player interaction and sociability, the player does not always revel in the dialogic ethic. This potential disconnect reinforces the idea that the experience of gameplay is always emergent from the design of the game itself, the community-of-practice around the game, and the player’s own mode of fulfillment.

SYSTEMIC THINKING

Learnable System, Subjunctive Characters, and Transactive Choices

Are the systemic properties and underlying rules of the virtual world consistent and persistent enough to be learnable through play-testing and informal experimentation? Does the videogame cast you as one of the agents of the interactive system in the virtual world? Are the consequences of your character’s in-game choices made visible to you? Just as important, are you implicated by the decisions you make?

The Systemic Ethic of the Humanistic Ethos

Just as Sherry Turkle argues that the potent and provocative nature of our screen-based way of relating to others demands an appropriate ethic in response, Stuart Kaufman (2007) in his Re-inventing the Sacred, believes that our growing knowledge of complex systems and our own role within them inspires and challenges us to
develop a new ethic as well. For the effects of phenomenon within complex systems are marked with uncertainty, ambivalence, and multiplicity. Maneuvering these complex properties requires new modes of inquiry – thinking, reasoning, and arguing. Kaufman goes further, revaluing the nature of ethical reasoning itself as the ability to be at home in the multiplicity of contending values, purposes, and goals.

Deanna Kuhn, in her studies of children using interactive screen-based simulations, believes that scientific thinking must move “beyond the control-of-variables strategy” to fostering skills for inquiry into complex phenomenon. Kuhn, Iordanou, Pease, and Wirkala, (2008) offer three such skills for advancing scientific thinking:

“The first is strategic and involves the ability to coordinate effects of multiple causal influences on an outcome. The second is a mature understanding of the epistemological foundations of science, recognizing scientific knowledge as constructed by humans rather than simply discovered in the world. The third is the ability to engage in skilled argumentation as entailing the coordination of theory and evidence.” (p. 435)

These skills speak not just to scientific thinking but also ethical reasoning for ethical inquiry also involves “the ability to coordinate effects of multiple causal influences on an outcome,” a recognition that knowledge “is constructed by humans,” and thus subject to our limitations and biases, and that ethical reasoning can be expressed, challenged, and developed through “skilled argumentation” that coordinates theory and evidence. As Ethicist Joseph Selling (2004) argues “Ethicists don’t tell people what to do or not to do” (p.2). Instead, “They provide information or awareness about the things that people might take into account in determining their own decision-making and behavior” (p. 2). As long as ethical dilemmas and scientific phenomenon are steeped in the inner-workings of complex systems the two can be bridged and afforded the same analytical approach—one that engages our systemic thinking.

Although systemic thinking overlaps with several features of the poetic imagination and our dialogic relations—and naturally so because each of these ethics is a formulation of a broader Humanistic Ethos— it is important to pull out and foreground observable measurable indicators of systemic thinking while asking “in what ways can gameplay experiences be compatible with systemic thinking?” Deanna Kuhn et al. (2008) has already provided three indicators of systemic thinking—acknowledgement that (1) the outcomes and effects of complex phenomena may be caused by multiple factors, (2) knowledge of such phenomena is constructed by human efforts replete with their biases and shortcomings, and (3) rational argumentation entails reason-giving that couples theory with evidence. That Kuhn’s conclusions were shaped by her research in 2004 with interactive science simulations provides evidence that screens can actually be focal points supporting activities of inquiry. Yet, for our purposes here Kuhn’s science simulations lack two qualities essential to videogames—narrative and characters. With the inclusion of these two qualities science, ethics, and games begin to productively blend and merge.

**Game-Like Systemic Simulations**

The first step to introducing characters, storylines, and ethically-relevant societal issues into simulations was made by researcher Dietrich Dorner (1996) whose Tanaland and Greenvale simulations cast the player in the role of a god-like mayor for a fictional town in Africa and England respectively. Each turn the players are allowed to make as many decisions as they would like with the end goal being their town’s prosperity. They can affect tax law, agricultural practices, touristic attractions, employment opportunities, and so forth. Afterwards an in-game year passes
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and the players witness how the results of their choices play out. They are allowed to make more decisions and then let another in-game year pass, and so on for a total of ten turns when they see whether their town has been doomed or improved by their choices.

The key to Dorner’s simulations is that they are systemic. The underlying system of rules can be discerned over time if players are willing to learn from their failures and inquire further into the outcomes that take them by surprise. Indeed, Dorner (1996) found that the players who asked more why questions, who were more interested in the causal links behind events, and who inquired more deeply into their analyses were more successful than players who did not do such things. These qualities and others that suggest an understanding of the coordination of multiple causes and effects, a coordination of viewpoints in constructing knowledge, and a coordination of theory and evidence constitute the systematic ethic, whether it is applied to the complex systems of science or the ethical dilemmas of society.

Thus far, games with an underlying systemic rule set can be characterized as serialized, persistent, and interactive. Serialized because in-game happenings develop over time building upon previous events. The game is not merely a set of disconnected episodes or vignettes that can be interchanged or reordered without any substantial loss in meaning or comprehension. Persistent because the underlying rules, mechanics, and overarching goals remain the same over time. If there are changes to the rules these changes can be meaningfully discerned. Conversely, if the rules were in constant flux they would not be persistent, nor would the game be stable enough to allow for systemic thinking. Interactive because the game environment responds to our intervening actions, changing either the game itself for us in the process. As such we can come to learn the underlying rules of the system. If the environment were not interactive, players would not have choices and the game would become meaningless (Salen and Zimmerman, 2003). Likewise, if the environ-ment fails to communicate the consequences of a player’s choice through either poor discernment (I cannot detect a change) or poor integration (I see a change but I do not understand how it impacts my future goals) the game also becomes meaningless (Salen and Zimmerman, 2003).

Taken together, serial, persistent and interactive rules make for a challenging game. In order to meet its challenges the player must divine the game’s underlying rules—a feat that requires patience and attention, concentration and focus. Hence the image of the player spending hours on end in the throes of a challenging game (perhaps instantiating what Mihaly Csikszentmihalyi (1998) terms Flow). Yet, these simulations are not yet a game, for they uncouple personal engagement from intellectual challenge. How can we care about an ecosystem or complex ethical system if we are positioned outside of it? How can we feel any responsibility if we are in absolute control of a society yet not implicated by any of our decisions and interactions? How can we be transformed by our actions if our own livelihood is never at stake? In effect, these simulations are still missing one important quality—the subjunctive.

Transactive Videogames

Games are subjunctive, as Jerome Bruner (1987) argued great literature is, in that they allow players to project their identity onto some in-game (or in-book) protagonist or character. As a character inside the story we can begin to reason with a purpose beyond the merely intellectual. We can grow to understand the values, morals, and needs of others at the same level we must in real life—by interacting and relating to others, coordinating multiple viewpoints, constructing our understanding, and fielding counter-examples. We shift from the untouchable Gods of simulations to the fallible human actors vulnerable to transformation by their experiences.

In addition to purposeful reasoning we can experience the consequences of our choices and
learn from the inadequacy of our previously used models-of-relevant-and-causal-factors in order to enhance our ethical reasoning. Again, ethical reasoning at the systemic and experiential level does not progress by acting as if we are all-knowing impartial God-like forces. Rather systemic thinking develops as we open ourselves up to multiple levels of analysis, considering multiple viewpoints and maneuvering through multiple value-systems to craft decisions that we recognize can always be improved upon.

James Gee (2008b) argues that a projective identity can give us embodied empathy for a complex system in a video game. More than embodied empathy a projective identity can prepare us for action- and goal-directed behavior. As game players we are not just systemic thinkers, but ethical actors. We are not just learning a system, but learning how to act within that system. More accurately, we are positioned so that the system acts upon us, implicating us for our actions and challenging us to improve upon our ideas and transform ourselves. *Quest Atlantis* creator Sasha Barab employs the terms transformational play and transactive engagement in order to describe a game’s capacity to work upon and transform us; that is, to play us (Barab, Scott, Siyahhan, Goldstone, Ingram-Goble, Zuiker, & Warren, 2009; Barab, Ingram-Goble, & Gresalfi, under review). It is in this manner that Quest Atlantis’ recent educational quest, *Plague*, positions players to collect contending viewpoints on a bio-ethical dilemma that may save a town from disease but at a worrisome cost.

Your role in the fictional town is legitimized as you learn that your own family history is deeply tied to this town. Many of the characters know your mother’s reputation and treat you accordingly. The newspaper editor requests your assistance in replacing his investigative reporter who has recently succumbed to illness. Your job: find out all you can about the plague to complete a persuasive argument in an unfinished editorial regarding the town’s bio-ethical dilemma. But first you play with PA9000—Perry’s Persuasive Argument Tool—which illustrates the relationship between theories, reasons, and evidence. The dilemma you uncover revolves around a scientist bent on creating a living organism to test possible cures for the plague. As you enact decisions on either side of the bio-ethical trade-off, the town’s members respond to your actions accordingly. You are explicitly implicated by your own decisions and their consequences. *Plague*, then, teaches us that videogames can situate their content, their experience, and their players in a way that affords an authentic desire to enact ethical reasoning at a systemic level. At the same time the game plays us as it feeds back the consequences of our decisions and actions. Some design principles articulated as guiding questions for a systemic ethic grounded in transformational play (Barab, et al., under review) follows:

- What is the game’s subject matter (issue, dilemma, trade-off, activity, storyline, etc)?
- What is the perspective afforded to this subject matter?
- How is this perspective legitimized through player choice?
- How is the consequentiality of player choices made meaningful?
- How are players exposed to alternative perspectives?
- Are players given the opportunity to engage with ethical issues or activities (i.e. war, prisoner interrogation, cloning, grand theft auto, etc) at a robust and sophisticated level?

Ethical dilemmas when presented in their complexity and at multiple levels of analysis can come to parallel the complex systems with which players must hone their attention, care, and patience if they are to ever understand them and make meaningful decisions based on them.
LIMITATIONS AND FUTURE DIRECTIONS

I believe the principles behind the poetic imagination, dialogic relations, and systemic reasoning, along with existential vigor can be further articulated and fashioned into a clearer Humanistic Ethos. These dimensions have their limits, however, for not only are they arbitrarily divided (perhaps one could make three or five or even more divisions) they fail to address important environmental and socio-economical questions. How can we minimize the impact of videogame cartridges and platforms on the environment? Are videogames creating a further divide between rich and poor, workers and non-workers, the young and the old? Despite these limits, the presented division of the Humanistic Ethos into the poetic, dialogic, systemic, and existential rescues it from an overbearing vagueness by providing observable active categories that can be transformed into measurable research units and integrated into research programs.

Although there are few qualitative studies, and even fewer quantitative studies demonstrating that games are capable to develop or hinder our imaginations, our intra- and interpersonal relations, and our systemic thinking, several lines of research anticipate progress in this direction. Good working examples are (a) the previously mentioned work of Stephen Dine-Young (2000). Dine-Young found that particular movies have more active potential than others—some can inspire ideals with which to strive (Star Wars), while others can help us relate to some aspect of humanity lost (Schindler’s List). (b) Sherry Turkle’s (1997) analysis of slippage—constructively exploring multiple personality traits online in order to enrich behavior offline. Her research in MUD environments revealed that interacting through online personae can afford the productive dialogue necessary for inter- and intra-personal development for some but for others it can become addicting and hinder growth. What are the moderating variables at play here? (c) Steinkuehler and Duncan’s (2008) analysis of systemic thinking in World of Warcraft message boards. They found inquisitive users testing, debating and co-constructing their knowledge of the persistent underlying rules and formulas that determine which in-game creatures drop what kind of loot at what rate. These cover the poetic, dialogic, and systemic possibilities of our screen-based-technologies and digital-medias respectively, but they can surely be deepened.

Jenova Chen believes screens can be portals that lead us somewhere deep into our imaginations. Sherry Turkle finds screens to be a powerful site for dialogue between our decentralized distributed selves. James Gee predicts screens such as simulations and videogames will become the next metaphor for how we understand the mind and experiential reasoning. Taken together screens have the power to awaken the poetic imagination, to orchestrate dialogical play, and to legitimize systemic reasoning. At the same time screens do not always live up to these potentials both in their design and in their usage. In worst case scenarios, screens follow an accelerative-obsolescence strategy in their development, a commercial ethic in their hype, and a narcissistic impulse in their reception. But innovative game designers and players in search of poetic, dialogic, and systemic sophistication are opening new windows with which to receive screens.

REFERENCES


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Section 4

Youth, Family, and Play
Chapter 10
Ethics at Play:
Patterns of Ethical Thinking among Young Online Gamers

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ABSTRACT
This chapter discusses how young people think about ethical issues in online games as seen in the GoodPlay project’s interviews with fourteen online gamers, ages 15 to 25. After providing background on the GoodPlay project and relevant moral psychology and video games research, this chapter describes individualistic, interpersonal, and communal models of ethical thinking that describe young players. These observed models suggest that online games are encouraging players to practice sophisticated ethical thinking skills and therefore might be valuable tools for fostering ethical thinking. The chapter concludes with a discussion of future directions in the study and use of games to foster ethical thinking.

INTRODUCTION
In online multiplayer games, players interact with people they have never met to learn new skills and norms, compete for resources, and complete complex tasks in large groups—situations that raise myriad ethical issues and demand informed decisions. The presence of such ethical content suggests that games might be valuable tools for helping young people think about and deal with ethical issues. Games, in other words, might help foster ethical thinking skills—such as the ability to take the perspectives of others or predict the consequences of an action—that inform one’s decisions about how to act in life. But do players, and young players in particular, engage with ethical issues in games in meaningful ways that might encourage stronger ethical thinking?

In this chapter, I describe the different models of ethical thinking that online gamers apply to the ethical issues they encounter in games. These models
are derived from the GoodPlay project’s in-depth qualitative interviews with fourteen 15-25 year old gamers. Together, these interviews show that all young people face a variety of complex ethical issues in online multiplayer games, but think about and resolve these issues using diverse strategies and thought processes. In particular, subjects show different capacities for taking the perspectives of others, evaluating the consequences of their actions, and assessing game rules—three important components of thinking ethically in games. Based on these differences among subjects, I discovered three models that fall along a spectrum of ethical thinking. Subjects described by the individualistic model are primarily focused on the self and judge their actions according to personal consequences. Subjects described by the interpersonal model consider players who are close or similar to the self and judge their actions according to reciprocity and fairness. Subjects described by the communal model consider the game community and its many stakeholders and judge their actions according to their role within and responsibilities to that community. As we will see, any given subject’s observed ethical thinking tendencies often do not perfectly fit one of these three models, but I was able to roughly categorize each subject according to the model that best described him or her.

After providing relevant background on moral reasoning, games studies research and the GoodPlay project’s research design, I describe in greater detail these three models of ethical thinking and the subjects each model best describes. In the concluding discussion, I will speculate about the factors that might account for subjects’ different ethical mental models and discuss how the GoodPlay project’s findings might guide future research, game design, and educational practice in the service of fostering ethical thinking among young people.

**BACKGROUND**

**Moral and Ethical Development and Education**

The approach to ethical thinking in games used in this chapter stems from research into the psychology of moral reasoning and child development (Gilligan, 1982; Kohlberg, 1981; Turiel, 1998). As opposed to making normative claims about what is ethical or unethical, the field of moral psychology is concerned with characterizing the ways that individuals think about ethical issues and identifying those cognitive faculties that— independent of one’s particular ethical stance—are relevant to ethics. Kohlberg (1981), for example, posits six stages of moral development based on empirical research into how young people reason through various hypothetical moral dilemmas. Each of these stages involves certain ways of thinking about rules and authority, responsibility and obligation, and people and groups.

Character Education initiatives such as “Character Counts!” (Josephson Institute, 2009) have gained prominence in U.S. education in recent decades in an attempt to foster particular values and virtues, but past U.S. moral education movements (Howard, Berkowitz & Schaeffer, 2004) as well as current ethics and citizenship education initiatives (Colby, Ehrlich, Beaumont & Stephens, 2003; Fischman & Gardner, forthcoming) draw heavily from the tradition of psychological research discussed above. That is, they focus on developing particular cognitive skills or ways of thinking that are relevant to ethics. In trying to foster ethical thinking, these educational initiatives make heavy use of hypothetical dilemmas and role-playing scenarios, teaching tools that have game-like qualities, but video games thus far remain outside of this domain.
Ethics and Pedagogy in Video Games

While video games are not often considered to support ethics and citizenship education, interest in using games as pedagogical tools is mounting. Video games are increasingly popular in the U.S. and have become a staple in young people’s entertainment diet; a recent nationwide survey found that 97% of teens ages 12-17 play video games, and that 50% of teens played video games “yesterday” (Lenhart et al., 2008). As video games continue to evolve as a medium and enter mainstream culture, researchers from the various social sciences and, more recently, the field of video game studies, have sought to better understand how games engage and affect players. Studies related to video games and ethics have roughly followed the more general trends of research on games and learning. Initial studies relevant to ethics focused on the content—and especially the violent content—of games and sought to measure how exposure to this content affected players’ aggressive behavior (Anderson et al., 2004; Calvert & Tan, 1994; Cooper & Mackie, 1986; Gentile, et al., 2004) and pro-social or cooperative tendencies (Anderson & Bushman, 2001; Gentile et al., 2008). In the past decade, however, a body of theoretical work grounded in the particular attributes of video games has clarified the relationship between video games and learning. This work emphasizes video games as designed experiences (Squire, 2006), whereby players practice epistemic thinking (Shaffer, 2005) and develop situated knowledge through active role-playing, decision-making, and reflection (Gee, 2004; Jenkins & Squire, 2004; Shaffer, Squire, Halverson & Gee, 2004).

Studies of ethics and games grounded in this theoretical work show how games give players the opportunity to negotiate rules and develop ethical frameworks (Consalvo 2005/2007) and exercise critical ethical reasoning skills (Simkins & Steinkuehler, 2009). These works, which primarily deal with single-player games, emphasize games as ergodic media. Players are not just exposed to ethical content; they explore and experiment with ethical choices, actively interpret game ethics, and relate these experiences to non-game contexts. While these studies have focused on the ethical dimensions of existing commercial games, some designers draw from this literature to create games meant to engage players in ethical scenarios as well (for example Quest Atlantis, 2008).

Multiplayer online games are similar to the single-player games that have thus far been the focus of ethics and games scholarship, but offer the added experience of interacting with other real players, and so may play a particularly powerful role in fostering ethical thinking. Studies of massively multiplayer online role-playing games (MMORPGs), in particular, describe a complex social space characterized by conflicts as well as a “multiplicity of interleaved collaborations” between players (Nardi & Harris, 2006; see also Williams, et al., 2006). This social context no doubt raises ethical questions for players (Warner & Raiter 2005). Rather than grapple with ethics through an experience largely determined by the game designer, as is the case in single-player games, players in multiplayer games encounter ethics through dealing with other people in a relatively low-stakes environment. Put differently, these games do not offer ethical simulations, but real ethical experiences, and so have great potential for fostering ethical thinking. In analyzing the ethical thinking present among young multiplayer gamers, this chapter is meant to test that potential by exploring how young people respond to the ethical content of online games, and pave the road for future work on using games to foster ethical thinking.

Methodology

The 14 online gamers discussed in this chapter are part of a larger sample of 61 digitally engaged youth interviewed for the GoodPlay Project, led by Dr. Howard Gardner at the Harvard Gradu-
ate School of Education with the support of the MacArthur Digital Media and Learning Initiative. The GoodPlay project conducts research to gain a deeper sense of the sorts of ethical issues confronting young people online today, to catalogue young people’s mental models for thinking about and dealing with these issues, and to identify factors that might influence young people’s mental models.

For the GoodPlay study from which this chapter draws, we recruited our subjects from the Greater Boston Area, drawing from three public high schools for our youngest (15- to 17-year-old) cohort, six area colleges for our mid-age (18- to 22-year-old) cohort, and several local work sites, two online groups and the Boston-area Craigslist website for our post-college (23- to 25-year-old) cohort. Through each recruiting site we administered a paper-based or online version of our screening survey, which asked participants about their demographic background and their level of engagement in a variety of online activities. We recruited interview participants from the 1,680 people who took our survey.

The participants in the overall study range in age from 15-25 and demonstrate an above-average level of engagement in at least one type of online activity. Of 61 subjects, we interviewed 26 about social networking, 14 about gaming, 13 about blogging, and 8 about other types of content creation. 29 subjects are male and 32 are female; 34 identified themselves as White, 8 as African American, 8 as Asian American, 7 as Latino, 1 as Native American, and 3 as “other.”

We strove for a similar degree of engagement and socioeconomic, racial, and gender diversity within our group of 14 online gamers. Most of these gamers play or have played quite a few games both online and offline, but we chose to focus on particular gaming experiences: eleven were interviewed primarily about their experiences in one or more MMORPGs, two about their experiences playing online first-person shooters, one about her experience with a small, text-based online role-playing game. Five of these gamers are high school-aged (15-17), six are college aged (18-22), and three are post-college aged (23-25); eight are male and six are female; eleven identify as white and three as non-white.

With each of our 61 subjects, we conducted two in-person, semi-structured interviews, the first of which, the “person-centered interview,” typically lasted between 70 and 90 minutes and focused on the subject’s personal history of digital media use and on the ethical issues s/he has faced and dealt with in his or her primary online activity. The second interview, which will not be covered in this chapter, involved posing several ethical scenarios to subjects.

After completing these interviews, our team developed, reliability-tested, and applied a coding schema with over 80 themes to each interview. These themes capture: a) subjects’ conceptions and online behaviors with respect to five ethically-loaded issues—identity, privacy, credibility, ownership/authorship, and participation, b) the presence or absence of various components of ethical thinking such as perspective-taking or consequence-driven thinking, and c) independent variables that may affect the ways in which young people navigate these ethical issues.

For the 14 online gamers discussed in this chapter, I created an analysis matrix based on further review of each coded transcript. Each row of the matrix profiles a subject with respect to a number of attributes including ethical issues discussed, ethical thinking skills demonstrated, training and mentoring experiences, and in-game group involvements. Based on this matrix, which allowed for direct comparison between subjects, I derived the three models of ethical thinking discussed below.
Ethics at Play

Findings: Individualistic, Interpersonal and Communal Thinking

When is it okay for me to kill another player? How much time and energy should I devote to helping team members? If a player is having trouble fighting a monster, should I help her? How much should I charge an inexperienced player for an item? If a player is swearing at me, what should I do? Online multiplayer gamers wrestle with these sorts of questions in a context that does not offer easy answers. Online multiplayer games are characterized by large and often unfamiliar communities, distance between individuals, anonymity, a lack of accountability, and a disconnect between actions and their effects. For example, because the popular MMORPG World of Warcraft has a large number of players, is only lightly moderated, and requires players to interact with each other as characters using only voice and text, a player can usually yell at a complete stranger without perceiving how that stranger is affected and without experiencing any retribution or punishment. These conditions give players relative freedom to act as they please, leaving it up to them to evaluate their actions and develop ethical stances toward gaming.

In looking at the ethical stances that subjects have developed—that is, in observing how they think about and resolve ethical issues in online games—I identified three types of skills that subjects employ. These skills, which I will call perspective-taking, consequence-based thinking, and rule-based thinking, appear to be major components of ethical thinking in games, and the ethical thinking models described here are characterized by different levels of fluency in these three skills.

Perspective-taking involves using social cues, past experience, and one’s imagination to understand the motivations and needs of others. Taking the perspectives of others and using these perspectives when making decisions is essential to effectively judging how one should act toward others and understanding and responding to others’ actions. Consequence-based thinking involves understanding and considering the full range of consequences that can stem from one’s actions. In multiplayer games, one’s actions can have both immediate and distant effects on oneself, other people, groups of players and the gaming community as a whole; one must consider these possible effects to act in a way that is consistent with one’s intentions.

Whereas perspective-taking and consequence-based thinking are skills essential to ethical thinking in any context, considering rules is a skill important to games in particular. Rules are a pervasive and prominent aspect of gameplay that players must take into account when thinking about how to act in a game (Consalvo, M., 2007; Juul 2005). Unlike a more precise game such as chess, however, most online games do not have clearly delineated sets of rules. Designers build rules and explicit codes of conduct into games, but a great deal of room for ambiguities and disputes remains. Rule-based thinking, then, involves interpreting game rules and evaluating actions based on whether the official or agreed-upon rules of a game allow them.

In analyzing how and to what extent subjects demonstrate perspective-taking, consequence-based thinking, and rule-based thinking, I found that each subject tends toward one of three models of ethical thinking, each characterized by a different approach to these skills. Of our fourteen subjects, three are best described by what I will call an individualistic model, six by an interpersonal model, and five by a communal model. These three models are summarized in Table 1.

As we will see, the individualistic, interpersonal and communal models comprise a spectrum of ethical thinking, characterized by outwardly expanding spheres of responsibility and consideration. To be clear, these models do not describe our subjects in full, nor do any of our subjects perfectly illustrate the individualistic, interpersonal, or communal approach to ethical thinking. In particular,
some subjects primarily hold one model but from time to time display tendencies of another model. I will detail these models and better describe those subjects who exemplify them below.

**Individualistic Model**

**Ina**, 16, plays as two different characters in *Runescape*, a “good” girl who is nice to others and an “evil” boy who is mean and who she uses to scam her cousin and possibly others out of in-game money. She thinks of *Runescape* as a fun chance to play around with these identities, and doesn’t seem to understand or mind her effects on others. The only rule that she cites is that you shouldn’t give out personal information; other than that, anything goes, because she’s just playing to have fun.

Our three subjects who primarily exercise the individualistic model rarely hold their actions or the actions of others to any sort of external standards, but instead think largely in terms of benefits or harms to the self. They are focused on personal consequences, rarely if ever taking others’ perspectives or demonstrating an understanding of and commitment to shared rules. Ina, described above, is a strong example of this model. She sees games as a source of personal amusement and from time to time does things other players might frown upon (like scamming), not because she is particularly intent on causing others harm but because she has fun playing that way. Other people or the rules of the game simply don’t enter into the equation.

The other two individualistic subjects sometimes demonstrate a regard for people and rules beyond the self, but generally demonstrate an individualistic orientation. **Isaac**, 18, for example, seems to approve of people being nice to each other and dislikes it when people are mean to him; these beliefs, when expressed by other subjects, usually suggest a more general regard for others’ feelings. But later in his interview, Isaac says that he is nice to other players in *Runescape* because "if you say bad things to them or if you threaten them because they’re not giving you something, they’ll kill you," suggesting that his regard for others is in fact based on calculations about how to minimize harm to the self. This orientation is further demonstrated in Isaac’s experience playing Halo, where he and the offline friends he plays with will “yell at people we don’t know because they’re far away;” when faced with few consequences to the self, Isaac does not appear to consider others at all.

The third individualistic subject, **Isabel**, 20, while a slightly stronger perspective-taker than Ina or Isaac, is arguably the subject who has caused other players the most emotional distress. Given the opportunity by her tech-savvy boyfriend, Isabel

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**Table 1. A summary of how subjects described by the three ethical thinking models engage in perspective-taking, consequence-based thinking, and rule-based thinking**

<table>
<thead>
<tr>
<th>Ethical Model</th>
<th>Perspective Taking</th>
<th>Consequence-based Thinking</th>
<th>Rule-based Thinking</th>
<th>Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individualistic</td>
<td>Does not recognize the feelings or motivations of other players</td>
<td>Concerned with personal consequences</td>
<td>Considers rules to avoid punishment</td>
<td>3 subjects</td>
</tr>
<tr>
<td>Interpersonal</td>
<td>Basic empathy; considers perspectives of close relations and players similar to self</td>
<td>Considers immediate consequences to others, consequences familiar from personal experience</td>
<td>Follows rules to promote fairness, reciprocity</td>
<td>6 subjects</td>
</tr>
<tr>
<td>Communal</td>
<td>Considers perspectives of distant others, community stakeholders, and players different from self</td>
<td>Considers consequences to others, small groups, and gaming community as a whole</td>
<td>Follows rules to strengthen gaming community, applies ‘spirit of the rules’ to novel situations</td>
<td>5 subjects</td>
</tr>
</tbody>
</table>
tampered with the design of the game she plays to get massive amounts of free items. Isabel was initially hesitant to cheat, because she did not want to get in trouble, but she sees no problem with breaking the rules: “Yeah, there’s the cheating again. But as I said, to me it’s just a game. Everybody’s trying to get ahead in the game. So if you figure out a way to do it better than someone else, why not do it?” Isabel’s actions created uproar in the gaming community, and when the company finally cracked down on Isabel’s cheating, they deleted the accounts of everyone who had traded with her, forcing people who had spent years improving their characters to start over.

Isabel demonstrates a limited ability to take others’ perspectives, demonstrating empathy for others who are either similar to her or close to her—people just barely beyond the self. For example, Isabel does not fit in at school, and she shows concern for people in a similar situation online, saying that “When people make fun of them, it just makes me feel sick.” But on the other hand, she refuses to empathize with people who are angry about her massive cheating: “They all got really, really mad when my boyfriend and I were cheating. They had huge forums about it and were all so angry. It was really funny, how mad they got, because to me, it’s a game, and a game’s a game.”

Here, she is faced with people who take the game and its rules seriously, and she does not understand or respect this perspective.

Analysis of the perspective-taking, consequence-based thinking, and rule-based thinking skills demonstrated in interviews with these three subjects suggests that these subjects have small spheres of attention or responsibility; they have little sense of or regard for the people with whom they are interacting or the effects that their actions have on others. All three subjects, like Isabel, justify their actions by saying that it’s “just a game.” This telling expression suggests that it doesn’t ultimately matter to them how they act within the game, because they don’t think games demand ethics or have important consequences. That subjects hold this view of games is unsurprising: games DO have less important consequences than other spaces, and the fun of games often comes from “letting loose,” not from developing a strong personal ethic. Far more surprising is that only three of our subjects primarily held this individualistic ethical model; as we will see, our other subjects tend to think about their participation in online games differently.

**Interpersonal Model**

Melissa, 20, used to play Runescape, but found that people were mean to her and used dirty tactics to get ahead. Recently a friend introduced her to World of Warcraft, and so she is just starting to play that. She thinks “griefing” other players is wrong—there’s an honorable way to kill people and a dishonorable way, and you should fight people who are at your level, otherwise it’s just like offline bullying, it’s unfair. She feels she should help people who are also in the Horde (all World of Warcraft players choose to be part of either the Horde or Alliance faction), because others do that for her, and she generally tries not to make others feel bad. She sometimes pretends to know how to do things or acts experienced so that people will let her join their group for a quest; she usually asks her friend when she doesn’t know how to do something and tries her hardest to do it, but sometimes they figure out she’s a newbie and they get really mad.

Six of our subjects are best described by an interpersonal ethical model. These subjects, in addition to thinking of the self when making ethical judgments, tend to extend this self-regard to others. Melissa, for example, has been frustrated in the past by other players who scammed or grieved (harassed or bullied) her, and so avoids these behaviors because she doesn’t want to inflict the same harm on others. Put differently,
she recognizes that other players have feelings like her own, considers how her actions will affect those feelings, and subscribes to rules (such as “fight people who are at your level”) that, if everyone follows, will make the game fair and limit these harms.

Subjects described by the interpersonal model tend to demonstrate an intermediate form of perspective-taking that I will call basic empathy. In online games, players act through animated characters and typically communicate through text, creating a distance between individuals that makes it easier to objectify others than in face-to-face interactions offline. Basic empathy involves recognizing that other people control these characters—people who have feelings and needs that deserve consideration. Subjects who demonstrate basic empathy are able to ascribe their motivations and preferences to these other people, but have trouble understanding or keeping in mind the ways in which other people might differ from the self. These subjects engage in a similar process of self-projection when thinking about consequences; they evaluate how their actions will affect others based on how they themselves would be affected. Because of this approach to perspective-taking and consequence-based thinking, many of these subjects, including Manny, 23, are committed to a personal ethic of reciprocity:

> Well, I would say there's kind of an overlying rule of just being honorable a little bit in gaming, at least in my mind. And I would say most of my friends play that way. Not all of them. But it's kind of treat others how you want to be treated, at least in my mind, a little bit. I mean obviously not the enemy team, but within your own team.

As Manny suggests above, an ethic of reciprocity, while important among friends, is not easily applied to enemies, i.e., competitors. In these situations subjects described by the interpersonal model tend to turn to the rules of the game. Whereas individualistic subjects might follow the rules because they are concerned about the consequences of violating the rules, interpersonal subjects tend to follow the rules because they value fairness, a close relative of reciprocity. Because they don’t like it when other players cheat, they feel it is important that they do not cheat either.

Three of these subjects show some tendencies toward the communal model, which is detailed in the next section. All six of these subjects, however, convey one or two behaviors or beliefs that betray a prevailing absence of the sort of thinking seen among communal subjects. Melissa, as mentioned above, tries her best not to harm other players, but pretends to be an experienced player so that others will let her into their group even though it makes them mad. As a player primarily interested in socializing, Melissa seems surprised, if not offended, that other players would get mad at her for trying to get into their group. She does not understand that others might be excluding her because they value in-game success and need competent players. Thus, while Melissa demonstrates basic empathy, she does not recognize that other players might be different from her.

Consider also Matt, 19, a strong perspective-taking and rule-based thinker who, when given the responsibility of deciding who on his team should get an item, for example, gives it to a stranger who “fairly” wins a dice role rather than to his close friend who secretly begs him for it. He does this because, as he puts it, “I would have been mad if someone had done that to me.” Later, however, Matt recounts an incident that resulted in his being banned from the game for three days:

> This one time I didn't know they had changed the rules where you could get in trouble for swearing, so I swore at someone. And then I got an in-game message probably three hours later saying I was going to get banned for three days. So, I was pretty upset about that. (INTERVIEWER: WHY DO YOU THINK THEY REPORTED YOU?) I was stealing their kills. It's a big group of monsters, and once you hit them the first time, the other people can't
loot even if they help kill. And I was just going around tagging everything so only I would get the loot. And he wasn’t harassing me, he was just saying ‘jerk.’ So, I was just like, ‘f-off’ and he reported me for it. So, I wasn’t breaking the rules because [stealing kills is] allowed, but it was definitely something that was kind of looked down upon.

This incident and several others suggest that while Matt considers how his closer associates will be affected by his actions, he does not tend to consider impacts on more distant players or players who are different from him. And despite his generous reading of the rules when distributing loot, here he gives a much closer reading of the rules, doing something that other players frown upon but that, because it is technically allowed by the rules, he considers fair.

Through similar instances, these six subjects tended to reveal some difficulty in either taking perspectives different from their own, considering the more distant effects of their actions, or applying game rules according to their purpose, and not merely their explicit definition. Because of these limitations, interpersonal subjects with every intention of treating other players with care and respect can still do harm in the eyes of others. For the most part, however, these subjects appear well-equipped to deal with the ethical issues that confront them, and many seem capable of communal thinking given a little more time or support.

**Communal Model**

Eddy, 25, has been playing *World of Warcraft* for several years and plays a high level character. He is not currently in a guild, but has been in several in the past. He takes a lot of pride in fulfilling his group roles and optimizing his team’s chances for success. Everyone wants to have fun, but it’s never fun when your team fails and has to start over, so you need to think of the team ahead of yourself. He is committed to ensuring that everyone has a good play experience. He makes sure that people in his guild don’t swear, because some members are parents who don’t want their kids to hear bad language. While he likes to role-play as an evil character in other games, he chooses not to in *World of Warcraft* because not everyone role-plays, and so young or sensitive players might take it personally. While in theory he has no problem with people selling in-game gold for real money, he supports the rule banning gold selling because in practice, sellers can disrupt gameplay and the gold selling industry exploits its workers.

Finally, five of our subjects are best described by a communal model. When thinking about ethical issues, these subjects consider not only themselves and other players like them, but the gaming community as a whole. Eddy is by far our strongest example of this model. He considers how his actions affect the small groups, large groups, and gaming community of which he is a part; he takes the perspectives of different players to ensure everyone has a positive play experience; and he evaluates rules by what they do for the community and its stakeholders.

When evaluating the consequences of their actions, communal subjects think not only of how they affect other people but, when relevant, consider how their actions might help or hurt the groups or communities of which they are a part. Since one’s role within a community determines how one can or should affect the community as a whole, subjects often demonstrate a concern for community-level consequences by talking about fulfilling their role within a group or community. Consider, for example, what Eric, 23, says when asked to whom or what he felt most responsible in his gaming:

*Most responsible? When I was in guilds, I’d say definitely to the guild. I’d be really responsible to play my role and make sure I’m doing what I’m supposed to. You know, in like Counterstrike or Team Fortress, whatever group I’m in, I’d say I*
probably feel most responsible to, just to make sure that I’m pulling my weight and helping out my team or guild or whatever group I happen to be in. (INTERVIEWER: AND WHY DO YOU THINK THAT’S IMPORTANT?) I think it’s important just because when you’re in that kind of situation, you know, everybody should be trying to do their best for the greater good of the team or whatever, just to make the game—to win, you know. To succeed in the game, you all have to be working your hardest.

Here Eric considers his particular role within each group he plays for and connects his own actions to the success of the group as a whole.

Subjects described by the communal model tend to demonstrate a strong capacity for perspective-taking; they not only demonstrate basic empathy for other players, but take the perspectives of multiple stakeholders within a community, recognizing that others affected by one’s actions might have different motivations or needs. Consider, for example, how Elaine, 18, talks of players who harass her for being a new player:

I mean, I don’t know what the rules about reporting people are. But I just wouldn’t see any need. They’re kids and they’re competitive. If I was 12, I’d probably be doing the same thing too, because you want to be the best and you want to fit in. I mean, that’s not really offensive...if it ever reached really confrontational terms... then I would definitely feel comfortable going to a moderator, because that’s what they’re there for. That’s their job. But I’ve never reached that point. And I think you just need to let the petty stuff go, because [the moderators] probably are overwhelmed with all of the stuff that they get.

Here Elaine goes beyond basic empathy and assesses the motivations and needs of players different from her as well as game moderators, who are more distant stakeholders with whom she does not regularly interact.

In contrast to how interpersonal subjects reflect on game rules, consider how Ethan, 15, talks about RuneScape’s rules against certain kinds of scamming:

Yeah, I’d say it’s a good rule. Even though the games have sort of changed around because of it, there’s sort of a trade limit, like you can’t trade over a certain value of an item...it’s so-so, because it’s sort of—it’s kind of hard to explain. It basically eliminates most of the real world trading edge. But what happens as a result is the community gets limited. We can’t decide the prices on our own.

Here Ethan does not merely acknowledge price limits or discuss how following those limits makes the game fair or unfair. He thinks about why these limits exist and talks about how these rules help or hurt the community as a whole.

Several subjects who I identified as holding a largely communal model do not fit the model as closely as Eddy, but differ from Eddy in illustrative ways. Whereas Eddy highly values his in-game relationships and likes to socialize, Elsa, 19, who mainly plays first-person shooters, is a much more competitive and game-centered subject—as she puts it, “I’m not a big talker, I’m a big player.” As a result, she does not tend to face many of the more complex social issues that Eddy thinks about, but nonetheless displays a strong capacity for perspective-taking and group-level thinking. Elaine, on the other hand, is a new World of Warcraft player, and therefore is not part of any groups and does not yet fully understand the dynamics of the game and its community. But as seen above, she demonstrates a strong capacity for taking the perspectives of others. I consider Elsa and Elaine to be untested, in that they do not seem to have been exposed to ethical issues as much as Eddy and others, but in demonstrating many of the skills that characterize the communal model, they appear capable of fully adopting the communal model when circumstances require it.
Eric is by contrast a tested player, and he demonstrates strong perspective-taking, consequence-based thinking and rule-based thinking skills. However, he does not consistently apply these skills across his interview. For example, he gives strong moral and ethical arguments about why griefing is wrong to do, and he says that he does not like to bully other players himself, but he nonetheless understands why others find it fun, and reports that on occasion he has accompanied friends of his who like to grief. At one point in his interview, he tells how he once made the difficult choice to leave a group that he had been a member of for some time. While he feels indebted to them for all the help they gave him, he disagrees with the group’s grieving practices:

_I didn’t like running around and killing people all the time. I like more playing the game and saving people from getting killed by random people—killing the killers, which I do. (INTERVIEWER: IS IT SOMETHING ABOUT HAVING A PRINCIPLE TO IT ALL?) Yeah, I’d say so. I mean, ultimately, I was just doing what they were doing, but I had the disguise of saying, ‘I’m an anti-[player killer]. I’m more noble than you.’_

Here Eric undercuts his own professed beliefs, which he elsewhere calls “hypocritical.” Eric, in other words, seems to fit the communal model in that he is able to consider his obligations to a group and to the game community at large, but he does not exercise these skills consistently or confidently.

I mention the three communal subjects mentioned above because they reveal dimensions of these gamers that do not easily fit into the spectrum of ethical thinking discussed here. Some subjects, like Elsa, are more focused on succeeding in the game, while others are more interested in socializing with other players alongside the game; some, like Elaine, are newer to gaming, while others have played for a long time and have experienced a wider range of ethical issues; and some, like Eric, are sophisticated ethical thinkers but are unsure of their beliefs, while others are unable to think far beyond the self, but are confident in and committed to their beliefs. Overall, these differences demonstrate some of the factors that may influence ethical thinking skills and conduct.

**CONCLUSION: THE PATH TO ETHICAL GAMES**

Our interviews show that online multiplayer games are providing young people with opportunities to think ethically. Young people, however, are responding to the ethical challenges of online gaming in different ways. Some are remarkably skilled at working through ethical issues in games and make decisions by reflecting on people, groups, rules, and consequences far beyond the self. Others do not seem to grasp the full community context of a game, but demonstrate a strong interpersonal ethic grounded in reciprocity, empathy, and fairness. Still others fail to think far beyond the self, and mainly make decisions by evaluating personal consequences.

In the interest of designing and using games in ways that support young people as they make ethical decisions, one cannot help but wonder what might account for this diversity of ethical thinking approaches; why, in other words, do some gamers adopt an individualistic model while others adopt a communal model?

Based on a survey of the existing literature on young people, digital media and ethics, the GoodPlay project team posited a range of factors that might influence young people’s online ethical stances: the affordances of the new digital media; young people’s technical and new media literacies; person-centered factors such as one’s cognitive and moral development, formative experiences, and the beliefs, values, and goals applied to one’s online experiences; influential peers and peer norms; and ethical supports like mentors, other adult figures, and exposure to educational cur-
ricula (James, et al., 2008). In our research we explored the relevance of these factors. Given the small sample size of 14 online gamer interviews, I am unable to assert strong links between such factors and subjects’ ethical thinking models and can only speculate. Based on patterns observed across the sample and anecdotal evidence from the interviews, however, two factors appear to stand out within the sample and merit further scrutiny: in-game group involvements and early in-game supports.

In-Game Group Involvement

All of our subjects, in playing online multiplayer games, are competing against and collaborating with other players in some capacity. Some subjects, however, tend to be loners, playing the game on their own and trading, talking, or working with other players only occasionally. Other subjects are members of sub-communities within the game. These sub-communities are called different things in different games (in World of Warcraft, they are called guilds), but all tend to be formally recognized, long-lasting groups whose members make a point to support each other, socialize and work together while playing the game.

None of the three individualistic subjects are involved in any in-game groups. Half of the interpersonal subjects—the three who did not show tendencies towards the communal model—report having, at best, weak group involvements. Melissa, 20, for example, is in a guild with only three members so as to get the material benefits of being in a guild, and Marc, 17, sometimes plays on teams in first-person shooters, but these teams are temporary and randomly assigned. The other three interpersonal subjects and all of the communal subjects have strong in-game group involvements with the exception of Elsa, 19, and Elaine, 18, the two untested subjects discussed above. (Elsa plays on teams in first-person shooters like Marc. Elaine is a new World of Warcraft player and so has not joined a guild and does not report playing in any groups; she does, however, talk extensively about her boyfriend’s guild in her interview, so while she does not have any group involvements herself, she is at least familiar with groups in World of Warcraft.)

It is not surprising that players with more robust group involvements display strong ethical thinking skills, given the typical demands of being in a group in an online game. If members are not considerate of others in the group, if they don’t follow rules mandated by the group, or if they don’t fulfill their roles within the group, these members, or the group as a whole, likely won’t last long. Playing with a group, in other words, might make it easier to consider consequences and perspectives beyond the self, in that one’s responsibilities to a small group are much more apparent and much more pressing than one’s responsibilities to a large, anonymous gaming community. This is not to suggest, however, that groups are islands of ethical thinking in gaming communities; subjects with group involvements did not just demonstrate strong ethical thinking skills when talking about their groups: they tended to think ethically in other game contexts as well, suggesting that perhaps groups act as a stepping stone, helping subjects expand their consideration further beyond the self.

While it is difficult to determine whether guilds create strong ethical thinkers or strong ethical thinkers join guilds, I see some evidence for the former in our interviews. Several of our subjects report that they have learned moral or ethical thinking skills from being in a group. For example, Eric, 23, says that “I think [online gaming] affected me in the way I approach a group setting, because I definitely think it’s helped me be more like a team player and being able to lead a group of people...[I am] able to listen to other people and what they need, and getting feedback.”
In-Game Peer Support

I also compared subjects’ initial experiences of playing their online game, looking in particular at early help they received from other players when learning how to play or trying to level up. Some subjects received a lot of support from offline peers while others received no such support, but these differences fit no pattern with respect to subjects’ ethical thinking models. Subjects’ online peer supports, however, do show some alignment with ethical thinking. Of three subjects who report receiving significant support from an online peer, two of these subjects fit the communal model, and one largely fits the interpersonal model but demonstrates tendencies towards the communal model. Of the five subjects that report having a negative experience when looking for online peer support—being taken advantage of, excluded from activities or groups, or denied help as new players—all but one are either individualistic subjects or interpersonal subjects without tendencies toward the communal model. Elaine is the one exception here, in that she is sometimes harassed for being a new player, but best fits the communal model. Elaine, however, receives an exceptional amount of support from her boyfriend, who she says has kept her from getting scammed on multiple occasions, so perhaps this offline mentor relationship plays a role in her adoption of the communal model.

Not all subjects give detailed accounts of their early in-game support, so it is difficult to know how, if at all, these supports foster ethical thinking. None of our subjects report receiving explicit help on ethical issues; players, it seems, primarily receive help with learning to play the game well. Perhaps, then, subjects are modeling these players who they encounter early in the game. Those people who are willing to help a new player are likely stronger ethical thinkers than those who harass new players, and so might influence these new players to think in similar ways. Note, for example, that all three subjects who receive strong in-game support early in the game later provide similar support to other new players. Alternatively, maybe the act of mentoring or hazing creates good or bad will toward other gamers or toward the game community as a whole, and so encourages new players to either ‘pay it forward’ or protect themselves against these harms in the future.

FURTHER RESEARCH

The analysis in this chapter should be seen as a preliminary, but deep, exploration of the intersection of games and ethics. While our sample is too small for us to reliably generalize about online multiplayer gamers’ ethical thinking or to make any strong statements about what in games fosters ethical thinking, our findings suggest many promising avenues for future research into the ethical dimensions of online multiplayer games. Additional qualitative research can expand our picture of both these games and their players. This study does not cover many online games that likely offer similar opportunities for ethical thinking, and talking to people playing a fuller range of online games will tell us more about what online multiplayer games can do. Given that our subjects approach ethical issues differently, such research should take stock of the ethical issues that games confront players with, but also focus on how games can foster stronger ethical thinking by supporting players as they deal with these issues.

All of the gamers we interviewed had been playing video games for at least several years, which begs the question: how did these young subjects think about ethical issues when they were younger? Expanding this research to a younger set of gamers seems promising, because these gamers may be described by different mental models on account of being in earlier stages of cognitive development. Younger gamers, in other words, might provide us with fuller picture of the range and development of ethical thinking pres-
ent in games. Furthermore, games might have more influence on younger players in formative stages of moral development, so learning more about these young players seems particularly important for those interested in using games to foster ethical thinking.

These inquiries must also be supported by research that both broadens and deepens our knowledge about young gamers’ ethical thinking. A large, (ideally longitudinal) survey-based study of young gamers’ ethical thinking could better test the relationship between ethical thinking and peer supports, in-game group involvements, and other potential influences. Observation-based research or, perhaps more feasible, analysis of a game’s use-data, could help us understand the relationship between how gamers think about and how they actually deal with ethical issues.

Given even our preliminary findings, however, it seems that online multiplayer games may provide young people with an excellent opportunity to practice ethical thinking. Actions in online games often have less serious consequences than actions in offline contexts, and so online games can serve as valuable training grounds, letting young people wrestle with difficult issues without risk of serious harm. But in addition to acting as a sort of safety net for ethical situations, games may be well-suited to help young people get the right lessons. They are scrupulously designed spaces that, by influencing player interactions and experiences through their designs, could conceivably support young people in dealing with the sorts of issues discussed above.

If in-game group involvements and early in-game mentorship do in fact help foster young people’s capacities for ethical thinking, then there are ample ways to increase young people’s access to these influences. Game designers can create good incentives for players to form and maintain sub-communities and to help new players. Parents, in deciding what games to bring into the home, can look beyond violent and sexual content to the quality of team activities and the ways in which new players are treated in a game. Educators might consider bringing such games into the classroom and encouraging strong teamwork and support among students.

One of the easiest and most important things one can do, however, is to encourage young people to talk about the ethical issues they encounter in games. While online multiplayer games offer ethical experiences ripe for unpacking, it is less clear how often and how deeply young people reflect on these experiences as they play. We designed our interview protocol to create a space for this sort of reflection, and our subjects eagerly filled that space. More opportunities for reflection of that kind and, even better, a dialogue around these issues cannot but help young people to navigate the ethical landscape of the games they play.

Young people do not often get the opportunity to join a new community, compete and collaborate with strangers, or take on important roles within a group. When these opportunities do arise offline—when entering a new school, collaborating with others for a job, leading an organization—unreflective decisions can lead to outcomes far worse than frustrating other players in a game. By giving young people the chance to confront ethical issues in an environment with lower stakes and ample supports, we can better help them meet the ethical challenges that they will face throughout their lives.

REFERENCES


Chapter 11
Family Fun and Fostering Values

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ABSTRACT

This chapter looks at the interplay between video and computer games and values discourse within families. The authors focus on the theoretical models for values discourse within families; the role that video games can play in values discourse within the family; the role that both research and design have in the game creation process; and the future opportunities for engaging values and ethics discourse within the family context through gaming.

INTRODUCTION

Over the past two decades, much has been said about the role of media, especially television, in family life and communication. Of all of the media that are part of the home ecology, video and computer games have had the least attention in the family communication context. Moreover, the reports that have been published have mixed findings or perspectives on the valence of role games play. Some reports have pointed to the positive, or at least neutral, effects on having a game system in the home on family interactions, particularly as a space for additional interaction between family members (Mitchell, 1984; Mitchell, 1985; Murphy, 1984). None of the previous work in this area, however, discusses the role of these games in the values discourse among family members. Because of the growing use of computer and video games by all family members, from preschoolers to grandparents, it is important that we pay more attention to these media.

This chapter will look at theoretical models for values discourse within families, including family systems, symbolic interaction, family rituals, and
social cognitive perspectives. Next, we will use these theoretical perspectives to outline the five key elements that need to be addressed when designing games for families. Finally, we will review future opportunities for engaging values and ethics discourse within the family context through gaming.

**The State of Play**

Like radio and television before it, electronic games provide a mediated space in the home for families to interact; a place for parents and children to gather and play together. Although console games have been around on a significant consumer scale since the 1980s, video and computer game play has increased continuously over the past few years (NPD, 2009). Today, 65% of households in the US, with or without children, play computer or video games (ESA, 2008). Kids are usually not the only gamer in the family. The average number of gamers in a household with children, including the child, is three (NPD, 2007). Currently, over half of American adults play video games, with one in five playing at least everyday (Lenhart, Jones, & Macgill, 2008). When we put it in the family context, however, we see that parents significantly over index on video game play, with 66% of them playing (Lenhart, Jones, & Macgill, 2008). This increase in video gaming on the parents’ side may also be having an effect on the way they view the role of video games in their children’s lives. In 2008, 63% of parents who play games themselves said that they believe that games have a positive effect on their kids’ lives (ESA, 2008).

In addition to the generational shift that has occurred over the past few years, as the first generation of 1980s console gamers has embraced parenthood, the change in technology to be more accessible and pervasive has also had an effect on family game play. From a generational perspective, we see that 40% of younger parents (under 40) play games with their children, compared with 25% of older parents. From a platform and mechanics perspective, the Nintendo Wii, with its intuitive movements and family-friendly games packaged within the console system, changed the dynamics of game play in the household (NPD, 2008a). Many family members, who had not been console gamers, became interested in the Wii console (NPD, 2008a). In 2008, the “Family Entertainment” category of games, which includes titles such as *Wii Sports* and *Rock Band*, surpassed the other categories in sales after growing 23% in one year (NPD, 2008c). In fact, the top two selling games of all time across platforms (*Wii Play* and *Guitar Hero III*) are in the Family Entertainment category.

When it comes to online gaming, there has been a huge rise in casual game play by people of all ages (MTV Networks, 2008). Although there is no consensus on what the term “casual” means, in general it refers the lesser commitment to game play, and stands in contrast to “hard core” play. Casual gamers tend to play games to relax, escape, and keep from being bored (MTV Networks, 2008).

Moms (21-49) are heavy casual gamers and are the heaviest online gamers, with 80% of moms playing free online games regularly; and over 30% of those moms spending over 2 hours each time they play (MTV Networks, 2008). Although these moms enjoy playing games by themselves to relax, most also say that they like to play online games with their kids, and wish that there were more games designed for parent-child co-play (Nickelodeon, 2009a). Moreover, the intergenerational communication around online gaming is also strong, with almost one-third of moms getting most of their information on gaming sites from their kids (MTV Networks, 2008). Clearly, gaming across platform is a family affair; and a topic in need of greater study when it comes to how that co-entertainment experience affects family communication around ethics and values.
UNDERSTANDING FAMILY COMMUNICATION AND VALUES DISCOURSE

The family is the primary sphere in which values discourse occurs; and every family creates and manages both external and internal boundaries for that discourse (Galvin, 2006). When we use the term “values discourse,” we are referring to the verbal or nonverbal articulation of personal or social belief systems that occurs within social practices. These “social practices” are “relatively stable form[s] of social activity (examples would be classroom teaching, television news, family meals, medical consultations)” (Fairclough, 2003, p. 205). Video or computer game play would be a type of social practice in which values could be shared.

The media consumed by the family members, both alone and together, impacts the discourse—creating spaces for conversation, changing communication dynamics, modeling communication patterns and values, and reflecting external societal values both similar and dissimilar to those held by the family. Most of the research that has discussed this complex interplay between media and families has focused on television (Bryant & Bryant, 2001; Bryant & Bryant, 2006; Wilson, 2003). The television families that real family members watch together in prime-time, for example, can provide models for how to communicate with one another. If those television families provide models of communication at odds with the norms desired by the real parents, the mediated models can become exemplars from which the real parents can explain their desired interactions between family members.

Digital games, however, are fundamentally different media forms from traditional media like television, particularly in their interactive nature. Unlike television or other narrative video formats, games make the player an active participant in the outcome of the experience. In the context of values and video games, this means that the person has a choice in the way that they approach the game. If, for example, they are playing with other players, they can choose to help them and cooperate, or they can choose to play in an adversarial manner.

There are three specific ways in which game play creates space for ethical discourse within families. The first is through providing additional opportunities for family interaction, which in turn creates more opportunities for families to create and reinforce their value narratives. The recent changes in game platform design, from the Wii to networked massive multiplayer games, have been fundamental shifts in the marketplace that have also created shifts in family communication and interaction. Second, games can either portray values sanctioned by the family, which can serve as models for family interaction and social learning; or can depict values in conflict with that family’s norms, which can serve as teaching opportunities. Third, the interactions that occur in multiplayer play, such as cooperating or competing, provide a training ground for real-life situations. For example, a child can learn the value of cooperating with someone else, and the positive outcomes that come from that; or they could also learn the importance of losing graciously.

Although there are many theories related to the ways in which families communicate, four theoretical perspectives—family systems, symbolic interactionism, family rituals, and social cognitive—are particularly relevant in the context of video games and values. Each of these theories explains, in part, why video games can potentially facilitate values discourse in the family context.

Family Systems Theory

The notion that families need to be studied as a whole system, and not just as individuals or dyads, has its roots in the general systems movements (von Bertalanffy, 1968) and was first proposed in the realm of families and media in the 1980s by Goodman (1983). Although there have been
many interpretations of what it means to be a family “system,” there are two main applications of the metaphor: (1) the metapatterns that are seen in nature can be transcribed to understand those systemic patterns within the family, and (2) the family system as consisting of the set of people and their relationships (Rosenblatt, 1994). For the purposes of this chapter, we will focus on the latter interpretation, which focuses on the family as a complex system made up of interrelated parts. The key to this approach is an understanding of family processes as “an intricate phenomenon, involving family boundaries, rules, decision making, independence, control, roles, and communication, among other components” (Goodman, 1983, p. 409). The family system is “open,” meaning that it takes inputs from the outside environment and puts outputs back into the environment, and “dynamic,” meaning that it is constantly changing (Broderick, 1993).

Goodman’s (1983) original work focused on the role that television plays in this system, both as a part of the interaction and as a mode for bringing outside influences into the open system. We can look at other newer media, in this case electronic games, in a similar way.

Families make available certain kinds of media within the home but also provide notions about how and when to use the media . . . and how to interpret media content . . . [T]he interactions of family members subtly create patterned ways of thinking about and using the media. These patterns become habits, and the habits become the stuff of everyday experience. (Jordan, 2002, p. 231)

Let us consider, then, the active role that video and computer games can play within the social and communication functioning of the family. In particular, if we look at the changes that have occurred in the past several years surrounding game play, we see that it has moved from a more child-centric mode to a family context. In the context of console gaming, the Wii has been a critical turning point, especially as it has reached more non-traditional console players like very young children, mothers, and grandparents. One of the most important changes with the Wii is in the way in which it has changed the ecology of gaming in the home. In the past, console systems were placed in “child friendly” areas of the home—children’s bedrooms, playrooms, or dens most often. The Wii, however, because it is usually purchased with the intent of family play, is placed with the “good” television in the main family living space (Bryant, Akerman, & Drell, 2008). This subtle shift places the system at an advantage when it comes to family decision making regarding activities to do together. Just as the television became the electronic hearth that the family would gather around after dinner, we are beginning to see the same patterns emerging around the Wii, albeit on a much smaller scale at this point (Bryant, 2008).

We are seeing a similar shift in how online games create new patterns of family communication. Recent internal research at Nickelodeon has shown that even though online game play is hampered by the setup of the system itself (e.g., it is difficult for two people to play together with one keyboard or one keyboard/mouse combination), not only are children, parents, and grandparents playing together online, but they are seeking out those co-play experiences (Nickelodeon, 2009a). Parents enjoy playing online games by themselves, for relaxation and entertainment, but they also express that the possibility of being able to play with their child is both an exciting and valuable proposition to them (Nickelodeon, 2009a). As those moments of shared experience occur more often around games, they create patterns and habits, which in turn become part of the communication discourse within the family. The relevance of this discourse in the context of ethics and values can in turn be explained through the lens of symbolic interactionism.
Symbolic Interaction Theory

Symbolic interaction theory focuses on the meaning that is constructed through discourse and interactions between people (Mead, 1934; Blumler, 1969). “As focal points for intense interaction, families are crucial sites for meaning creation, and verification” (White & Klein, 2002, p. 63). Family members are socializing agents for one another, and within the family context certain events and objects are given particular meaning (Segrin & Flora, 2005). Values are a type of meaning that is passed down from parent to child, as well as being under constant negotiation between family members. In their daily lives, each family member also interacts with their larger social circles and societal norms, and then brings back those negotiated meanings back into the fold of the family.

Taken in the context of electronic games, the interactions that happen around gaming can either reinforce or revise the norms set by the families. Children see how their parents approach game play and interpret and integrate their perceptions of that behavior into their own set of personal norms, as well as influence their perceptions of family norms. In addition, if a family, or certain subsets of the family, consistently play together and interact with one another through video or computer games—and this increases the overall level of communication or interaction between family members—then there are new norms set for the amount of family communication. Conversely, if game play within the family is more individualistic, and this in turn decreases family interaction and communication, then the effect on the standards for family communication could be negative.

In addition, the choice of games played by family members together provides meaning. Much can be deduced, for example, in the consistent choice of highly competitive games versus cooperatively-oriented games. In addition, the sanctioning of violent video games for either individual or family use portrays certain value-orientations. Finally, the role that different family members play in deciding which games to buy or play can also mirror family communication patterns, and can be explained further through family ritual theory.

Family Ritual Theory

Rituals can be activities that construct values and meanings (Baxter & Braithwaite, 2006). Family ritual theory, as composed by Wolin & Bennett (1984), explains that there are three types of rituals that families engage in: celebrations, traditions, and patterned family interactions. Celebrations are generally more culturally normalized events, like holidays, weddings, or funerals, and happen less frequently. Traditions tend to be more unique to each individual family and are more routinized, such as family vacations, reunions, birthdays, and so on. Patterned family interactions are more micro-events that happen on a consistent basis, such as dinner time or planned media viewing.

In the case of electronic games, although there may be specials cases where games play a part in celebrations or traditions, it is the more frequent patterned family interactions that are the most relevant. Similar to the way in which families, or subgroups within families, have favorite television programs that become weekly event viewing and therefore become ritualized spaces for family interaction; video and computer games are becoming a more consistent part of everyday life for families. The first generation of parents who played video games as children or adolescents has embraced electronic game play as a new and valid form of family entertainment (Bryant, 2008b; Bryant, Akerman, & Drell, 2008; Williams, 2006). In 2008, families with children under the age of 14, 81% have a video game system in the house and 95% have a computer with internet access; both of which overindex significantly when compared to households without children (Nickelodeon, 2008).
Ritualized video game play within a family provides a consistent space within the hectic day-to-day life of families for family interaction, which in turn creates more opportunities for families to create and reinforce their value narratives. In addition, the games that families choose to play together are an important symbol within these rituals. Do the games promote healthy competition or cooperation? What is the weight placed on winning? Do the games portray characters in a way that is in line with the social values upheld by the family, or are they in conflict with those values? These are all issues that are confronted within family game play choice.

A related issue, which is slightly at odds with a previous assumption of family ritual theory, is which person in the family is choosing the game. Unlike traditional media like television, where children are more likely to be watching a program of their parent’s choosing; video game choice is more often decided by the child. This is the case both at the time of purchase and at the time of play (Nickelodeon, 2006). Family ritual theory generally assumes that the parent has significantly more influence on disseminating rituals and the meaning that goes with them (Baxter & Braithwaite, 2006). In the case of video and computer games, and other new communication media like text messaging (SMS), the initial ritual and meaning may be defined by the child (Bryant & Bryant, 2006). Because of this inversion of influence, we need to expand family ritual theory in the context of these new media.

Social Cognitive Theory

The final theory that ties together family communication, values, and electronic games is social cognitive theory. As outlined by Bandura (1986), this theory entails a person observing an action and its consequences and subsequently modeling that action (albeit with many possible intervening factors). As applied to family communication, social cognitive theory is most often invoked when discussing the behavior of children as influence by the actions they see their parents taking (Kunkel, Hummert, & Dennis, 2006). These actions can be anything from communication patterns to health behaviors to the way they treat others around them.

Applied to video and computer games, we see that games and game play patterns can either portray values sanctioned by the family, which can serve as models for family interaction and social learning; or they can depict values in conflict with that family’s norms, which can serve as teaching opportunities. Take, for example, interactions that occur around sports-related games. There are a variety of possibilities when it comes to the models of competition and sportsmanship both portrayed by the games and the players. Some games have a strong focus on the harsh competitive and negative interpersonal interactions that can surround sports play, such as verbal taunting, interpersonal violence, or poor sportsmanship. Other sports games show competition in a more positive light, with encouragement and healthy competitive interactions. Of course, the models provided by games also arise in the ways in which family members treat one another during game play, which in turn become models for interactions outside of that play.

Similar to the areas of further study around family ritual theory, one of the issues in research and theory-building around social cognitive theory in the realm of families is that it currently is assumed that the learning that occurs is top-down (parent-child) (Kunkel, Hummert, & Dennis, 2006). Because norms and values around new technologies are often coming into the family via the children, particularly in the case of video games, it is important that future work in this area keep that in mind.

As a final note on the theoretical perspectives outlined above, it is important to point out that the above transcription of family communication theories to video games is just a first step to understanding the dynamics of gaming and
Family Fun and Fostering Values

Table 1. The five key elements of family game design

<table>
<thead>
<tr>
<th>Game Design Element</th>
<th>Key Questions to Ask</th>
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<tbody>
<tr>
<td><strong>Target audience</strong></td>
<td>- How many family members do you want to include?</td>
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<tr>
<td>“Who will play?”</td>
<td>- Who is playing (e.g., kids, parents, grandparents)?</td>
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<td></td>
<td>- What are the cognitive and physical abilities/limitations of the audience?</td>
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<tr>
<td><strong>Platform choice</strong></td>
<td>- Who are you targeting?</td>
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<tr>
<td>“Where will they play?”</td>
<td>- What platforms do they already likely have?</td>
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<td></td>
<td>- Where in the home (or elsewhere) are those platforms likely to be?</td>
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<td></td>
<td>- When will the game be played?</td>
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<td></td>
<td>- Are the family members co-located?</td>
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<td></td>
<td>- What communication possibilities exist within the platform?</td>
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<td></td>
<td>- Are there new opportunities in the platform space that are particularly suited to family gaming?</td>
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<tr>
<td><strong>Game format</strong></td>
<td>- What format will the game take?</td>
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<tr>
<td>“What will they play?”</td>
<td>- What types of play do you want to encourage (e.g., physical, cognitive, creative, social)?</td>
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<td></td>
<td>- Are there values that you want to model explicitly?</td>
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<td></td>
<td>- Will this be asynchronous or synchronous play?</td>
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<td></td>
<td>- Will the game foster independence or interdependence?</td>
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<td>- What types of roles can players have?</td>
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<td>- What is it about the game that will foster ritualized play for the family?</td>
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<td></td>
<td>- How are characters portrayed?</td>
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<tr>
<td><strong>Reward structure</strong></td>
<td>- What forms of cooperative/competitive play will be included?</td>
</tr>
<tr>
<td>“Why will they play?”</td>
<td>- What types of actions will be rewarded?</td>
</tr>
<tr>
<td></td>
<td>- How are players rewarded?</td>
</tr>
<tr>
<td><strong>Game mechanics</strong></td>
<td>- Are there any game mechanics issues that need to be overcome?</td>
</tr>
<tr>
<td>“How will they play?”</td>
<td>- Is there a platform that allows for new, innovative types of play?</td>
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<tr>
<td></td>
<td>- If communication is provided within the game, how will it occur and what modifications will need to be made based on the target audience?</td>
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</table>

communication. Very little has been done in this area in the context of console games, and even less when it comes to computer, handheld, and mobile gaming. The continued understanding and integration of these theoretical perspectives in the gaming context is necessary. In the next section, we will discuss how these theories play out in the practice of game development.

MOVING FROM THEORY TO GAME DEVELOPMENT

The four theoretical perspectives above, and their transcription onto the interplay between family communication and game design, give us a framework from which to understand the key elements that need to be in addressed in designing a game that provides opportunities for values discourse in families. Those five elements are target audience, platform choice, game format, reward structure, and game mechanics. Table 1 provides an overview of these elements and sample questions that game designers should ask when addressing each.

Target Audience

The first critical decision to make before designing a family-oriented game is to defining the target audience, or deciding “Who is this game for?” The answer to this query in the context of this chapter may seem obvious—the audience is the family—but today’s family is a complex system, and understanding who is part of that system and how to reach them, is important. The most simple configuration is the nuclear family, or whatever parent (or other caregiver) and child combination exists in that household. Multiplayer, synchronous games, where this nuclear family can play together, offer great spaces for increasing family interaction, values modeling, and communication.
There are also opportunities for reaching families outside of the “let’s get everyone in the same room playing together” model. Games can be designed to reach this family system asynchronously by incorporating saved benchmarks for play that family members can compare overtime (such as high score lists). These asynchronous games do not offer the direct interaction of the ones that everyone plays at the same time; but they have the added utility of being convenient, since individual family members can play when their schedule permits. They also may extended the timeframe of communication around the game, with this ongoing game play providing multiple touch points for family members to discuss their play.

When targeting games for an entire family, however, a developer needs to keep in mind that they will have to create a game that is playable by the least game-savvy of the family members, while keeping the better game players engaged (more on this topic below). This is a very tough line to navigate and may be seen as a hindrance for some developers. In our experience, however, it can also be a challenge that pushes developers to think of new, innovative game play ideas.

Creating a game that provides space for values discourse within families does not necessarily need to target the whole family. There may be particular topics that are more suited to certain dyads or triads of family members. For example, if you are creating a game for preschoolers, you may want to focus on that child and a single caregiver, therefore keeping the game play more simple and allowing for one-on-one instruction. Games can also be a space for different members of the family to “connect” with one another. For example, we often hear teen boys talking about enjoying their one-on-one time playing games with their father. This more targeted audience is often easier to develop for, since there are often fewer levels of player ability to keep in mind.

A final configuration of the family system that is valuable to keep in mind in the context of values discourse is the extended family. In the same way that communication technologies, from the telephone to email to social networking sites, have all provided extended families with opportunities to communicate more with one another and more often; many game systems or platforms now offer the chance to connect over long distances. Multiplayer online games, virtual worlds, online casual gaming sites, social networking games, networked console and handheld systems, and mobile networks all provide opportunities for game developers to reach families that are not co-located. For example, a grandparent in another state or a parent on the road could play with their grandchild or child via one of these games. This play provides opportunities for values discourse not only through the play itself, but by enhancing the overall relationship between the family members. No matter what part (or whole) of the family system you are hoping to design the game for, however, you have to carefully select the platform that best fits your target audience.

Platform Choice

After identifying the audience, the next point for designing a game for families is answering the question “Where will they play?” This entails figuring out which platform, or platforms, will yield you the largest and most suitable audience, as well as best game experience. Each platform—online, console, handheld, or mobile—has its own benefits and drawbacks, depending on whom you are trying to reach. Specific systems of each of those platforms may be more or less compatible with family play, whether because of the system interface or adoption rates.

Adoption rates are one of the most important factors to consider when choosing a platform. The systems that families (or family members) chose to play are sometimes not those that are receiving the most attention from the hard-core game development community. The PlayStation 2 (PS2), for example, is considered an “old” system...
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by game developer’s standards, having been introduced originally in 2000 and then succeeded by the PlayStation 3 in 2006. On the other hand, the PS2 is the best selling console to date, currently in about 43% of households (Plunkett, 2009; NPD, 2008a). Because of its longevity, it is a system often found in the household of young parents, so if you are targeting a game to preschoolers, for example, you would want to consider this system (Bryant, Akerman, & Drell, 2008).

Other newer systems that currently adopted at a higher rate by families or children are the Wii, Nintendo DS, and iPod Touch (NPD, 2008a, Nickelodeon, 2009b). The Wii, in particular, would be an ideal platform for a developer to target intergenerational play, since it has the highest adult penetration of any console system (about 15%; Nielsen, 2009a). In addition, because of the introduction of family plans by mobile phone providers in the U.S., mobile phones adoption is on the rise, with almost half of kids 8-12 currently having their own phone (Nielsen, 2009b). This provides increase opportunities to reach multiple family members through mobile game play. Overtime, of course, the platform options available to game developers will change, but paying attention to current adoption rates should help developers who are targeting family play make this crucial initial decision.

In addition to adoption rates, another key consideration is the spatial location of both the system and the players. The Wii, as mentioned above, is more likely than other console systems to be placed in a central, family-oriented location like a main living room (Bryant, Akerman, & Drell, 2008). The main family computer is similarly likely to be in a more family-oriented space, such as a living room or kitchen. Those systems are ideal for reaching families together in the home.

Moreover, if developers are interested in bringing together family members who are not living under the same roof, such as extended family or children and divorced parents, who may spend considerable time away from one another, they could focus on a system that has a networked platform. Network platforms, such as XBox Live, PlayStation Network, or the Internet, provide this opportunity for extended communication. Another networked platform which, thus far, has not been well utilized for family play is mobile phones or smart phones. Families today are more mobile than ever, so there are new opportunities to “catch” them on-the-go.

A final consideration platform-wise has to do with the interface of the platform. Platforms that have more simple or intuitive interfaces, such as the Wii with its motion-based play, may be better suited for family play because they allow for designing for the “lowest common gaming denominator” in the family. Handheld game systems, mobile phones, and the computer are also relatively simple platforms; but each has limitations for younger players, such as a need for more fine motor skills or a reliance on text-based instructions because of limited data streaming or cartridge size.

For console or computer-based games, if the system does not provide a simple interface, it is also possible to package the game with a new peripheral controller. There are several examples of peripherals that have been successful in targeting multiple members of households, including the dance pad for Dance Dance Revolution, the Wii Fit board, and the instruments for Guitar Hero and Rock Band. Obviously, those peripherals create added expense for the developer (and the consumer), but also can help differentiate a game in the marketplace. Across all platforms, nevertheless, matching the platform usability with the gamer ability is critical.

Game Format

Concurrent with the platform choice is figuring out what format the game will take, or “What will they play?” There are hundreds of variables to consider when it comes to developing a game, but in the context of family communication and value
dissemination, there are several key decisions that rise to the top. The first is whether there are values that the developer wants to model explicitly. As mentioned above, games can portray values that can serve as models for family interaction and social learning; or they can depict values in conflict with that family’s norms, which can serve as teaching opportunities. Games developers can communicate these values simply by, for example, requiring players to share or cooperate to reach a goal or by showing the negative effects of violent actions. Or perhaps there are more complex ethical considerations that developers want to engage families in. For instance, learning to make choices that will positively affect one’s environment might require a multifaceted simulation game. Having a clear definition of what values will be addressed in a game, and designing the overarching game play and rewards structure (more on this below) in reflection of those, will help create opportunities for families to model and discuss those values.

Another key question to answer when developing a game for families is what type of play is to be encouraged. Will the emphasis be on physical, cognitive, creative, or social play; or some combination of those (or something else)? Answering this question will also drive platform choice, since some platforms provide more opportunities than others for each of these. For example, physical play will require a platform that integrates movement into game play; and social play requires some form of communication or interaction.

In addition, if this game is targeting different family members, will it foster independent or interdependent game play, or both? For younger children, it is particularly important for them to be encouraged to play both independently and with others. For teenagers, on the other hand, it may be more important to model interdependent play, since there natural inclination is for independence. From a format standpoint, short-form, casual games may be a better fit for highlighting individual achievement; whereas multiplayer role-playing games offer the chance to show how cooperation can be beneficial (or how completely independent behavior can be problematic). Whether focusing on independent on interdependent play, or both, games can provide models for social interaction.

The characters in the game and the roles offered to the players are also spaces for consideration when developing games for families. The aesthetics and described personalities of characters provide models for particular attitudes and behaviors that players choose to emulate through game play. A character choice by a parent, for instance, can provide a model for their child about the types of abilities, attitudes, or approaches to problem-solving are most esteemed. Moreover, the attributes of the characters may either reflect values held by the family, or be in contrast to them. If they are in contrast to them, more discussion is required between parents and children in order to clearly demarcate those values as “unacceptable.”

Finally, if we refer back to the tenets of family ritual theory, we see that games can provide a space for consistent communication between family members. In developing a game with the goal of values discourse, therefore, it is ideal to create a game that fosters ritualized play for the family. In other words, they should want to play multiple times, and possibly even at “appointment” times, so the game becomes part of the communication rituals within the family. For ritualized play, games with an extensive setup may be at a disadvantage for more consistent play between family members. On the other hand, an online virtual world that requires only an Internet connection may easily become a new form of weekly play and interaction for a grandparent and grandchild living in different states. Keeping in mind that the format will affect the eventual integration of the game into those family rituals is important.

**Reward Structure**

Intimately tied to the overall format of the game is the reward structure that the game employs, or
“Why will they play?” Rewards (and punishments) are part of the way that children learn—and adults teach—right from wrong, good from bad, and so on. Their use in game play provides similar analogs for instruction.

In designing a game for families, it is crucial to decide at the outset what types of actions will be rewarded. What forms of cooperative/competitive play will be included? If there is team-based play, how will cooperation be incentivized? How will achievement be measured, and will it be based on the individual or the group? These are just a few of the questions that may come up when thinking about how players will be encouraged to keep playing and to succeed (however success is defined).

A final consideration with regard to reward structure is how the players are compensated for their achievements. The most common incentive in game play across platforms and categories is individual points. There may be other, however, more innovative and appropriate options for a game that is promoting values discourse. Say, for example, there was a game that simulated an ecosystem, and the players endeavored to put that system in balance through game play. The reward for that game might be saving an animal from extinction. Another example, which builds on the typical individual points system, is to create collective goals to which individuals can donate points (a nice example of this is the recent Club Penguin “Coins for Change” program, where individual players donate their points to a collective pool, which in turn defines how real-world dollars are allocated to charities). This type of collective reward adds another layer to the game play, and added opportunities for addressing values. This aspect of defining the game’s reward structure is one where there is currently a lot of room for innovation.

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**Game Mechanics**

A final element of family game design that has to be tackled relates to the mechanics of the game, answering the question, “How will they play?” Some of the mechanics issues arise due to the platforms or systems, and some are tied to the audience being addressed in the game. From a platform perspective, one of the key issues is how well the platform (or system) handles multiple players. Trying to develop a synchronous multiplayer game for the computer, for example, means having to overcome the problem of having more than one person use the keyboard and/or mouse at the same time. With mobile devices and handhelds, synchronous, multiplayer play on one device may not be possible at all. Those systems, however, may be ideal for asynchronous multiplayer game or networked games (if wireless connectivity is possible).

More common to deal with than platform concerns, however, are mechanics issues that arise due to the target audience. When you are targeting families, you are including one of the toughest audiences to design for—children. Children, especially those under the age of about eight years-old, are still developing the cognitive, physical, and socio-emotional skills required to play games targeted to older audiences. You have their lack of gross or fine motor skills, which makes it difficult for them to use controllers; their basic level of problem-solving, which makes multi-faceted tasks difficult to understand and complete; and their developing vocabulary and communication skills, which can make interacting with them in a game a rather trying experience for those playing with them. Developing a game for families requires developing for players across the spectrum—from the younger or less experienced player who needs special consideration to the one who has the gaming know-how and needs a challenge. These complex considerations when it comes to mechanics means that there is a particular need for user experience research with family games.
in order to make sure that the needs of all of the
players are being addressed.

Finally, as new platforms continue to be released there will be new opportunities for family interactions around gaming. Keeping an eye out for these new prospects is important for game designers who are interested in facilitating family discussion. Re-thinking the ways to design games on current platforms is another way to progress the possibilities for family games. By attending to each of these five elements of game design, and asking the questions provided in Figure 1 (at a bare minimum), game creators, designers, and publishers can open up many new opportunities for providing space for values discourse.

**THE FUTURE OF FAMILY GAMING**

Gaming is going to become an even more important part of the way in which families entertain themselves and communicate with one another. Since communication within families is the most important means of ethic and dissemination, there are great possibilities within this space.

Judging by the industry reactions to the success of the Nintendo Wii, including the recent announcements by Microsoft and Sony of motion-based, more intuitive controllers for their XBox and PlayStation systems, the video game industry is paying more attention to the non-traditional gamer. This is the category that most family-targeted games fit into, including *Rock Band* and *Wii Sports*. We have also been hearing, anecdotally at this point, about how extended families are using games such as *Animal Crossing*, which has communication and co-play capabilities across the Nintendo Network, to have co-entertainment experiences while being geographically distant. This notion of family play that is not tethered to the living room television is one that we think should receive much more attention in the next few years.

In the same vein, online gaming from casual games to virtual worlds has the ability to join families across distances. In addition, there is significant room for improvement in the casual gaming space for creating co-play games. Currently, there are very few of them; and parents and kids are creating co-play experiences in spite of the technological hindrances. Moreover, we have focused mostly on discussing games as individual entities for family interaction. Another for further development, however, is in family gaming in a more packaged context, like gaming packages on a gaming portal or across sites. And finally, the virtual world space has been primarily focused on kids and tweens, but there is an opportunity to create more group-based cooperative play multiplayer games online, in which families could have group accounts to play together.

A last area for the future of family gaming is that of cross-platform and mobile gaming. The increase in mobile phones for all family members and the increase of internet-enabled phones both offer increased opportunities for “on the go” gaming. Whether they are ancillary extensions to more in-depth gaming on a console system or an online virtual world, or they are fully-contained mobile games, this technology gets families when they most often have small moments of downtime that they want to fill—waiting for appointments or practices to finish; getting from afterschool activity to another; and so on. The notion that “play” can be woven into the daily lives of families, and enhanced by the electronics instead of based on them, may be a congruous fit for the hectic lives of today’s families and offer more continuous opportunities for games to play a part in the ongoing values discourse within those families.

**REFERENCES**


Chapter 12
Cognitive Science Helps Formulate Games for Moral Education

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ABSTRACT

This chapter emphasizes that cognitive science can play a significant role in formulating games for moral education. The chapter advocates an encompassing approach where games should be developed by concentrating on the interaction of users with their contexts. Ethics entail moral principles and ethical decision-making is dependent upon developing cognitive structures. Therefore, while designing games one needs to consider developmental trends and information processing models. The framework developed here further emphasizes the need to develop moral games based upon principles of good games in general. There should also be stringent criteria to gauge the success of the game in real world contexts, especially if these games function as part of a school curriculum for moral education. Finally, the chapter concludes with issues surrounding the implementation of such technologies.

INTRODUCTION

Games are usually defined as rule-governed playful activities. Beginning very early in life, children learn to engage in imitative acts that are not random in nature, but are governed by cultural conventions including cultural use of tools and linguistic behavior. Thus, these playful activities are often rule-governed and structured in a normative fashion (Kalish, 2005). There have been interesting debates in psychology regarding the ethical nature of play and games. Earlier theorizing concentrated on the ethically unimportant nature of games and due to this, these could not be viewed as educational activities (Dearden, 1968; Peters, 1966). But some leverage was provided by these scholars and according to them even though games were not understood as ethical in nature but could nevertheless be employed instrumentally to support the larger enterprise of moral education. On the other hand, there are contrasting views that focus on how games can be viewed as inherently moral.
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in nature and not merely as supporting the ends of moral education. According to Aspin (1975), games themselves could be regarded as moral enterprises and consistently engagement with games has moral values that could be harnessed for helping the young minds function in accord with moral principles. Thus these games should be aptly included in education programs focusing on moral development. In a similar manner, Giddens (1964) argued that play and games function as an avenue for helping the young to self choose activities that are rule governed in nature.

These debates become more important in today’s world considering the amount of time children spend in playing the electric versions of games, that is, video games rather than engaging in physical sports. Can these types of games be viewed as ethical in nature? Can these be employed in educational programs? For answering these questions, we also need to distinguish between concepts of pleasure and rule governed behavior. It goes without doubt that players engage in games for the pleasure that these provide. But at the same time, players submit themselves to rule governed behavior that games call for and other ethical considerations upon which game(s) are fundamentally built. One sign of the latter is how immensely players are outraged when their gaming partner violates a game stated rule. Therefore, what at the beginning comes across as a pure source of fun and pleasure is actually in an implicit manner a source of rule governed activity where players eventually know that they themselves are responsible for their actions and therefore are much more willing to accept their faults (Aspin, 1975). On this note, games could be viewed as an apt medium that could be exploited for facilitating learning of rules, advancing the understanding about fairness, tolerance and the like before these could be generalized to the much more open ended outside world.

A major aim of the current chapter would be to integrate this debate on building age appropriate games for the purpose of enhancing moral cognition. Since these games need to be age appropriate, moral cognition is also essentially dependent upon developing cognitive structures. Thus to begin with, I will first describe ethics and than give a brief description of the relation between moral reasoning and cognition. I will then go on to elucidate how modern technological advancement could play a significant role in developing age matched games due to the advent of various multimedia devices that are successful in stimulating interest and motivation in children.

Before going on to the next section, I would briefly provide a working definition of cognition since the motivation behind this chapter is based on it. Cognition from this perspective is well described as an integrated activity of the individual and his/her surroundings and not as something that occurs in a vacuum shielded from other contextual influences. Therefore, games developed from a cognitive perspective should take into account the contexts in which these will be eventually used (an apt example in this case would be the school environment), the background (in this case, the developmental level) of the potential user and also the state of support available for the purpose of designing games both from theoretical (advances in principles underlying good games and cognitive theorizing) as well as technological sides. The resulting endeavor should be an amalgam of these interacting aspects that together could be defined as cognition in context (embodied or situated activity) (Rambusch, 2006). Therefore, the current chapter will aim to advocate an all encompassing approach for developing moral games.

Conducting any sort of cognitive work in different domains (e.g. moral cognition, problem solving, scientific reasoning and the like) evokes working memory into the picture. Thus, here I define the concept of working memory in detail because without an intact working memory system, it is difficult to connect information stored in long term memory with current information gleaned from the environment for the purpose of completing or conducting any work.
**Working memory:** This could be considered a theoretical concept that was proposed for explaining the maintenance and processing of information in a temporary manner for the purpose of facilitating thought processes in humans. Working memory also serves as an intermediating interface between long term memory (information stored permanently), action and perception by not only keeping the current information active in an online format for facilitating work but it also keeps current goals active (Baddeley, 2003). Since working memory supports current manipulation of information and serves as interface, it has a limited capacity for storage and maintaining information in an active manner which means that at any moment it can only support limited amount of work. There has been interesting debates in the literature that focus on the amount of information that could be handled by the working memory system (Kane et al., 2004). Therefore, any attempt to deal with more information than could be handled by the working memory leads to decrements in performance and amounts to cognitive load on the system (Khetrapal, Kar & Srinivasan, 2008). In order to support efficient information processing, working memory is further subdivided or rather is described to have different subcomponents like the central executive, visuo-spatial sketchpad, episodic buffer and phonological loop. Each of these is also defined separately:

**Central executive:** Central executive is not very well understood but the literature indicates that this component coordinates information processing and goals with the help of the two subsidiary systems named, phonological loop and the sketch pad.

**Phonological loop:** This comprises of a phonological store that facilitates storing of acoustic or sound like information for some seconds plus an articulatory rehearsal process that helps in refreshing the stored contents. In this manner, the rehearsal process is similar in nature to subvocal (private) speech. The phonological loop is also very limited in capacity.

**Visuo-spatial sketchpad:** This component could be considered the visual/spatial counterpart of the phonological loop.

**Episodic buffer:** This is an important component that serves as an interface between the subcomponents of working memory and the long term memory and thus facilitates transfer of information among the components (Baddeley 2000), ultimately providing an appropriate cognitive work space.

**BACKGROUND**

Ethics usually refers to moral principles and values and ethical decision making entails understanding moral principles as well as the ability to act based on moral principles (Robertson et al., 2007). Early research focus was placed on cognitive developmental model that described moral reasoning as a conscious process developing in stages (Kohlberg, 1984; Piaget, 1932). But theories appearing later (neo-Kohlbergian theorists) lay emphasis on context dependent effects considering moral conflicts to employ cognitive structures in an automatic and implicit manner (Narvaez & Bock, 2002; Rest, 1994). These automatic processes are generally described as moral sensitivity (Rest, 1994) and moral intuition (Haidt, 2001). Moral sensitivity could be considered the first component of ethical decisions because it gives rise to the requirement of making a moral judgment and then select a course of moral action. Further more, moral sensitivity could be distinguished from the deliberative process of moral reasoning (Brabeck & Rogers, 2000) and could also be potentially improved by training and education (Bebeau, 2002).

**Moral Reasoning and Cognition**

Ethical behavior and moral reasoning are further hypothesized to be dependent upon working memory (WM) (Bucciarelli, Khemlani & Johnson-Laird, 2008; Moore et al., 2008). WM has
traditionally been shown to comprise of various interconnected components like the visuo-spatial buffer, phonological loop, episodic buffer and the central executive (Baddeley, 2000). Consistently research on multimedia learning have shown the importance of animation (dependent upon visuo-spatial processing) and narration (dependent upon phonological loop) that must be finally integrated during learning within WM (see Mayer and Sims, 1994). On parallel lines, studies conducted on multimedia learning (e.g., Sweller et al. 1990; Tindall-Ford et al. 1997) have underscored the importance of presenting material in different formats (visual and auditory), that helps in integrating the presented information thereby supporting problem-solving because the load on WM is reduced and the WM capacity is increased. This effect is accounted for by the existence of episodic buffer that functions on multimodal codes and is controlled by the central executive. The episodic buffer binds information from different sources into an episode and temporarily stores this episode. But if the central executive is loaded due to task related elements, performance or learning falters because it becomes more difficult for the cognitive system to integrate information from various sources for the purpose of storing episodes that could be later retrieved after the learning process is over.

Role of New Technologies

The effect of new technologies and games on children’s moral development might be considered a new age cultural “tool” in Vygotskian sense (see Rakoczy, 2007 for similar reasoning) of the cultural mediation of knowledge. The new age tools present the world symbolically that can be used to affect the child’s developing understanding of the world in a planned manner. Consistently, Vygotsky commented, “Action in the imaginative sphere, in an imaginary situation, the creation of voluntary intentions, and the formation of real-life plans and volitional motives - all appear in play and make it the highest form of preschool development … From the point of view of development, creating an imaginary situation can be regarded as a means of developing abstract thought.” (Vygotsky, 1978, p. 102 - 103).

In discussing about games as mediators of knowledge that helps spur moral cognition in children we touch upon a popular debate between two major views prevalent in psychology regarding cognitive development. The Piagetian school of thought considers the construction of knowledge as an individual oriented process where each child constructs it himself/herself while on the other hand, Vygotsky argued for the primacy of cultural tools in knowledge construction. Consistent with the Vygotskian school of thought, age appropriate games could be considered as powerful mediating tools for enhancing moral cognition and reasoning in children particularly for younger children who have not developed adult like ways to reason with the help of language. This is because language plays an important role in self regulation and thinking and according to Vygotsky (1978); language also has a central role to play as a mediator of knowledge. Thus in this sense, games could be considered a substitute for thought that could be employed in a systematic manner to enhance the development of moral cognition in children.

General Good Game Principles

Following from the Vygotskian concept, this section describes general principles that need to be followed in order to develop better games. For example, according to Gee (2003):

- Good games give information when the latter is typically required, that is, when demanded and at the most appropriate time and not out of contexts
- Such games always remain challenging by operating at the periphery of the player’s
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competence. This is a required state of affairs for such a state serves as a big motivation and is inherently pleasurable.

- These allow players not just to function as consumers but also as producers of their gaming environment. Games that only allow the consumption mode (e.g. most likely in academics) are often not viewed with enthusiasm (Brown, 1994).

- Good games allow players to deal with simple problems in the initial stages from which a pattern of generalization could be extracted that later helps the player to deal with much more difficult problems that arise in the course of game. This also reinforces motivation on the part of players.

The work done by Gee (2003) mostly concentrated on the concept of motivation which is seen as a driving force behind learning. Therefore, good games should be highly motivating so as to encourage motivation on the part of players. Gee also compared the state of learning from games with that of learning from books and movies and emphasized the seemingly better motivating nature of games. In a similar manner, Clark (2003) described the feeling of one’s body and mind being stretched into a new space while performing action at a distance which is true in case of games.

This sort of state is more motivating in nature as the player can connect with the game at a much deeper level due to the ability to manipulate the game characters and take decisions. Such kind of work has not been carried out within the realm of moral cognition but I want to emphasize that these general principles should be kept in mind while designing games for the moral domain as well.

Types of Games

The keen reader must have noticed that there is no description of the specific type of game. This is because hardly any work seems to be done to connect particular games with the kind of framework developed in the chapter. There has also not been any parallel progress in attempting taxonomy of games but as a rough division, games could be classified as strategy games that require complex problem solving or the ones that require fast reactions and coordination. As a guide to understand the kind of games usually employed we will take an overview of the survey conducted by Kirriemuir & McFarlane (2003) in which they looked at schools that employed games in classrooms. The survey’s results show that vast majority of computer games used in schools were simulation or strategy games. These were PC based and simple in nature. Examples include, the RollerCoaster Tycoon and Sim City.

For the purpose of this chapter, when I refer to games I only imply computer games or rather games that have a computer based interface. This restriction to computer games rather than physical games or board games is graspable taking into consideration the growing popularity of such media supported by the advent of new technologies.

The relationship could be bi-directional, as in the requirement and the urge to play such games in the modern world gives rise to further technologies that aid in the improvement of computer based interfaces even further. The recent advancement in this regard is the introduction of virtual reality.

Issues

Developing Moral Reasoning with Multimedia

Multimedia presents an exciting development in recent times to present information by stimulating various senses like vision, hearing and so on. Multimedia (e.g. computer) could also be fruitfully employed in the field of education in order to aid and facilitate the education process in various settings like home and school. Such media is an excellent source for presenting social situations in domains like foreign language learning, interpersonal and moral decision making.
Furthermore, with an interactive media, a learner can be helped to analyze information sources that are important for problem solving and a particular problem situation. For instance, Covay (1990) created a moral case study named ‘A Right to Die? The Case of Dax Cowart’ for the purpose of stimulating the development of moral reasoning in learners. This is based on a Texas man who in the 1970s requested to discontinue his treatment for burn injuries. This case first came to public attention through a video titled, ‘Please Let Me die’ at the University of Texas. The video consisted of an interview that transpired between Cowart and his consulting psychiatrist along with pictures of his treatment.

In Covay’s moral case study, the learners are presented with a dilemma of a soldier returned from a war with sixty percent of burn injuries. As a part of treatment, he would be subjected to painful procedures but his treatment gives him a chance to live although with disability. He demands that his treatment should be discontinued and he should be allowed to die. Learners are expected to decide whether he should be allowed to die or continue receiving the treatment, even though painful in nature. The aim if this moral scenario is not to provide the learner with arguments for a specific position but to provide them with a moral framework within which such issues could be explored. Covay’s creation is quite interactive in nature where the learner could interact with the patient and others present like the nurse, doctors, a lawyer and the patient’s mother. This is done so that the learner could get a broad perspective of the whole situation along with the individual view(s). The learner is also presented with abstract concepts of suffering, quality of life, autonomy and so on. Whichever position the student/learner takes, he or she is always presented with information contrary to it so as to advance the understanding of each choice.

Covay’s development is an excellent example of what Flavell (1987) would describe as metacognitive reflection. This type of reflection is most likely to be evoked in situations that offer opportunities to engage in conscious decision making which is true of environments offering complex problems to be potentially solved. According to Schwartz et al. (1999) reflective thinking entails social interactions as learners require multiple perspectives and feedback during the engagement in the learning process. Reflective thinking is also a deliberative act of exploration that requires on the part of the learner to understand the process of learning (Schon, 1992). Therefore, it becomes very important for any sort of technology (e.g. multimedia) to give due importance to these basic principles of reflective thinking and incorporate these into the development of age appropriate materials for children so as to aid the advancement of cognitive skills in a particular domain.

Problems

Covey’s system was not developed for children and it dealt with a situation that might not be very appealing to be used with children. Given the lack of systematic research on the relation between the application of games and the development of moral cognition in children, it becomes important to develop a theoretical base that serves as a guiding force in this regard and the current paper is a first step towards this direction. At this juncture, it is important to consider ideas about how cognition works and develops in children in order to develop age appropriate games for facilitating moral reasoning in children. It will be futile to produce a system that presents complex arguments about moral dilemmas that the young mind is not even capable of handling. It is also important to take into account the factors that would work towards making such a system very attractive for children. At the beginning therefore it is a balancing act between three sets of factors namely, the developing cognition, attractive material that has the capability to sustain motivation and interest and finally the reasoning principles and ideas themselves which need to be presented to children in the moral domain.
Initial Attempts at Integrating Cognition with Games

The attempt to integrate research in the cognitive domain with efforts in developing age-appropriate games for moral development is slowly gaining momentum in the scientific literature. In this section, I will elucidate this development with the help of few examples but the reader will realize that we have a long way to go before a successful system is in place.

Sherer (1998) designed a computerized game called ETGAR for stimulating moral development of junior and senior high school students starting with the premise that moral behavior and moral development are closely linked. Participants were not only expected to play the game that presented several moral dilemmas in different domains like school, family, friends, work, society, community, sex but were also expected to develop their own moral dilemmas. An expectation to generate their own dilemmas was based on the premise that getting a chance to think about the problems that may threaten their personal lives and by making such problems appear more real in the context of games, ethical sensitivity and moral behavior on the part of the participants would be enhanced. During the course of the game, players are expected to accumulate points that are given in order to reinforce positive behavior. Points are based on the choice of answers given by the participants in response to the dilemmas presented to them. But the point system is sometimes made unpredictable in order to closely resemble the unpredictable nature of life itself. Players’ interest is kept by the nature of points awarded. The findings from this study show that such games do have a positive effect on the moral development of students. This example study from Sherer is closer in nature to Covay’s work but is more age appropriate for the population designed. The successful results serve as a motivation to design further age-appropriate materials. On parallel lines, Bers (2001) designed an ‘identity construction environment’ for the purpose of providing opportunities to the young for the exploration and development of personal and moral values. This successful approach is another example of developing an age-appropriate virtual world for children. Bers made a popular attempt at integrating technology with psycho-educational intervention. This was formulated with the aim of supplementing face-to-face psycho-educational programs (Bers, 2003).

Another example comes from the work of Robertson & Good (2003) who developed the Ghostwriter in collaboration with teachers, actors and professional storytellers for the purpose of virtual role playing environment. In typical Ghostwriter sessions, children in pairs immerse themselves in computer mediated role play. Since the Ghostwriter offers a virtual world for role play, children who play the role of characters easily learn to control the virtual characters. Ghostwriter is thus not only easy to use but also affords interactivity as the child who plays the role of the leader can encourage the other children to become emotionally involved with the plot displayed. Consequently discussions while taking difficult decisions are encouraged. The main aim of developing the Ghostwriter was to foster the development of ethical decision making with due implications for social and personal development. The results indicate, that Ghostwriter was successful in achieving the aims for which it was planned.

Exciting methodologies have also been proposed (Tuzun, 2004) in the recent past that will help to make such endeavors even better. Design ethnography with naturalistic observations has been described as employing a qualitative research paradigm which involves sustained participation and interaction with the designed product and its context of use. Design ethnography rests upon the methods of ethnographic and action (participatory) research. The basic goal is to change the culture under consideration where both individuals and the context continuously interact with each other. The researcher is the main agent of change who
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plays two different roles (active participation in the process and that of a peripheral observer) at the same time.

Another exciting tool is developed by Bers (2003), called Kaleidostories which is useful for data collection rather than for the purpose of designing itself as proposed by Tuzun (2004). Kaleidostories is an attempt at online collaborative environments for the purpose of facilitating moral development. This is a web based narrative tool that helps people in exchanging stories which in turn help in building up a virtual community that mediates the sharing of values and the development of role models. The beauty of Kaleidostories lies with the opportunity provided to the users for either developing their own role model or adding it to the data base or by selecting from the available models already present in the library. The users are not only expected to develop or select these models but also to link them up with particular values that are then shared across the community of web users. All the users are also represented graphically that aids learning and relating to each other and this also allows the Kaleidostories to be used asynchronously. This tool was developed to augment the face-to-face interactions of teachers with students.

Furthermore, Beals & Bers (2009) proposed a set of 6 criteria (purpose, communication, participation, play, artifacts and rules) for designing virtual environment specially geared to the needs of children. According to their proposal, any design developed for children, by incorporating these, possibly could help maximize the advantages for a targeted domain. The proposal of these 6 criteria is a highly welcome advancement considering the many problems already identified with the application of technology (developed for adults) for children, reinforcing the need for more developmental work based on Vygotsky’s concept of ‘zone of proximal development’. For instance, Havighurst (1971) emphasized that games selected by players is a reflection of their developmental needs. This prompts us to employ more ethnographic work on the lines proposed Tuzon for the purpose of initial observations. This kind of observation will go a long way in giving valuable information about the kind of games preferred by children at each age and the interaction of game selection with the development level that the child has attained.

Research described above (definitely being in its initial stage) shows that efforts at integrating basic work from cognitive science and ethical and moral domain is likely to yield fruitful outcomes if followed with rigor in the future.

An emphasis on such an integration of domains in designing games is needed when targeting the moral domain:

- **Design:** At the level of underlying principles that guides the development of games
- **Methodologies:** These are required to implement the design, for instance, ethnographic methods combined with observations
- **Tools:** Data collection should be facilitated with the help of appropriate tools, for instance, Kaleidostories
- **Data analysis:** We will also eventually require new suitable methods for analyzing the specific data that we obtain in this course

Furthermore, game developers for the moral domain also need to keep in mind the calls for better cooperation with people working in different aspects truly in line with the work of Robertson & Good (2003). As an encouraging note, we have the successful initial results, new paradigms, underlying criteria for design but more is needed to gain momentum. The results, tools, motivating guidelines and the designs all reflect attempts at synthesis from disciplines of study which in itself is an important achievement. We still need even better synthesis from each of these fields that in turn will give rise to the requirement of more basic work on cognition especially tailored for
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developing virtual/games for children and more specifically in the moral domain. This is also likely to revise some of the existing theorizing and will give way to new methodologies that could be developed for this kind of work. We have some basic ingredients ready and what we may want is more synthesis of these! This brings us to the next important section on future directions where I outline most important directions in which this work could proceed.

FUTURE RESEARCH DIRECTIONS

Enhancement of Cognitive Skills in Children

Contemporary scientific research gives us valuable results that help us understand the manner in which the cognitive skills (mental processes) of children could be improved. Research evidence exists to show that learning is very effective when four conditions are satisfied and when technology is matched to each of these (Roschelle et al., 2000):

- Active engagement with the learning materials
- Group participation
- Frequent and timely feedback and interaction
- Connection of learning materials to the real world contexts

This implies that it is important to pay due attention to the above mentioned four points so as to understand how these could be implemented into new technologies. Therefore a promising research direction in this regard would be to take the findings (falling under the four mentioned points) into account so as to apply them carefully in the gaming scenario. This is important as other parallel systematic research incorporating these points with high school, middle school and elementary school students show that cognitive skills could be enhanced and motivation towards learning could be aroused on the part of the students (Liu, 2003).

In order to engage interest on the part of children, it is important to present interesting material (as discussed previously). An appropriate example in this regard is the presentation of characters in games. This is because the presentation of characters as biological agents rather than as mechanical agents helps children in developing an understanding about the mental states of others (which once understood is likely to be generalized to the real world if the gaming environment carefully connects to the real world contexts). Making a distinction between biological and mechanical agents is important as only biological agents can have feelings. Providing eyes or eye-like features to the cartoon characters help in presenting these as biological agents (Hamlin et al., 2007).

Games can help in making a connection to the real world contexts by presenting material to children repeatedly so as to enhance the possibility for such materials to be used as analogies for solving real world problems. Problem solving by analogies entail solving a novel problem by recalling a previous experience that is similar in nature to the currently encountered situation. A material that is thus presented repeatedly and understood in the context of problem solving (which is true for games designed for this purpose) not only improves the chance of it being recalled easily but also facilitates its use as an analogy to be picked up from the gaming context (Goswami, 2008). Games can help play a facilitatory role in this regard by presenting material that children might not encounter until late childhood.

Here, it is important to say that even though video games and other multimedia provide repeated experiences of a particular type yet it is not currently known whether, without the inclusion of social communication with others, the young brain still abstracts the experiences from the games (Goswami, 2008). Therefore, it is best to
design the games that have social communication with adults and other relevant peer groups, as a substantial portion. Furthermore, the discussion within the social context can help in the consolidation of abstracted and learned materials from the games.

**Considering Cognitive Development**

Having talked about the factors specific to game development, it also makes sense to take into account the development of WM in children while developing age appropriate games. Therefore, this part will elucidate the cognitive literature on WM that could be relied upon for game development. WM capacity continues to increase with age; the increasing capacity (Barrouillet & Camos, 2001) helps the developing child to hold multiple perspectives about a particular situation in an active manner. And games that require children to hold multiple perspectives active can in this regard aid the developing WM resources and ultimately help the child to plan action sequences by giving him/her practice with self regulation skills (Goswami, 2008). In this scenario, it is not only important to consider the developing WM resources but also imperative to keep in mind the role of cognitive load and task difficulty that can interact with WM and affect performance, as empirical findings show that imposing load can adversely affect task performance even for children as old as 13 years of age; this is because WM follows a long developmental course (Khetrapal, Kar & Srinivasan, 2008).

A new direction for developing multimedia games in this regard would be the application of virtual reality (VR). VRs could be considered as an exciting medium that will not only be an attractive source for children but will also be an optimal base for the application of principles of cognitive development or rather the developing cognitive structures, identified above, while developing tools for enhancing moral cognition in children. Schultheis & Rizzo (2001) define VR for behavioral sciences as, “an advanced form of human-computer interface that allows the user to interact with and become immersed in a computer-generated environment in a naturalistic fashion”. The VR technology has yielded promising results in terms of cognitive functioning (Rose, Attree & Johnson, 1996); social benefits (Hirose, Taniguchi, Nakagaki, & Nihei, 1994) and has proved to be less expensive than the real world simulators.

The emphasis so far has been on the development and adaptation of multimedia technology (e.g. VR) as a medium for developing games because of their utility in providing age appropriate tools, considering the developing cognitive structures of the young. As mentioned at the beginning of this chapter, it is important to create environments that help children recall the learnt material which in turn will be helpful in eliciting ethical and moral behavior. Multimedia technologies can be helpful in this endeavor as these stimulate different sensory codes like audition and vision. Simultaneous presentation of information through different modalities helps the learning process for the young mind by the way of reducing interference. This happens because a learner can store information in two different sensory codes rather than burdening just one of them. Consistently, Mayer (2001) showed that learners can learn better from both animation and narration.

Simultaneous presentation of information in different modalities helps in developing understanding about the problem situation in any domain (e.g. education, moral). This is because it is essential for reasoning and understanding as each may not be accompanied by the other (Sweller, 1988). Sweller’s work showed that some problems demand so much load on the cognitive resources during the solution process that the learners are unable to build a schematic structure that abstracts essential information for solving problems of that particular type yielding dissociation between problem solving and understanding. Thus, it is recommended that while developing
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games for moral cognition, game developers keep in mind that load on cognitive resources needs to be reduced if an abstract level of understanding is desired for the moral domain. In this set of situation, stimulating different sense modalities will be beneficial. Presumably, the freeing up of cognitive resources in this way ultimately helps in the integration of information presented through different sense modalities and on which the development of higher level understanding rests.

It will also be a good idea to develop transfer tests in the process of such endeavor. These kinds of tests require the young learners to apply their acquired (abstracted) knowledge to new situation that are not encountered during the learning process. In this manner, it will be easy to gauge the level of understanding for the moral domain in children not just the ability to solve moral problems in the gaming context. This kind of high level understanding could be the first step in eliciting ethical behavior in children.

Implementation

It is not only important to understand how technology could be employed to obtain gains in cognition but it is also essential to find ways to implement new successful innovations. To gauge the problem of implementation it is wise to follow the report from Teachers Evaluating Educational Multimedia (TEEM) project at UK (McFarlane, Sparrowhawk & Heald, 2002). According to this report, there is inconsistency between UK curriculum and game content. There was also an emphasis in the report to develop games that meet educational needs and helps provide a cover for the inconsistency. On similar lines, Kirriemuir & McFarlane (2003) in their survey report (again mostly conducted in the UK) discovered that the support materials for teachers themselves were required for learning the games, school agreements made the introduction of new gaming software into school networks difficult and teachers lacked time to learn the new gaming software. Therefore, implementation of new technologies does not only require financial concerns but also other types of issues that need to be carefully thought of (Roschelle et al., 2000):

- Teachers or other teaching staff in contact with the children need to be receptive of the new technology and at the same time also master the required new skills (technological and social)
- Adoption of modern curriculum that integrates the new teaching aids and technologies and new student assessment methods dependent upon such an integration

CONCLUSION

This chapter could serve as a valuable resource for moral game developers in need of relevant information on cognitive development and other requirements for children. First of all, as this chapter shows, it becomes important to understand the distinction between moral reasoning and ethical decision making. From the viewpoint of the current chapter, ethics is composed of these two components and games can help at improving the development of moral reasoning which could be considered as the first successful step towards improving the likelihood that children will act in an ethical manner after exposure to such materials. But this is not the whole story, improving just moral reasoning may not be sufficient and hence it is important to supplement the whole gaming endeavor with few more important elements namely, active engagement with the learning materials, active participation, frequent and timely feedback and connection of learning materials to the real world contexts. This future research direction will prove to be valuable if systematic studies that aim to understand the successful implementation of the whole gaming endeavor, are undertaken.
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REFERENCES


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Cognitive Science Helps Formulate Games for Moral Education


### ADDITIONAL READING


Chapter 13
Moral Development through Social Narratives and Game Design

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ABSTRACT
Morality originates in dispositions and attitudes formed in childhood and early adolescence. Fantasy play and both the perspective taking and interpersonal negotiation of conflicts that it affords, have been causally linked to the development of moral reasoning and a theory of mind. A closer examination of the self-regulated processes involved implicates a number of contributing factors that video games and virtual worlds are well suited to encourage. The authors present recommendations suggesting the ways in which such technology can facilitate moral development by supporting and simulating diverse social interaction in ways leading to the promotion of self-efficacy, critical thinking, and consequential decision making.

INTRODUCTION
Life revolves around play, or at least it did. As children, our imagination set the stage for making sense of a world around us through inventive play and exploration (Vygotsky, 1933/1966). While play can focus on inanimate places and things, it is within the type of play focused on social narratives where we learn how and why to compassionately interact with others (Paley, 2004). In the process we develop our own moral compass of what is right and of what is wrong.

Advanced technology makes it possible to simulate imaginary worlds where we can play starring roles, as is done in the fantasy play of childhood. For better or worse, video games have the power to immerse individuals firsthand in otherwise out of reach social experiences. Historically, concerns about the adverse influence of newly introduced media on society have accompanied the release
of novels, music genres, television, and more recently, video games. However, such criticism often fails to account for the active nature of media consumption.

Far from a blank slate, individuals bring with them a wealth and depth of experiences shaped by their personal cares, concerns, and dispositions. Each of these elements then affect how receptive individuals are to external influence. The active and experienced media consumer is the protagonist of this story. It is a story about how everyone is actively involved in their own moral development through the stories that they tell, if only in their minds. It will be argued that technology can be better designed to promote moral growth through a consideration of how fantasy play incubates learning. This chapter will consider where morality comes from, what influences its development, and how video games might play a supporting role.

**BACKGROUND**

**Morality Defined**

A moral is widely considered to be a principle of right and wrong conduct. By comparison, an ethic is a set of morals particular to a given culture or group; and finally morality is a process of conforming to a set of rules of right conduct (Dictionary.com, 2009). In this sense, ethics are externally mandated and may or may not be adopted into an individual’s internally constructed set of morals.

Moral development and transformations of consciousness continue throughout life. At younger ages, cognitive and social predispositions are first formed that enable or impair one’s social relationships (Krosnick & Alwin, 1989), and by extension, ultimately direct one’s moral trajectory. The origins of morality have been attributed to social factors in early childhood, beginning at around two years of age, coinciding with the emergence of both fantasy play and language acquisition (Singer, J., & Singer, D., 2006). Its development continues into adulthood, mostly as predicted by Kohlberg’s (1981) model of staged development (see Figure 1). Along the path from childhood to adulthood, various stages of moral transformation occur that redefine one’s world view and affect the nature of one’s interaction with others (Bandura, 1991; Vygotsky, 1933/1966).

While still in need of further research, there is support for the impressionable years hypothesis that individuals are most receptive to changing their beliefs prior to adulthood (Alwin & McCammon, 2003). For this reason, childhood and early adolescence will be the focus here as moral development is traced from its early beginnings in the social and narrative fantasy play of early childhood to its more adult manifestations in activities such as role play and interpersonal conflict negotiation.

**Mechanisms of Moral Development**

Robust evidence confirms that moral judgment does indeed progress across cultures in the stages observed and predicted by Kohlberg (1981), up until stage four (Snarey, 1985; Gibbs, Basinger, Grime, & Snarey, 2007). After stage four Kohlberg’s model becomes inconsistent with findings. Individuals are found to consistently advance in their use of higher levels of reasoning to situate their beliefs, but have not been found to necessarily follow the order nor the philosophical alignments of stages 5 and 6 as predicted.

The mechanisms underlying the development of moral reasoning seem to shift with age from natural proclivities to more environmentally mediated factors. At first, instinctual, affective responses to social interaction seem to precede and influence the onset of behaviors associated with stage one morality (Bridges, 1933). Later in life, after stage four, morality is found to progress at variable rates toward more abstract and principled alignment of personal identity with socio-cultural
ideals (Snarey, 1985; Gibbs, Basinger, Grime, & Snarey, 2007). In between, a number of underlying social and intellectual competencies have been found to correlate to moral advancement, such as a theory of mind, interpersonal skills, leadership status, and intimacy between friends (Schonert-Reichl, 1999). And, of all external factors tracked, the leading predictor of moral development is found to be perspective taking, or rather access to environments that afford such behavior (Gibbs, Basinger, Grime, & Snarey, 2007).

In summary, the course of moral development conforms early on to natural predispositions. It varies later as individuals selectively adopt ethical precepts from their social and culture interactions, notably those involving perspective taking. An opportunity then is to consider how technology might support perspective taking earlier in the development process, leading into the types of critical reflection associated with more advanced forms of moral reasoning (Simkins & Steinkuehler, 2008).

**The Role of Schema in Moral Development**

To explain why perspective taking activities such as role-play and conflict negotiation lead to moral development, it becomes necessary to look closely at underlying cognitive processes. Bandura’s (1986) social cognitive theory explains that an individual’s ability to think about observed social and environmental phenomena depends on their ability to internally represent them. From this, perspective experiences are selectively interpreted and stored, and then used to inform social decision making.

According to schema theory (Anderson, 1977; Bartlett, 1932; Piaget, 1936/1952), the internal representation of knowledge and, to some degree, reasoning itself, is a mental network comprised of layers of more and more sophisticated narrative-like conceptual structures, called schema. Each schema is an attribution of meaning. A group of schema, or schemata, can collectively represent...
our understanding of what something is, how it is categorized in relation to other things, where or when it might be found, and how we should expect it to behave or change in particular contexts. Higher levels of schemata move from representations of direct experience to entail abstract reasoning and meta-cognition, the latter of which entails introspective reflection, and strategies for mentally approaching situations in the world around us.

Initially, new schemata are formed as we make sense of simple percepts. Over time, knowledge deepens as new schemata form connections between existing ones, culminating in realizations of new ways to think about what we already know. An example of a low level schema could be the recognition of staircases as configurations of stepped structures affording ascent or descent. A higher level set of schema might connect the schema of physical staircases to other schema about existential transcendence or professional advancement, thus making it possible to understand metaphoric references to stairs. In contrast, socially oriented schema, as are central to moral reasoning, involves defined social roles, such as that of a doctor.

Once established, schemata are used to inform decision making, to guide the way we think, and are not prone to change until they fail to explain new experiences (Piaget 1936/1952). At a basic level, one schema of “doctor” could identify a type of person responsible for keeping a person alive and healthy. Another schema might add that doctors are also obliged to minimize suffering. Contradictions are revealed upon learning about high risk therapies and terminal illnesses. A doctor cannot always keep a patient alive without causing them pain, nor can they always ease a patient’s suffering while providing the best care. In the process, a consideration of the moral complexities of euthanasia occurs. In this way, cognitive dissonance can trigger a reconsideration and a reorganization of schematic beliefs (Piaget 1936/1952). The progression of knowledge from the concrete to the abstract, and its evolution rooted in conflict resolution has a number of further implications related to moral development, suggesting the following:

- Moral reasoning would progress as one gains contextual experience rather than maturity alone, which explains the findings that while morality does progress in an initial sequence it does not do so at set ages (Snarey, 1985; Gibbs, Basinger, Grime, & Snarey, 2007).
- Reflection related to moral issues, as is promoted by role play, is necessary for the discovery of contradictions that subsequently lead to construction of beliefs and strategies for moral reasoning.
- Merely rewarding or punishing an individual is not sufficient to promote an understanding of why certain behaviors are considered moral or immoral.
- Similar experiences will be perceived and understood differently between and even within individuals based on their schematic state at any given time.
- Given the assumption that established schemata are deeply embedded in a network of association, and thus not as easy to reorient as less defined schemata, it follows that beliefs can most easily be swayed when an individual has enough knowledge to grasp the general idea being considered, but not so much as to be committed to a particular point of view.

Moral Reasoning as Inherently Social and Narrative

Literature on moral development uses terms such as moral and socio-moral interchangeably because moral development is a form of social development (e.g. Kohlberg, 1981; Vygotsky, 1933/1966). It entails the acquisition and accommodation of
new schemata describing social roles, social responsibilities, and reasonable expectations of how situated actions lead to particular consequences.

The combination of these details reflects a narrative quality to thought itself. There are main characters, challenges to face, and expectations about how actions will affect expected outcomes. Bartlett’s (1932) early findings support the theory that memory is inherently narrative, demonstrating that recollection of lived events include inventions of details conforming to stereotypical narrative structure and omissions of details that do not. According to Bruner (1986), even when lived experiences are not explicitly narrative in nature, they are given narrative structure through our perceptual and cognitive processes of encoding them into schema, which discursively organizes cognition, emotion, and action together in meaningful ways that allow us to take action, make predictions, and, more generally, to make sense of what we observe.

We make two main claims: (1) the interplay between external social narratives and their internal representations is where morality develops, and (2) that the narrative structure of thought explains why narratives are effective tools for explaining ideas and why narrative testimonials are found to be more persuasive than facts (Reinard, 1988). The implication is that games, which either involve morally related social narrative or which support players’ creation and enactment of such narratives, will most effectively promote moral development in children and adolescents.

### The Paradox of Immoral Behavior

Social narratives are powerful internal and external sources of influence on individuals. Put us in a new social environment, pressure us to behave in ways against our better judgment, and we are capable of acts we would not think possible. Most of us would electrocute someone in the next room if, during a psychology experiment, the seemingly knowledgeable researcher insisted on it (Milgram, 1974). Many of us would act cruel and abusive if we were thrust into the role of prison guards in Zimbardo’s study (Haney & Zimbardo, 1976), and would act prejudicially if told we were superior to others for reasons as arbitrary as eye color (Peters, 1987). In a follow up survey, Milgram (1974) found that 100% of those polled said they would have quit the electrocution experiment had they been in it, yet only 35% of participants within the study actually did. In other studies, such as one investigating corporate theft, a significantly higher number of workers with the highest levels of moral judgment reported stealing from their companies when no corporate programs actively supporting ethical behavior were in place (Greenberg as cited in Gibbs, Basinger, Grime, & Snarey 2007).

These examples illustrate a common concern with Kohlberg’s reliance on measures of moral judgment to describe morality. Moral transgressions clearly occur in predictable ways that go unexplained by Kohlberg’s model, and adherence to ethics seems highly contextually dependent. But why?

Bandura (1991) accounts for the disparity in his suggestion that morality is a system comprised of moral performance as separate from, but linked to, moral competence. His model and initial findings indicate a greater degree of agency on the part of the individual in actively selecting when to, and when not to morally self-regulate their own behavior:

“Self-monitoring of one’s conduct is the first step toward exercising control over it. Action gives rise
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to self-reactions through a judgmental function in which conduct is evaluated against internal standards and situational circumstances. Moral judgment sets the occasion for self-reactive influence. People get themselves to behave in accordance with their moral standards through anticipatory positive and negative self-reactions for different courses of action” (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996 p. 364).

The point being made is that moral reasoning is one of many internal processes involved in regulating behavior. Self awareness is emphasized both in the ability to assess a situation and to anticipate consequences of possible actions. An individual’s library of schema about situations and the perceived morality of possible outcomes may serve as the internal standards against which to judge a situation, but the emphasis is on the process being one of interpretation. The implication is that misinterpretations, internal rationalizations, and a lack of self-efficacy could all help to explain why individuals can be externally influenced to behave immorally.

Self Efficacy and Resisting Immoral Influence

Self awareness is an interesting and important component to understanding this paradox between competence and behavior. As we cognitively reflect on who we are, there is both an “I,” a central perceptual agency that thinks and wonders, as well as a descriptive self-image built upon how we think we are perceived by others. When asked, people describe themselves as tall, smart, friendly, or shy. Yet such descriptions are all relative. “Tall,” as a description, says very little about the actual height of a person without a relative point of comparison. Our sense of identity is therefore directly and substantially based on comparisons to others. Furthermore, we are defined, not in relation to everyone, but only to the select few that we consider comparable, such as peers within our community. And to further complicate this, through our affiliations with different groups, we have a sense of identity of who we are contextually relative to each affiliation. This gives rise to tensions between what we think is right and the various social norms and expectations imposed on us through multiple affiliations.

While related to ethics, social norms can entail expectations to misbehave just as much as they might elicit prosocial behavior. Social norms are usually enacted in group participation behaviorally and inferred over time or through explicit normative influence. The violation of norms triggers corrective or exclusionary behaviors in varying degrees of severity. Human tendencies to avoid violating social norms, whether related to fears of losing peer acceptance or stemming from trust in authority figures, has proven, as discussed, to have surprising influence on individuals.

According to Bandura (2000), self-efficacy is the key to resisting both the pressures of external influence and the internal drive to conform to social norms that lead to immoral behavior:

“Beliefs of personal efficacy are the foundation of human agency. Unless people believe they can produce desired results by their actions, they have little incentive to act. It affects how they think, feel, act, and motivate themselves. Specifically, such beliefs regulate what people choose to do, how much effort they invest in what they undertake, how long they persevere in the face of obstacles and failure experiences, whether their thought patterns are self-hindering or self-enhancing, how much stress and despondency they experience in coping with taxing situations, and their resilience to adversity” (Bandura, 2000, p. 331).

In other words, moral behavior depends on feeling that one can make a choice as well as the expectation that one’s choice will lead to meaningful and desired outcomes.

Moral behavior then, is a complicated culmination of normative pressure, our perception of
having the ability to make a meaningful choice, the guidance of our critical ethical reasoning, consideration of social-narrative experience, our values of empathy and personal ethics, and concern regarding consequences for all involved. In this way, moral development not only entails improving moral judgment, but also in enabling resistance to outside influence.

**Sources of Normative Ethical Influences**

The use of existential social narratives as a vehicle for ethical transmission abounds throughout recorded history (Campbell, 1991). Fables and parables have been particularly popular in conveying the normative ethics of a group from one generation to the next. It might be asked, of all narrative formats and ways of conveying ethical lessons, why have certain ones come to be so popular? It is interesting that the classics seem to contain simple linear plot lines, a focus on symbolic characters, and generalized points of view. Given what is known about early schema formation and the internal process by which the world is first understood, the narrative structure of fables and parables seems well aligned, or even analogous to, the cognitive way in which morality is internally represented.

For example, consider the fable about the tortoise and the hare. The narrative tells us about a slow, patient turtle that never stops trying. It crawls step by step in a race toward a goal, even when faced with seemingly insurmountable competition. Nameless and stereotypical, unreal in their depiction as anthropomorphic animals, the characters take on a symbolic quality. They seem to represent simple schematic ideas likely to be understood by a child, like patient versus impulsive. The simple, iconic form and the lack of extraneous side characters or secondary plot lines all reduce the number of important elements one must attend to in order to realize the implied morals, such as “slow and steady wins the race.”

According to schema theory the acquisition of new schema involves a process of digesting experiences into simplified, generalizable forms. Salient elements are recognized in relation to past experience, extraneous details are stripped away, and the skeletal explanatory narrative that remains is used to connect the details together (Singer, 1994). In this way fables already come in a form that seems partially digested for easy understanding. What remains is for the schema to be compared and connected to past experiences, or tested out in play, as can be seen in young children.

**Social Narrative Play and its Role in Moral Development**

From the earliest of ages we observe and experiment to discover meaningful connections between everything around us. While observing social narratives in stories and life can lead to new ideas, it is not until those ideas are understood in relation to what we already know that we can make sense of them (Piaget 1936/1952). A behavior facilitating this process, which we call social narrative play, involves the enactment, rehearsal, and reinvention of social narratives (Rosen, Schwebel, & Singer, 1997; Singer, J., & Singer, D., 2006). Social narrative play is the subset of play focused on internal or external critical exploration of social narratives. The emphasis on critical exploration stems from a constellation of findings that locate early moral development in the effortful negotiation of social conflict involving issues of morality (Piaget, 1932/1997; Schonert-Reichl, 1999; Youniss, 1980). This is most likely to occur with peers who are perceived as similar to ourselves, and most often within the intimacy of close friendships (Schonert-Reichl, 1999; see also Berkowitz, Oser, & Althof, 1987; Nelson & Aboud, 1985). The process of negotiating differences and disagreements with playmates affords the potential opportunity to see a situation from another’s perspective. This corroborates the finding already described, that access to opportunities...
affording perspective taking is the leading predictor of moral reasoning (Gibbs, Basinger, Grime, & Snarey, 2007).

An important distinction is that play described as social involves social interaction, whereas social narrative play is focused on critically thinking about social narrative, whether the play itself involves others. The importance of this can be seen in the research of Ryokai & Cassell (2001). They found that both solitary and paired children are more verbally active and tell more elaborate stories during play when exposed to audio recordings of other children narrating their own play sessions. Furthermore, children use more sophisticated logic, literary devices, and consideration of the perspectives of others after listening to the narration of peers, independently of whether they themselves participated in direct social interaction. The implication is that ordinary play can be transformed into social narrative play with the suggestion rather than the actual presence of social interaction. Solitary video games involving virtual social interaction, like adventure games and RPGs, should therefore be able to foster moral development through social narrative play.

Finding the Right Medium

Given the personal and internally constructed nature of morality, the design challenge is to provide a diverse audience with the types of experiences and support likely to personally motivate each of them to confront particular issues. The approach being recommended is to provide opportunities to observe, socially explore, and play with social narratives, but not all media can do this effectively. Each type has its own advantages and limitations. Books present ideas, but do not directly facilitate interaction or play. Fantasy play itself, while more of a practice than a medium, does provide the freedom to explore invented or observed narratives, but lacks the guidance that more structured experiences can provide. Examples of this can be seen in virtual worlds where users participate in constructing the world and collectively directing the way in which it is used. In the spectrum between more passive mediums like text and more audience driven ones like virtual worlds, video games fall somewhere in between. They are promising in the ways that they can facilitate both open-ended as well as directed social narrative play. Their structured narratives can introduce carefully selected moral dilemmas, while their game play mechanics can guide social interaction and personal exploration.

Finding the Right Narrative

Common across a range of mediums is the use of narrative, and certain narratives are more appealing than others. According to Dawkins (2006), the transmission of stories and ideas, or “memes,” between people and across cultures undergoes a process of natural selection mirroring that of biological evolution. This can be seen in the selection and reinterpretation of stories from Aesop’s Fables and religious scripture. Particular stories have survived the test of time and continue to be sought out for their relevance throughout the ages. The natural selection of stories can therefore be indicative of the preferences, needs, desires, questions, and fears of the people and societies in which they thrive (Campbell, 1991; Dawkins, 2006).

NARRATIVES that make use of certain recurring themes seem to have widespread appeal and remain relevant from generation to generation because they address issues to which all can relate (Jung, 1968; Campbell, 1991). For example, Meadows (2003) argues, “Fear, Struggle, Love, Desire, and Society are all issues that are both universal and personal, and it’s the specific relationship of the personal to the universal that makes them so poignant for a reader” (p. 24). Among kindergarteners, Paley (2004) identifies friendship, fairness, and fantasy as central themes. Campbell’s “monomyth” (2008), chronicling the journey of
the archetypal hero, is another example. Even the lasting appeal of Shakespearian works have been attributed to their central use of universal archetypes (i.e., Romeo & Juliet as star-crossed lovers, Richard II as a hero dying with honor). While video game designers do not have hundreds of years with which to test out which memes naturally resonate across diverse audiences, they can continue to do as they have done, and look to emulate themes or address issues present in the narratives already popular with their intended audiences.

Finding the Right Context

While narratives in many forms have historically played a prominent role in the transmission of ethics, their effectiveness has likely depended on the contexts in which they have been situated. Ethical stories are often told by authority figures and role models like parents, teachers, and religious leaders. They are often told in classrooms or homes where trusted peers are available to discuss or even act out ideas that were introduced. Even in educational television programming credible role models are found to increase the impact a show has on its viewer’s beliefs and learning (Fisch, 2004).

Media that delivers narrative separate from a socially and emotionally supportive context is prone to ignore or underestimate the value of social presence. Translation of social narratives into concrete or digital forms might be enough to convey ethical lessons but not enough to enable understanding or acceptance of them. The opportunity to witness others’ emotional and social reactions, to discuss, to act out, and to meaningfully change the stories, is essential. This need not occur in the interaction with the medium itself. A story is read, a show watched, and a game played in a context, both internal and external. The supportive and social nature of that context might make all the difference.

Narratives embedded in video games are situated within the context of gameplay mechanics and aesthetics. A tension can occur when the narrative does not make sense in relation to the gameplay experience (Lindley, 2002). Edutainment software, historically speaking, has been criticized for disregarding this (Okan 2003; Squire & Jenkins, 2003). In the 1980s and 1990s, the term edutainment was used to describe a particular type of educational software that inserted educational content into the context of popular games, regardless of whether the combination made narrative sense. While combining educational activities like solving simple math problems with a game like Taito’s Space Invaders may still succeed in improving basic arithmetic skills, the lack of narrative cohesion can distract from higher level thinking. A moral lesson or educational objective, if it is to be critically considered, must be interwoven into the narrative in such a way that it is integral to the advancement of the plot (Fisch, 2000) and gameplay.

VIDEO GAMES

In this section, we will specifically discuss how video games can be influential in assisting in the development of morals and ethics in players. We first begin by discussing the social aspects of technology and how important it is in today’s video games. Then, we touch on several factors involved in the development of educational technology products. Next, we describe the social narrative play features of video games. Afterwards, we provide our recommendations on how to effectively design digital games that provide players with the types of experiences and reflection needed to support moral development. Finally, we end by providing many examples of games available today that include some of the features we believe are needed to support moral development in players and model recommendations we make in this chapter.
Moral Development through Social Narratives and Game Design

Technology Mediating Social Interaction

In the past, advancements in video game technology have often involved improvements in the realism of graphics, sound, and motion. Now, radically new approaches to socializing through digitally supported technology, from portable devices to social networking sites, and from virtual worlds to augmented and alternate reality games have created opportunities for game designers to promote the types of social narrative play being recommended for moral development.

While exact sales figures and reliable demographics can be difficult to determine, certain details, such as the demand for socially interactive play, are evident:

- At least eight out of ten of the top selling video games for personal computers and consoles in each of the past four years from 2005 to 2008 have been multiplayer games (NPD Group, quoted in Matthews, 2009; Sen, 2008)
- Increasing speeds, affordability, and ubiquity of connectivity has made it possible to play more sophisticated games with others over the Internet, often instantly connecting players with friends they already know and trust.
- Virtual worlds and massively multiplayer online games now facilitate social communities, complete with virtual economies, self governance through laws and norms, and an open ended freedom to engage in user driven fantasy play, even as adults.
- Games, such as Maxis’ The SIMS, and social networks focused on game design, such as the MIT Media Lab’s Scratch site, are providing veritable playgrounds for user-controlled social narrative experimentation. Their popularity not only demonstrates a strong mass appeal but also a willingness of designers to embrace new approaches to socially oriented game design.

Just as children seek out social-narrative play with their peers, so too does it seem that populations of game players seek out social-narratives in their games, whether in features allowing for actual social interaction or immersive social-narrative realism. The willingness of mainstream consumers to spend significant amounts of money to engage in fantastic social-narrative play of subscription based Massively Multiplayer Online Games (MMOGs), even as adults, should say something to those considering this issue.

Repurposing Technological Advances for Education

Technological advances are converging to lower the costs of bringing more intelligent, immersive, and collaborative types of educational software into schools. Steadily increasing profits in commercial game sales has bolstered the industry, and enabled the kind of big budgets necessary for cutting-edge research and design. This is not to say that multi-million dollar budgets will be directly supporting the design of games for change. Rather, once new technologies are developed for games focused on entertainment they often become available soon afterwards in customizable forms and can be reused for more educational purposes.

Social Narrative Play In Video Games

Technological advances are converging to make more socially immersive and interactive virtual experiences possible. Those most critical to the discussion at hand, namely those supporting social narrative play toward ethical advancement, are emerging in the forms of: 1) virtually supported social interaction with real people across time and space, and 2) social interaction with digital characters. Both of these types of advancement
Meaningful learning cannot be forced upon a learner. Compelling narratives, and even controversy, may inspire play and learning. Yet only certain types of play, namely social-narrative play that incorporates perspective taking and interpersonal negotiation of ethical dilemmas, has been causally linked to the moral development. Play can involve many types of engagement other than these (Sutton-Smith 1997), and it will require careful planning in the design of video games and virtual environments to insure that the experiences they afford facilitate engaged, meaningful learning.

DESIGN RECOMMENDATIONS

It is in the context of virtually enabling social narrative play, for both young and old, where a great opportunity exists for digital games and worlds to support moral development. Based on the theories and research discussed, the following recommendations are being made to help inform the design of digital games to effectively facilitate the types of experiences and reflection involved:

1. **Situate moral lessons in social narratives:** Social narratives serve to demonstrate and connect attitudes, behaviors, and reasoning involved in certain situations in a meaningful way. Since social narratives are most effective when they can be compared to personal experience, providing contrasting cases can also help.

2. **Provide meaningful choices with observable consequences:** Put players in roles where they can make meaningful choices that lead to meaningful consequences—where there are not necessarily right answers, but rather social, moral, and material trade-offs that affect, or better yet, transform aspects of gameplay.

3. **Match game play mechanics, game narrative, and educational Narrative:** A players
ability to become immersed and engaged is affected by the overall cohesion between the underlying educational/ethical objectives, the narrative and the gameplay.

4. **Focus on socio-moral dilemmas:** Allowing players to make choices is not enough, players need to be making decisions regarding difficult social-moral dilemmas that entail social conflict negotiation and perspective taking. Such dilemmas should therefore be central to a game’s narrative.

5. **Support rather than force moral development:** Games are not known for being effective at prescribing beliefs, but rather excel at promoting experiences that afford them. Realize that players bring their own values/agendas/prefereces to the selection of games and stories, and that effective moral persuasion will depend on the interaction between their personal ideas/ethics and those facilitated by the game experience, rather than a one way communication.

6. **Allow exploratory role taking:** Morality is an existential part of consciousness rooted in finding stable and mutually beneficial ways of navigating between one’s sense of self as an autonomous individual, and one’s sense of self as a valuable member of various group affiliations. Provide gameplay opportunities to see decisions and consequences from different perspectives and at different points in time.

7. **Be convincing:** Moral development depends on players’ critical reflection about conflicting perspectives and ideas. While people may be willing to consider new ideas in the safety of pretend play, enduring attitude change depends on how personally convincing, coherent, credible, and consequential the contradictory arguments are perceived to be.

8. **Know your audience:** The interests of people can vary greatly. Players will seek out social narratives of personal interest, and will find meaning in ideas that answer personal questions or that are presented by role models they trust. Consider what questions players are asking themselves, whom they look up to, and why.

9. **Recognize and use universal themes:** Universally meaningful issues can be seen reflected in the social narratives found in the myths and fables that have been popular cross-culturally and enduring throughout history. Adaptation of universal themes and archetypes can insure reliable appeal, and help draw a player into connecting in meaningful ways to a narrative. Also, keep in mind that new memes emerge for each generation which, while not universal, may be more relevant still.

10. **Work with the affordances of your genre:** Some genres, like adventure and RPG games lend themselves well to immersing players in elaborately constructed narratives that can be designed around predetermined moral situations, while others, like MMOGs and virtual worlds, support live social interaction and often allow users to enact and play out their own narratives. A particularly interesting genre in relation to moral development is alternate reality games, which situates play in the real world with participants playing as themselves, rather than as fictitious characters.

11. **Simulated social interaction is good, interacting with real people is better:** Stand-alone games involving social narrative play can effectively facilitate moral development, but socializing with others, especially peers, tends to motivate and support individuals in a more intellectually challenging and emotionally rewarding way.
Examples of Games Already Enabling Social Narrative Play

While new forms of technology that support user-directed social-narrative play related to moral development is nascent, many video games already exist that model recommendations made here. The small cross sampling of such games described here serve as inspirational examples. They demonstrate interesting or informative features across a variety of game genres.

For example, September 12 by Newsgaming.com is a casual game making a political point. Or, as its developer states, it is a “simulation meets political cartoon” (Newsgaming.com, 2009). As with fables and many casual games, the design is simple, and the gameplay easy to learn. The opening game screen instructions are as follows:

*This is not a game. You can’t win and you can’t lose. This is a simulation. It has no ending. It has already begun. The rules are deadly simple. You can shoot. Or not. This is a simple model you can use to explore some aspects of the war on terror.* (Newsgaming.com, 2009)

As stated, the simulation begins before you click the start button with civilians and terrorists visibly walking back and forth beneath the instruction menu. The game is notable for its ability to overcome the simplicity of its genre while addressing a complex moral issue in a simple, intuitive, and immediate manner. The player has the option to click the mouse and take part in the war on terror. Clicking the mouse launches a missile at a targeted location, destroying everything within reach of its explosion. The consequence of such action is clearly demonstrated as civilians weep over slain loved ones, and then visibly turn into terrorists in response.

The creators state that their objectives are to “use games and simulations to analyze, debate, comment, and editorialize major international news” (Newsgaming.com, 2009). The player never receives a lecture about the war on terror. Instead, they are given an experiential lesson. While given the option to not shoot, the crosshair cursor icon that follows mouse movements around the screen seems to suggest that you should attempt to kill terrorists. Then the internal conflict that emerges in the decision to shoot or not provides a focus on a socio-moral dilemma that conveys a real complexity of the “war on terror.”

The Adventure and RPG Genres of Games

Once again, the genre of adventure games is of particular interest. This is not only the case for its narrative based dynamics, but also for its evolutionary influence over the most social and intellectually challenging types of games available today. Examples include MUDs, MOOs, virtual worlds, and MMORPGs. Many titles within its family tree exemplify the recommendations being made. Examples include:

*The Black & White, and the Fable Series (Lionhead Studios)*

*Black & White* allows you to play as the god of an imaginary civilization. A player’s decisions to rule with compassion, or through force, contribute to a culture of unity or fear among their people. The game is notable in its very indirect way of having players lead by moral example rather than direct control of situations.

Lionhead Studio’s later series, *Fable*, continues to immerse players in fantastic worlds of moral decision making, only this time focused more on the personal nature of character development. In an interview, its designers report that they regret the exaggerated binary of the first *Fable’s* game design (“Be good for goodness sake” 2008). Players had reported finding the morally ambiguous events in the first game the most satisfying. Therefore, in *Fable II* they have added nuance and ambiguity, to reflect that the paths of moral
righteousness and villainy are often difficult, not always clear, and full of self-sacrifice and personal consequence.

**The Knights of the Old Republic Series (Bioware)**

This series of inwardly psychological RPGs focuses on the difficulties of walking the path of predestined power and leadership. It excels in maintaining a close relationship between a deep and structured central narrative, open-ended game, and socially nuanced control over how moral dilemmas are resolved.

**Seven Cities of Gold (Ozark Softscape) & Sid Meier’s Pirates (MicroProse)**

Both games immerse players in the exploration and conquest of the New World, one by Spanish conquistadores and the other by colonial merchants and pirates. Both are historically inspired games placing the player in the role of an explorer. Players can operate outside of established laws, trading, exploring, and plundering as they see fit. Yet all choices are linked to consequences of friendly welcome or outright hostility as news of the gamer’s actions spread from city to city. The combination of historic detail and open-ended gameplay demonstrate a balance often difficult to achieve, all while immersing players in the morally ambiguities of European efforts to colonize new worlds.

**Bully and the Grand Theft Auto Series (Rockstar Games)**

Despite their notoriety, both Bully and the Grand Theft Auto series, are trendsetting because they combine multiple types of games and genres into a unified and cohesive game experience. For example, stunt car races, open-ended street fighting, and narrative-based character development are all supported. Based on the same underlying game engine, each game series offers expansive worlds to explore and a choice of approaches that players can take. In each game, the player assumes the identity of an antihero who must rely heavily on violence to advance the central storyline. There are always villains to fight and friends to defend. The main characters start as underdogs seeking to avenge their family and friends against corrupt, oppressive, or cruel authority figures. The strong use of archetypes and universal storylines unifies the game worlds with pervasive mythic narratives that resonate with gameplay at many levels. The games employ many of the qualities our chapter contends to be potentially persuasive and compelling. However, a major caveat is that the depiction of violence action and lack of emotional repercussions associated with it gives very mixed moral messages and unrealistic expectations regarding the utility of violence.

**The Social Simulation Genre of Games**

More of a hybrid and an emerging genre, social simulations nonetheless promise fertile ground for designers interested in exploring games that support moral development.

**The SIMS (Maxis)**

The SIMS series is a notable constructionist game design centered on iconic social-narrative play. While vague in its portrayal of social interactions and criticized for its emphasis on materialism, it has an innovative design and a proven mass appeal. Video capture and the ability to export saved games into an HTML format are two examples of built in features that invite players to engage in storytelling and social networking in innovative ways not often available in video games.
Façade & Seaman (Virtual Simulations of Social Relationships)

Lesser known, ground breaking games like Michael Mateas and Andrew Stern’s Façade and Vivarium’s Seaman may foreshadow the types of social narrative based games yet to come. Both games immerse the player in an interactive social narrative drama involving open-ended, two-way conversations between the player and AI driven game characters. The core of both games revolves around complicated dynamic storytelling and intelligently emulated human conversation. Façade is something of a three-act play where the player takes on the role of being best friends with a married couple on the verge of divorce. The player is invited over to the couple’s apartment and the game then revolves around the very open ended conversation between the player and two virtual characters. The player can coach their friends into reconciliation or further exacerbate their marital problems. By comparison, Seaman revolves around natural conversation actually spoken by the player into a microphone, as they grow, care for, and teach a sentient alien creature about mankind. These games may very well exemplify the future of socially interactive single player games. Deep exploration of simulated interpersonal relationships within games has historically been limited by the difficulty with which human conversation could be realistically emulated by AI. Yet these games demonstrate that the technology to revolutionize is here.

FUTURE RESEARCH DIRECTIONS

Affiliating with a community requires an individual to be aware, and respectful of community norms, ethics, attitudes, and behavioral expectations. Modern life requires individuals to affiliate and functionally participate in multiple communities (peer, familial, professional, religious, etc.). Different communities can have very distinct, and potentially conflicting, sets of ethics. Questions remain as to how navigating between disparate community affiliations affect an individual’s moral development. An increasing number of digital social spaces are available as a result of today’s technologies. We now have the opportunity to participate in an even greater number of social communities, both digital and non-digital, than ever before. Given the social nature of moral development, and the way it benefits from rich opportunities to critically reflect on interpersonal experiences, increased participation in disparate communities has the potential to be an effective facilitator of moral development. This raises several potential questions. Are affiliations with virtual or game world communities comparable to real world affiliations? Are affiliations to virtual communities inherently interfering with real world affiliations and responsibilities?

More personally, questions regarding the affect of games on individuals’ sense of self also remain. Do digital experiences alter perception of non-digital ones, and if so, how? Does extensive use of social networking sites or character based role playing affect how an individual thinks of themselves?

Does anonymity, which is often required to protect the identity of children, lead to a disinhibition effect, and does this promote anti-social behavior? Studies that ask questions such as these would provide valuable insight into the numerous situations one must be aware of when attempting to address the moral development of individuals in today’s fast past world of virtual interaction.

Lastly, embedded in the schemata one uses to store information internally about their world, each person has their own evolving internal narrative life story (McAdams, 2005). Personality psychology informs us that we must think of a person on three levels to better understand what makes them who they are. Those levels are dispositional traits, characteristic adaptations, and integrated life stories (McAdams, 2005). How might their dispositional traits influence the type
of games they enjoy and as a result, the social situations that might be available for them to explore during gameplay, and which ultimately affect the trajectory of their moral development? How can games encourage construction of positive life stories that value introspection, self-efficacy, and other habits of mind necessary to encourage personal growth?

Answering any and all of these questions will require effort to observe and make sense of gameplay across games and in relation to external measures of morality, like Kohlberg’s moral judgment questionnaire or more intensive ethnographic observations of behavior. Designers can support such efforts by embedding options to track and summarize gameplay events in a form that allows comparisons between players.

CONCLUSION

In all its forms, social narrative play appears to be a natural process through which social experiences are understood in moral terms. Encompassing interpersonal conflict negotiation and perspective taking, social narrative play is not trivial nor an activity found only in childhood. Despite Western world views that have historically diminished fantasy play as frivolous, it is known to be significant and serious in its role in the development of theory of mind, socio-moral reasoning, and self-efficacy (Lillard, 1998; Singer, J., & Singer, D., 2006). While fantasy play seems to disappear in adolescence, it is merely becoming internalized, laying the foundation for adult forms of consciousness (Vygotsky, 1933/1966). The cognitive interplay of social narratives, then, continues in more regulated and situated forms. Examples include recreational, academic, and professional role playing activities such as debate, mock rehearsals of events, dramatic performance, job interviews, persuasive argument, business negotiation, and more.

The conclusion we draw is that advances in video games allow them to support the types of open ended narrative play and social dynamics from which critical moral thinking emerges. When playing a video game, players can entertain ideas contradictory to their own in the experimental safety of the magic circle of gameplay, just as they had done in fantasy play as children. While not all games necessarily afford social narrative play, those that do are specifically well-suited to facilitating moral development.

Every player brings to a video game the power to think for themselves along with a wealth of experiences with which to inform their decisions. Their ability to develop social narratives (i.e., symbolically represented events, situations, and identities inside their minds) aids them in developing their autonomy and sense of self relative to others. While capable of imitating moral behavior, their ability to truly understand it depends on critical thinking. From birth, children seek out the types of social interaction and fantasy play found inherent in moral development. In time, their progression is motivated less by predispositions, and more by personal preferences and environmental influence. Universal themes and archetypes may indicate social narratives likely to resonate with individuals. When they are placed in well-aligned contexts, they may even motivate critical reflection. Video games and virtual worlds are well-suited to support the kind of user-directed social narrative play that helps to mediate moral development. However, each genre or type of game or virtual world does afford varying levels of narrative control, interpersonal interaction, and open ended game play. While finding the right fit of narrative, pedagogical approach, medium, and gameplay design is nuanced and subjective, the recommendations provided here can lead to more efficacious results.

Still, moral development is a self-regulated process. Individuals who continue to (1) put themselves in new social situations in the face
of adversity, (2) push themselves toward self-improvement and (3) seek out the answers to the question why? seem to be those who achieve the highest stages of morality. By understanding the internal processes involved in such achievements, as well as predispositions individuals bring to their play, game designers will be better equipped to support this journey.

REFERENCES


Section 5
Design Considerations and Reflections
Chapter 14
The Mechanic is the Message: How to Communicate Values in Games through the Mechanics of User Action and System Response

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ABSTRACT
Humans learn through play. All games are learning devices—though most teach the player how to play the game itself and do not strive to communicate information with utility in the real world. This chapter is for designers seeking to design game mechanics to communicate learning objectives, values, and ethical messages. The term “mechanic” describes both a) the actions a player takes as she interacts in the context of a game (e.g., run, jump, shoot, negotiate) and b) the response of the system to player actions. In other words, the mechanics are the essence of the player interacting with the game. When the mechanics of a game align with the values the game’s designer strives to communicate, then the player is learning those values experientially. Learning science shows us that this type of experiential learning is a powerful and natural type of learning for humans. Designing game mechanics as described above is easier said than done. This chapter includes six best practices for achieving success, which are supported by case study examples from leading designers in the field.

INTRODUCTION
“For the things we have to learn before we can do them, we learn by doing them” - Aristotle (2002)

When Marshall McLuhan coined the phrase “the medium is the message” in his book Understanding Media (1964), he meant that the form of a medium is integrated with the message it communicates. Any given medium, by its structural particulars, has a large effect on how the messages conveyed through it are understood. For example, print media is good at communicating complex, nuanced messages that may take many hours to consume. This is because the user can carry print media around, start and stop reading at her leisure, and so forth. In contrast, broadcast television is not as good at com-
municating complex, nuanced messages because its structure is different, for example, the user is more likely to consume it in short snippets, or consume it when not applying her full attention. Print is different from television, which is different from film, which is different from hypertext, which is different from games. The structural differences in each medium beget presentation styles that are attuned to their strengths. The types of messages that the mediums can convey is also affected. The title of this chapter is a play on McLuhan’s phrase in specific context to games as a medium, but the big-picture meaning is the same. That is, the interactive, goals-based structure of games greatly affects how messages are embedded in games are understood by users. The title emphasizes “mechanics” because what the user does when interacting with a game is at the heart of how messages are understood, learned, and internalized. And they are at the heart of what makes games unique from other media.

Good games have the power to communicate nuanced messages in ways that linear media simply are not capable of conveying. Take the example of the driving simulation game Gran Turismo 4. Users are able to learn and practice fine points of race car driving including the advanced physics of racing—such as drift, weight transfer, grip angle, and many others—by actually doing those things performatively.

The stated objective of Gran Turismo 4 is to be “the real driving simulator” (Sony Computer Entertainment, 2005). The developer, Polyphony Digital uses game mechanics—in this case steer, brake, and accelerate—to communicate that objective to the player. The point of this chapter is to show how game developers can custom design mechanics to best communicate analogously rich and subtle messages from other fields to players.

Ethics are the moral standards by which people judge behavior (Agnes, 2001). Linear media are very restricted in how they can communicate ethical messages in contrast to games. Games, because of their interactive nature, have the potential to allow users to receive ethical messages experientially. The best practices listed herein are intended to enable designers to create interactive systems that communicate sophisticated messages, particularly in the area of values and ethics.

Understanding Mechanics

“Games are a series of interesting choices” Sid Meier, (Diamante, 2008)

There is a generic core mechanic in all games that can be described as (a) player makes a choice, (b) system responds to that choice, (c) repeat. This genericized description is true for all types of games including single player games, multiplayer games, turn-based games, and real-time games (Fullerton, Hoffman, Swain, 2004). When people utilize the mechanics of the game, they are inherently learning how the system of the game works. When building a game for purposes beyond entertainment designers often create mechanics that communicate concepts, values, and ethics from the real world to our players.

As an example, consider Gran Turismo 4 again. It’s a driving simulation game: to play this game a race session starts and players make choices that affect their on-screen racecars. Typically, at the start of a racing game the player chooses to “press accelerate button.” The game system responds to this choice with fluid visual and aural feedback to each player. The cars move forward, engines roar, and tires squeal. Each minute choice about steering, accelerating, and braking the on-screen racecars is communicated back to the players and is part of the game state held in the software. As the players practice these simple mechanics in fluid response cycles with the game system, they are able to experience and learn aspects of auto racing that range from basic to advanced.

These lessons about automobile racing are afforded by the mechanics in Gran Turismo 4.
The player uses the same actions in the game that drivers use in real racecars—e.g., “steer,” “accelerate,” and “brake”—and the system responds in a way that simulates reality. The player can practice using the standard Playstation controller. For example, she can steer with the Left Analog stick, accelerate with the X button, and brake with the Circle button. Or, she can use a Playstation driving peripheral and practice the same hand, eye, foot coordination used by real drivers (e.g., she can steer with her hands using the Steering Wheel controller, accelerate with her right foot with the Gas Pedal, and brake with her left foot with the Brake Pedal).

This short deconstruction of Gran Turismo 4 is included to illuminate the mechanics of the game and show how they communicate messages about automobile racing in extreme detail. These mechanics in context to the level design in Gran Turismo 4 provide a rich learning environment. Players are free to play and experiment with a variety of choices—such as drive into a wall—to gain understanding of the content. They do so in a safe environment—it is one that is free of consequences in the real world. This enables the player to experiment without fear for physical safety or being financially liable for the cars they damage. The mechanics allow players to practice the craft of auto racing until they have attained true expert knowledge about the topic. After sufficient practice, players can not only speak intelligently about how to drive a racecar, but have also absorbed the concepts that would help them learn how to race a real car efficiently.

As a counter example, take the game Grand Theft Auto IV. This game has mechanics that do not punish users for behaviors that are regarded as unethical, immoral, or illegal in real society, such as running over pedestrians, or wanton destruction. By doing so, the creators of the game are accused of communicating the ethical message that these behaviors are legitimate in the real world.

Deconstructions of mechanics can be done for any well-designed game. In Table 1, please see a chart that includes some game titles, along with their mechanics and basic learning objectives.

In each of the examples in the chart, the mechanics of player action plus system response create a rich and dynamic learning experience for the player.

In the next section I provide background and research influences for the arguments in this chapter. The background sets the stage for the core of the chapter—“Best Practices for Designing Mechanics that Communicate Learning Objectives.”

**BACKGROUND**

“Tell me and I forget. Show me and I remember. Involve me and I understand” Chinese proverb (Rohsenow, 2003)

The best practices for designing mechanics that communication values, ethics, and learning objectives cited in this chapter draw from a) interviews with leading serious game designers and

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**Table 1. Survey of core mechanics**

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<th>Game Title</th>
<th>Core Mechanics</th>
<th>Core Messaging</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Spectrum Warrior (Pandemic Studios, 2004)</td>
<td>Move, Fire</td>
<td>Tactics for squad-based combat</td>
</tr>
<tr>
<td>Peacemaker (ImpactGames, 2007)</td>
<td>Choose from list of Leadership Options—Military, Diplomacy, and Construction</td>
<td>Dynamics of the Israeli-Palestinian conflict</td>
</tr>
<tr>
<td>The Redistricting Game (USC Game Innovation Lab, 2007)</td>
<td>Adjust Map</td>
<td>How U.S. congressional redistricting works</td>
</tr>
<tr>
<td>Civilization IV (Firaxis Games, 2005)</td>
<td>Move, Build, Attack, Negotiate</td>
<td>How civilization evolves</td>
</tr>
</tbody>
</table>
b) literature from multiple fields including game design and learning science. This section provides background on the most influential designers and their games, and games literature.

**Research Influences from Literature**

Henry Jenkins III and Randy Hinrichs cited the following key finding in their *Games to Teach* research, which was conducted from 2001-2003: “most educational games have failed because they use generic game templates (e.g., *Pac Man*) rather than original game rules designed to illustrate the rules of a system” (Jenkins & Hinrichs, 2004). This finding illuminates the fact that most serious game developers utilize existing game mechanics (such as trivia questions or shooting) when developing their work. This is not to say that using these mechanics is wrong, but it is just to say that they typically do not communicate learning objectives as articulately as developers might like. This makes sense considering that the designers of games such as *Pac Man* were trying to achieve stickiness and arcade fun and were not striving to communicate values and ethics.

Ian Bogost, in his book *Persuasive Games*, describes the expressive potential of videogames using the term “procedural rhetoric” (2007). Bogost argues that, “Procedural rhetoric is the practice of using processes persuasively, just as verbal rhetoric is the practice of using oratory persuasively and visual rhetoric is the practice of using images persuasively” (2007). Procedural rhetorics are interesting because they afford a powerful, experiential way to communicate how things work. Games are a form of expression uniquely suited for achieving true procedural rhetoric. This is because no other form allows a user to receive messages experientially through the loop of user action and system response.

In our book *Game Design Workshop*, Tracy Fullerton and I describe a methodology called “playcentric design.” It is a methodology that stresses (a) rapid early prototyping of interactive systems, (b) playtesting these prototypes with real users early in the process, and (c) iteration throughout the production (Fullerton, Swain, & Hoffman, 2004). The methodology has been proven effective for creating original play mechanics for both entertainment games and serious games. Playcentric design methodology is directly applicable to the process of creating mechanics that communicate values, ethics, and learning objectives.

Dozens of frameworks have been published for understanding human learning and the fundamentals of effective instructional systems. The book *Instructional Design Theories and Models* by Charles Reigeluth alone includes twenty such models (1999). Prominent works in the field include Robert Gagne’s book *The Conditions of Learning and Theory of Instruction* (1985) and Jeroen van Merrienboer’s book *Training Complex Cognitive Skills* (1999). Close examination of all the frameworks published to date allows one to distill some underlying principles that are shared across the field. First, the frameworks collectively suggest that the most effective learning environments are problem-based. Second, they suggest engaging users in the following phases: (1) activation of prior experience, (2) demonstration of skills, (3) application of skills, (4) integration of these skills into real-world activities (Hmelo-Silver, 2002). This meta-framework can be applied directly to the design of serious games.

**Influential Games and Their Designers**

The following are four engaging, well-designed games wherein the mechanics have been designed to (a) achieve a desired procedural rhetoric and (b) communicate rich ethical messages. They are included here to provide tangible, case study examples that illustrate the best practices in action. The learning objectives in each game are communicated to the player as she interacts, experiments, and plays with the game. A lead designer from each of the games graciously provided
insights for this chapter via personal interviews with the author.

- **Peacemaker** (ImpactGames, 2007)—This is a turn-based strategy game that simulates the Israeli-Palestinian conflict. The player may play as the leader of Israel or the Palestinian Authority. The actions available to the user closely match those available to the real leaders. The core mechanic in the game is easy to understand: each turn the player gets to choose one leadership action from a set of choices. For instance, when playing as the Israeli leader you may choose the action “Give a Speech to the Palestinian People” and then the qualifier “About Anti-Violent Resistance.” The choices available to each leader are quite different, and match those of the real Israeli and Palestinian leaders. The object of the game is to establish a successful two-state solution to the conflict, and doing so earns you the Nobel Peace Prize. The design team for this game included both Israelis and Palestinians. The interface in the game includes feedback thermometers and a score that change frequently according to the player’s actions. The high sensitivity of these metrics communicates a message of “this is a very delicate balance” or “you are walking a tightrope with ethical and societal consequences here”. The beginning of the game is particularly challenging and the situation only gets better as the player makes progress. This positive feedback mechanic communicates the values of tolerance and compromise intended by the designers. These mechanics show how the conflict and its violence could be diffused. A lead designer on Peacemaker and Executive Producer, Asi Burak, offered insights about his process in creating the game for this chapter.

- **Tactical Language & Culture Training System** (Alelo, 2006)—This is a simulation game system that allows the player to learn foreign languages—including Arabic, Pashto, and French—in an immersive 3D environment. Player actions are spoken commands given in context to the culture being studied. For instance, in the Tactical Iraqi version, the player moves through 3-D Iraqi markets and other spaces and speaks to virtual Iraqi citizens by literally speaking into a headset microphone. The game allows the player to both practice Arabic and practice interacting successfully in Iraqi culture. The game has been used to train thousands of members of the U.S. and Australian military. A lead designer, Dr. Lewis Johnson, provided insights for this chapter.

- **The Redistricting Game** (USC Game Innovation Lab, 2007)—This game teaches the fine points of congressional redistricting including how it works, how it is abused, how it affects America’s representative democracy, and how it could be reformed. The rules of the game are translated directly from the laws for redistricting in U.S. states. The core mechanic—moving district lines on a map—matches directly to what redistricters do in real states. After the player completes each mission a newspaper is displayed that includes a victory headline that tells the her she successfully achieved the objective that was given to her by her party and it also includes an Op Ed article that explains the ethical ramifications of her actions. For example, if a player successfully completes a bi-partisan gerrymander, as per her party head’s instructions, she wins the mission but learns the effect that such techniques have on a representative democracy in the real world. As lead designer, I will offer examples.
from trials of the game in the best practices sections below.

- **SurgeWorld** (Red Hot Learning, 2009)—This game is designed to teach disaster preparedness—particularly how to manage crises during surges of patients—to hospital personnel. The rules of the game are taken from California hospital operations doctrine. The mechanics involve rapidly clicking hospital personnel and other resources and choosing how to allocate them. The player is barraged with medical triage decisions—e.g. choosing which patients receive treatment based on the severity of their wounds and the hospital resources available. In many situations the player must learn to make the hard ethical choice of categorizing a severely wounded patient as “unsalvageable” in order to save more patients overall. A lead designer, Duane Dunfield, provided insights for this chapter.

All of the games mentioned deal with value judgments and ethics overtly and in ways not traditionally explored in games. In addition, each is designed to be accessible and fun while still providing a rich learning experience that will translate to knowledge in the real world. And they each include clear objectives for the players and tangible scores at the end. Case study examples from these four games appear throughout the best practices.

**Best Practices for Designing Mechanics that Communicate Values and Ethics**

One of the most difficult tasks people can perform, however much others may despise it, is the invention of good games. C.G. Jung (Zagal, Nussbaum, & Rosas, 2000)

The following best practices are taken from the author’s experience designing original play mechanics for dozens of games including entertainment games and serious games and from interviews with leading serious game designers. An emphasis is made here on designing mechanics that communicate values and ethics.

The best practices are:

1. **Integrate Subject Matter Experts Throughout**
2. **Identify and Prioritize Learning Objectives**
3. **Embrace Playcentric Design**
4. **Learn from Learning Science**
5. **Maximize Credibility through use of Objective Information**
6. **Formally Assess Learning**

**1. INTEGRATE SUBJECT MATTER EXPERTS THROUGHOUT**

All of the interviewees for this chapter stressed the necessity of working with good Subject Matter Experts (SMEs) during the game production process to ensure that the game communicates real world messages and values. SMEs consult to the design team to interactively help them learn the fine points of the topic that will be simulated via the game. They typically work part-time providing insights and feedback on the work of the full-time team. Productions that utilize multiple SMEs can get a more diverse set of perspectives on the topic. It is recommended that at least one SME not only have knowledge about the topic being simulated, but also deep experience interacting with it and/or immersed in it.

SMEs should not be expected to design the game but rather provide information about how the topic functions so the designers can translate that knowledge into a closed system of objectives, rules, procedures, and resources. Teams should, of course, also consult books, articles, movies and
other media that feature the topic. Linear media, however, cannot communicate functional nuances and the full possibility space of a topic in the same way that a set of engaged SMEs can.

At the start of a production SMEs should assist in the development of the learning objectives for the application (see more about this under #2 “Identify and Prioritize Learning Objectives” below). SMEs can do this by translating their expertise with the topic into a set of tasks that a user should be able to complete and concepts that she should understand in order to demonstrate competence. During the production, a set of SMEs can test the game and comment on whether it simulates the topic appropriately and whether it enables users to reach an appropriate level of mastery. In this way, SMEs are integral to the iterative design process (see more about this under #3 “Embrace Playcentric Design” below).

Mechanic Design Case Studies

It is difficult to make useful statements about how to design play mechanics that apply to all types of games. This is because comparing one game to another is rarely an apples to apples comparison. For example, consider the lack of commonalities between Solitaire and World of Warcraft. Instead, this chapter provides mechanic design case studies from the four games listed in the Background section. The intent is for these case studies to provide actionable concepts that readers can apply to their own game productions.

Peacemaker

From the first day of the development process for Peacemaker, developer Asi Burak intended for the actions in the game to simulate the actions available to Israeli and Palestinian leaders authentically. The team of developers included Israelis, Palestinians, and Americans and relied on SMEs from all perspectives. Burak, an Israeli, says “Even I learned things that I didn’t know about the process [of diplomacy] as a result of having [Palestinians] integrated into the process” (personal communication, November 10, 2008). The actions available in the game are finite and were crafted by studying actions taken by the real leaders over the years. The team used creative judgment to distill the finite list into a system of about 40 specific actions per side. The actions are organized into the categories of Policing Actions, Diplomatic Actions and Infrastructure Actions. For example when playing as the Israeli leader the player can choose a Diplomatic Action to give a speech that is Pro Law and Order, Pro Reconstruction, Anti-Violent Resistance, or Pro Violent Resistance. Each action affects game variables in opposing ways. For instance, if the Israeli leader chooses an action that gives concessions to the Palestinians it will (a) increase trust with them and (b) decrease the security of the Israeli people. SMEs helped craft the actions and ensure the realism of the system response to those actions.

Tactical Language & Culture Training System

Lewis Johnson integrated three types of SMEs into the production for Tactical Iraqi (personal communication, November 17, 2008). First, they used native Arabic speakers as language experts who helped ensure that Arabic was being accurately translated both in terms of words and grammar. Second, they utilized task experts from the U.S. military who helped craft the tasks in which the players would engage in the game. For instance, in the game, the player acts as a Navy officer tasked with going ashore and setting up a disaster relief site. In addition to Navy SMEs, they use SMEs from the Marines for Marine Corps scenarios and Special Forces for Special Forces scenarios. Tasks like this in the game are important because they allow the player to practice language in context to situations in which the player may actually find himself after completing the training. Third, the game utilized Iraqi culture experts to craft
cultural lessons that can be communicated to the player through play. For example, the player learns through playing in the world that in Iraqi culture, one should let a sheikh enter a room first. Actions are taken primarily via speaking directly to the game via a microphone. The game responds to words from the player in context to the language, task, and culture integrated into the system.

The Redistricting Game

The Redistricting Game utilized multiple SMEs including a professor who studies redistricting reform as well as several people who have redistricted real U.S. states. The core mechanic of the game is a feedback loop of the player adjusting the district lines on a map and the system responding to that action. For instance, when the player moves a line on the map, the virtual congresspeople on the map will squawk with disapproval if that move reduces their chances of being re-elected. During playtesting for the game, the SMEs commented that the actions and strategies that testers were using were identical to those used by real redistricters. The testers, in fact, were employing very sophisticated strategies that one would find described in political science textbooks, even though they had no exposure to those books or even any training in how to redistrict. Thus, the mechanics of the game were communicating sophisticated messages about redistricting in a similar way to how the mechanics of Gran Turismo 4 were communicating sophisticated messages about auto racing. As an example: when first exposed to the game players naturally adopt the common redistricting techniques “packing” and “cracking”. “Packing” means concentrating like-minded voters in one district to reduce their voting power in other districts (USC Game Innovation Lab, 2007). “Cracking” means spreading like-minded voters apart across multiple districts to dilute their voting powers in each (USC Game Innovation Lab, 2007) Players seize upon these ideas on their own as they play the game because they are logical strategies for winning – not because they have learned about the technique elsewhere.

The SMEs vouched that the game was indeed delivering the messages accurately and they made suggestions about potential tweaks to the level designs in cases where they were not.

SurgeWorld

SurgeWorld was created in conjunction with the staff responsible for disaster preparation at Children’s Hospital Los Angeles. These SMEs included nurses, doctors, administrators. In addition, university researchers who craft emergency procedure policy for the state of California were also involved. The design team talked to SMEs on all levels and read all available documentation about hospital procedures and operations. The team was allowed to participate in disaster drills at the hospital in order to observe how the staff actually operates in these situations. Prototypes of the game were tested by the staff and feedback was iteratively incorporated into each new version of the game. In the end the collaboration between game designers and SMEs resulted in a playable system wherein the core messages of California emergency procedure doctrine are communicated experientially when a player plays the game. Players gain hard knowledge that will help them react appropriately in the event of a real crisis.

In conclusion, for each of the four games listed above close collaboration with SMEs was integral for designing the mechanics and messaging. Since each of the four example games also deals with ethically charged issues it was imperative that the creative judgments of talented SMEs be expressed in the playable systems. Without these qualified judgments from SMEs each design team would have to learn the topic from written sources, such as books and the Internet, and would be hampered in their ability to accurately convey nuanced messages.
2. IDENTIFY AND PRIORITIZE LEARNING OBJECTIVES

In nearly all commercial games, developers make design choices based on maximizing player fun. This is because commercial games are created for entertainment. In serious games, developers want the game to be fun but also need to prioritize the communication of learning objectives when crafting their game environments. Since the vast majority of games created have been entertainment games, the development community is not oriented toward defining learning objectives at the beginning of a production. Adopting this learning objective-oriented mindset is a necessary first step toward creating mechanics that can communicate the appropriate real world messages effectively.

One compelling way to identify the learning objectives for a serious game is to conduct a needs analysis with the SMEs. This process will identify the skills that players need to develop proficiency in and the concepts they need to understand to excel in a given subject. A needs analysis will yield a list of pertinent concepts. Once a needs analysis has been conducted in collaboration with SMEs, the team can go about translating them into formal learning objectives or statements that describe what users should be able to do after completing the game. For example, during a needs analysis for Peacekeeper, the learning objective “participants need to understand the dilemmas facing the leaders in the Israeli-Palestinian conflict” may have emerged. In The Redistricting Game the learning objective “participants need to understand how redistricting is used and abused in America” emerged.

It is useful to write out these learning objectives in sentence form and rank them in order of importance. When the objectives are clearly defined and prioritized, the team can use the list directly when making design decisions. This means the team will tweak the rules, procedures, resources, and other formal elements in context to the prioritized objective list to ensure that players receive the desired messages. Let’s unpack this by using Gran Turismo 4 as an example. The objective is to provide a realistic simulation of auto racing, and the enable users to experiment with acceleration speed, braking distance and traction. The game used data from real cars, enabling users to experience authentic auto racing. In contrast, the game Burnout Paradise uses fictitious cars and the game variables, which are tuned for maximum entertainment value. The objective of Burnout Paradise is to deliver an arcade driving experience with outrageous explosions and car pile-ups, not to simulate real race car driving.

Mechanic Design Case Studies

Peacemaker

Asi Burak states that a main objective of Peacekeeper is to communicate what real Israeli and Palestinian leaders do—the dilemmas they face, the constituents they serve, consequences of their actions not only in the Middle East but around the world (personal communication, November 10, 2008). By starting with this objective and building mechanics accordingly, the game is able to provide the player with a learning experience that allows a user to understand how the conflict works. The game provides clear context for many of the places and events that a user hears about in the real news about the Israeli-Palestinian conflict but does not necessarily understand.

Tactical Language & Culture Training System

The Tactical Language & Culture Training System has the objective to teach languages naturally via spoken word in the context of the culture where the language is spoken. This structure allows the player to not only learn the standard language components—vocabulary, syntax, and grammar—but also a way for them to practice it in true-to-life situations. The core mechanic of
the game is designed to simulate real life situation in a literal, experiential sense; for example, via speaking out loud in the native language. This mechanic provides a safe environment for the player to practice and make mistakes until she can competently take the skills developed to the real world. Johnson points out that “literal”, in this case, still takes a back seat to the game’s learning objectives. For instance, in Tactical Iraqi, none of the NPCs (non-player characters) speak English and no translator is available to help. While this is atypical for real world situations in Iraq because many people speak English and there are often translators available, it helps deliver the game’s learning objectives (to teach the player to speak Arabic) more effectively.

The Redistricting Game

This project has the formal learning objective to teach players the details of congressional redistricting through play. These fine points include showing the player how redistricting works, how it is abused, options for reform, and how partisan and non-partisan redistricting affects America over time. These points are communicated through the simulation via the core mechanic of changing boundaries on fictitious but archetypal state maps. Each time the player changes a boundary the variables in game are updated and the game responds to this new state. In other words as the player moves a line on the map the population data in the districts updates and the cartoon congressperson speaks his or her mind about the change the player has made. For instance, in Mission 3 if the player moves a line adds lots of Democratic voters to the district of Republican congressman Arnie Surplus the system responds as follows (a) steam comes out of Arnie Surplus’s ears, and (b) he stands up angrily and says “You’ve overrun my district with Democrats! It’s an act of war!” (See Figure 1).

SurgeWorld

Duane Dunfield says that the learning objective in SurgeWorld is for real hospital staffers—doctors, nurses, administrators, and other personnel—to be able to practice acting effectively in a variety of disaster situations (personal communication, November 25, 2008). The game allows the staffers to see the big picture of how such situations work and experience the roles of each of the participants. Staffers can practice overcoming the situations repeatedly until they have internalized the patterns for real world success. The game environment provides a simulation that can be experimented with and tested. The computer simulation is much more flexible than live action role play drills and provides a space to experiment.

By articulating and prioritizing learning objectives the game developers, in each of the case studies in this chapter, were able to design mechanics that communicate those objectives using procedural rhetoric. In each case study this process enables the game to deliver nuanced ethics-oriented messages. For example, in SurgeWorld the player faces difficult ethical choices about how to spend limited resources in the face of overwhelming casualties. By allowing the player to practice this emotionally demanding task in the safety of the game she becomes better equipped to make ethically acceptable choices in the event of a real disaster.

3. EMBRACE PLAYCENTRIC DESIGN

The hardest question in game design is: “What does the player do in the game?” This is challenging because it requires the designer to translate open-ended concepts into a codified system of objectives, rules, procedures, and resources. It requires the designer to take complex and nuanced phenomena and distill them a small set of inter-operating variables. When put in motion, or played, this system must simulate the topic being
studied with sufficient clarity as to communicate meaningful messages to players.

An effective methodology for developing original play mechanics is: (1) prototyping, (2) playtesting, and (3) revision. The book *Game Design Workshop* provides a detail primer for this process—calling it “playcentric design” (Fullerton, Swain & Hoffman, 2004). Playcentric design means placing the player at the center of the design process. The idea is to make a rapid, simple prototype of an interactive concept—typically constructed with paper—then test the prototype by allowing real players to play it, and then tweak the prototype in a next iteration. This process is repeated until the game achieves the desired results. The key to success is to start with something very basic and layer on features in subsequent iterations. Ideally each iteration will be inexpensive to make—requiring only a skeleton crew—and turned around rapidly. Paper prototypes typically beget digital prototypes, which can then evolve into the final polished software.

It is common for a team to go through dozens of prototypes and hundreds of iterations in this process. Many times whole prototypes will be scrapped to approach the problem from a different perspective. It is for this reason that original game mechanics tend to take longer to produce than established mechanics and thus they also tend to require larger budgets.

The most efficient teams will embrace this iterative process from the concept stage to the production stage to the quality assurance stage and even after the project has launched through online updates. Teams who understand how to keep their designs plastic and keep costs down during iteration will be better able to end up with successful designs. Data from the book *The In-
The Mechanic is the Message

innovator’s Dilemma shows the leading differentiator for ventures that succeed over those that fail: ventures that succeed retain enough resources to try multiple different directions before figuring out which one will actually function as a business (Christensen, 1997). This lesson also applies to game development. Keep costs low and reserve funds until the playable system of the game truly achieves the desired results with playtesters. Then and only then deploy resources to produce polished media.

Ideally, in a serious game, the answer to the question “What does the player do?” is the same as the answer to this question about the topic in real life. This approach was taken in all four of the case study games below. For example: what the player does in Peacemaker mirrors what real Israeli and Palestinian leaders do as closely as possible; what the player does in The Redistricting Game mirrors what redistricters really do; and so forth. In each of the examples the designers embraced playcentric design until the system was able to convey nuanced ethical messages reliably.

Mechanic Design Case Studies

Peacemaker

Asi Buraksays “[we are] all about prototyping, testing, getting feedback, and revising” (personal communication, November 10, 2008). The team started the process of building Peacemaker by making a paper prototype or a board game version. Burak and his colleagues iterated on the board game in successive versions and then translated to digital and made more successive versions. The team tested first with SMEs and then with players. These tests revealed different things. SMEs from different constituencies tested the game for balance and realism. These differing opinions were relied on to see if the representations in the game were accurate and fair. Players, on the other hand, were relied on to see if the game was engaging and fun, and whether the learning objectives were being achieved. As a driving compulsion, Asi wanted to make a peace game with tension because (a) tension is engaging and (b) tension communicates a core learning objective of the game, in that the Israeli-Palestinian conflict is an extremely difficult and delicate situation wherein each action a leader takes has positive and negative consequences.

For mechanics, the team decided on a structure of one action per turn and tested this in simple form with a simple set of options. From there they could layer on more options, tweak option, and then to layer in more and more sophisticated and realistic responses from the game. Tests started on paper prototypes and iteratively evolved to simple digital prototypes and then onto the final form of the game with polished media.

Tactical Language & Culture Training System

Lewis Johnson uses the phrase “learner testing” to describe his test process meaning he is playtesting to see if game is delivering the desired learning results he has defined for his games (personal communication, November 17, 2008). From a game mechanic perspective, players interface with the game using spoken commands. The team developed a play system wherein a spoken command is matched to a record in a database of pre-defined communicative acts. These communicative acts are akin to verbs in natural language. A player in a Tactical Language game learns how to perform appropriate communicative acts in the foreign language. The foreign language becomes an interactive environment for learning. To achieve this result the design team started with simple models of language acquisition, tested them, and then layered on features iteratively.

The Redistricting Game

The Redistricting Game started as a very rudimentary paper prototype. A 14x20 grid was created on a piece of poster board. Each cell on the
The Mechanic is the Message

grid represented a census block and included a number of Republicans and a number of Democrats. The cells were then labeled with a post-it note of one of four colors. The groups of colored post-it notes represented four different congressional districts in an archetypal state. Playtesters viewed a whiteboard that showed a summary of the Republican and Democratic populations in each district. Playtesters were given an objective to gerrymander the state to change the balance of Republican or Democratic representatives. The playtesters acted simply by changing the colored post-it notes on the board and then viewing an updated summary on the whiteboard. This prototype was created during the second week of production with a crew of two designers and two grad students. (See Figure 2)

When played for the first time, this simple prototype created an intense three hour play session and debate during which playtesters were searching online about the U.S. Constitution, passionately arguing the meaning of representative democracy, and lying their heads on the table bemoaning the fact that their Congressional votes in real-life did not matter. The SMEs in the room marveled at how quickly the playtesters were adopting the most sophisticated real-world gerrymandering tactics—despite having no training in redistricting. From this simple beginning, several additional paper prototypes were created to model other aspects of redistricting. Then the team created multiple digital prototypes—first using Microsoft Excel, then many versions in Adobe Flash. Ultimately, the Flash prototypes were extended to layer in all of the relevant features of the topic, including responses from different virtual constituents, a whip count, and a complete approval process for the state legislature, governor, and the courts. On several occasions whole features had to be cut and a new direction pursued.

This process of successive testing and revision continued until the day the game was released online.

SurgeWorld

SurgeWorld also began as a board game prototype. It was played initially by SMEs who were real
hospital staffers. The board game version quickly evolved into a digital prototype. Simple scratch art was created to represent the different aspects of the hospital, staffers, and patients in the digital prototype. The game required the team to perform multiple rethinkings of the core mechanic, including versions that resembled real-time strategy games like *Starcraft* and different versions that resembled resource management games like *Build-A-Lot*. The team kept media production costs to a minimum until the prototypes were working smoothly and the desired learning objectives were being achieved.

In conclusion, the prototyping and playtesting-oriented process that is central to playcentric design enables developers to hone in on mechanics that achieve a procedural rhetoric that communicates nuanced ethical messages quickly and at low cost. Each of the games listed in this section embraced rapid iteration as a key strategy for success.

### 4. LEARN FROM LEARNING SCIENCE

Developers can benefit greatly by including education consultants who have expertise in the science of learning in the game design process. Doing so can increase the chances that the game will communicate the desired objectives.

As mentioned, dozens of learning science frameworks have been published to date. In aggregate, they suggest that the most effective learning environments are problem-based. Researcher Robert Gagne developed a process called the “Events of Instruction” that is foundational in the field of instructional design (1985). According to Gagne’s framework, instructional media should first gain the learner’s attention. Second, it should inform learners of their objectives. Doing so provides the learner with a clear sense of purpose and thus will lead her to make meaningful choices in the game. When a player does not know their objective then they are typically not as engaged and will lose interest. Third, according to Gagne, the media should incorporate opportunities for the user to practice skills (1985). Digital games are particularly well-suited to allow players to practice in a safe environment that can be utilized at any time without costly set-up or coordination.

Dr. Richard Clark, a learning scientist, has served as an education consultant on serious game projects for USC’s Institute for Creative Technologies. Clark developed a model called “Guided Experiential Learning” that is well-suited for application to digital game design. Clark’s research shows that effective instruction needs: (1) authentic problems, (2) illustration of how the problem can be solved, (3) opportunity to practice and receive feedback, and (4) connections to prior knowledge. Clark’s research shows that appropriate application of the Guided Experiential Learning model can increase learning by 35 to 50 percent in comparison to traditional models (Bennett, 2008).

### Mechanic Design Case Studies

Each of the four case study games in this chapter—*Peacemaker*, *Tactical Language*, *The Redistricting Game*, and *SurgeWorld*—utilize concepts espoused by Gagne and Clark. For instance, each game presents the player with authentic problems to solve and each provides clear objectives to the players. All of the games enable extensive opportunity for practice and provides contextual feedback throughout the play experience.

### 5. MAXIMIZE CREDIBILITY THROUGH USE OF OBJECTIVE INFORMATION

Objectivity in media means presenting facts over opinion. The concept of objectivity is controversial because all media is created from some point of view. Serious game developers, like journalists and documentary filmmakers, can increase the
The Mechanic is the Message

credibility and persuasiveness of their work by striving for objectivity as much as possible. Games that translate facts and data from the real world into system variables can inherently make more persuasive arguments than those in which variables are derived from creative judgments. Take the videogame Madden 2009 (which is an NFL football game) for example: in this game the statistics of the virtual football players are taken directly from the statistics of the real football players. This means that Indianapolis Colts’ quarterback Peyton Manning’s real-life passing percentages are applied when a player uses a virtual Manning in a game session. In this example, the abilities of the players provide increased credibility over fictitious statistics. Objective information is also useful for maximizing the credibility of ethical messages as is illustrated in the examples below.

Mechanic Design Case Studies

Peacemaker

Asi Burak made objectivity a top priority in Peacemaker. One technique the team utilized was to incorporate playtester feedback from many people on each side of the Israeli-Palestinian conflict. Peacemaker posed a challenge here because value judgments about either side could not be made in the game. For instance, system text cannot refer to a group such as Hamas as a “terror” group because that view is not shared by both sides. Or, as another example, the team had to figure out how to use words like “attack” in a way that does not offend either side (A. Burak, personal communication, November 10, 2008). Finally Burak and his team decide to use real news photographs as media from the game. Thus, if a riot occurs in the game, then a photograph from a real riot in Israel is displayed. This use of journalistic imagery is a powerful dramatic technique for reminding players that the game is based in reality. Finally, Burak points out that the game espouses a two-state solution to the real conflict. This is the point of view of the game makers and many people on both sides of the issue, however, it is important to note that the game does not validate points of view that call for a single state solution to the Israeli-Palestinian conflict. This is a clear case of ethics designed into the procedural rhetoric of a game. To minimize potential criticism stemming from this message Burak published his design assumptions upfront to provide as much transparency as possible.

Tactical Language & Culture Training System

Tactical Language & Culture Training System uses the accepted rules of the language—such as vocabulary, grammar, syntax, in the design of the Tactical Language games (e.g. Arabic, Pashto, etcetera). In other words, the rules of the game mesh with the rules of the language. As a player masters the game, she also masters the language. This is an example of translating factual, objective information into a game system.

The Redistricting Game

The Redistricting Game is designed to provide objective information to its players. The issue of redistricting reform is not favored by the political left or right (each side uses the laws in the same ways for their own gain) and thus the game is non-partisan in its underlying data. Each mission in the game can be played from the point of view of the Republicans or the Democrats. The underlying system variables are the same in each mission regardless of party—for example, the Mission 1 map is identical for Republicans and Democrats. The only difference between playing as one side over the other is the names and artwork on the characters and in the jokes told by the game. For example, the Republican names and jokes poke fun at conservatives and Democratic names and
jokes poke fun at liberals. However, the number of jokes and the tone of the jokes are balanced to be the same for each side.

Quotes from real Republican and Democratic politicians also appear in the game, but they always appear adjacent to one another in pairs. For instance, the home page of the game includes adjacent quotes from prominent conservative pundit, Norm Ornstein, and former Democratic National Committee leader, Les Francis. The rules in the game are taken directly from the laws of congressional redistricting that are used in almost all U.S. states. When all of these objective aspects are put into play, the game creates a balanced view of the topic. These design choices were made by the team to maximize the credibility and persuasiveness of the game.

**SurgeWorld**

_SurgeWorld_ uses real California hospital operation doctrine to inspire the underlying rules and procedures in the game. That said, the design team still had to figure out how to translate the doctrine into something accessible and fun. For instance, the team had to decide who the player represents in the game – i.e., a doctor, nurse, patient, or incident commander. After several experiments, it was decided that the player should not represent a single group but rather make choices for all units in the game. This way the game can illustrate the interrelated roles, responsibilities, and challenges for each constituency. This is another case of the game communicating ethics-oriented messages.

In conclusion, use of objective information such as facts and numbers is a technique for increasing credibility and the persuasiveness of an argument. Objective info can be derived from ethical standards and used in a design as well. For example, ethical standards are often found in the laws – e.g. it is illegal to drink alcohol before age 21. By foregrounding objective information in game system designs developers can increase the educational power and impact of their work.

### 6. FORMALLY ASSESS LEARNING

Nearly all serious games are designed to impart real world knowledge to the player. Serious game developers, however, typically do not collect data for learning assessment. As a result they typically do not know what, if anything, the players are actually learning. This attitude is changing because funders today are starting request assessment plans.

Richard Wainess of UCLA’s National Center for Research on Evaluation, Standards, and Student Testing (CRESST) points out: scientifically sound learning assessment for games is a new area of research. Assessment in dynamic environments requires more sophisticated statistical models than those used in assessments of linear media. In a dynamic environment, techniques such Bayesian networks and hidden Markov models may need to be employed (R. Wainess, personal communication December 16, 2008). Hidden Markov models can be used to find and measure patterns that appear over a space of time (Rabiner, 1989).

Developers can benefit from hiring consultants and/or partnering with groups, such as CRESST, who understand learning assessment in a dynamic environment. Sound assessment techniques will yield hard data that shows the degree to which players are learning the game’s intended messages.

A core aspect of assessment methodology is to: (a) test knowledge of the topic in the player before exposure to the game, (b) have the player play the game, (c) test knowledge of the topic, such as the ability to perform tasks, understanding of core concepts after playing the game, and (d) compare the difference between the two tests. This can be accomplished by selecting groups of test subjects who take tests before and after exposure to the game.

In conclusion, including assessment experts on a team can positively influence the design of the game. For example, they will want to measure the degree to which learning objectives are com-
The Mechanic is the Message

communicated to the player. This will push the team to design learning objectives that are, indeed, measurable. Integrating assessment experts also comes at a cost in efficiency, because developers and assessment personnel are not practiced at collaborating together and typically have very different work cultures. Game developers who embrace this idea will push the envelope in an important new frontier in the field of games.

FUTURE RESEARCH DIRECTIONS

Talking about music is like dancing about architecture (Elvis Costello, as cited in White, 1983)

Elvis Costello’s quote cleverly illuminates the lack of fidelity that comes with describing the nuanced, temporal, aural medium of music with mere words. The same can be said for trying to use words to describe our nuanced, interactive, multidimensional, experiential medium of games.

A first order of future research into mechanics for serious games will be to better understand playable system design. As Michael Mateas and Andrew Stern point out in their paper “Build It to Understand It,” building games provides a powerful and unique method for researching and understanding games, beyond what can be understood by writing about games alone (Mateas & Stern, 2005). In other words, building games is a research mechanism for pushing our medium forward.

The serious games development community is, by nature, expanding our medium. Each of the case study games in this chapter—and a handful of other games in the field—break new and important ground. Why? Because each of those games has custom-designed mechanics that communicate messages as the player takes action in the game. As was alluded to in Henry Jenkins Games to Teach research findings, a leading problem with serious game development is a lack of custom-designed game mechanics that communicate learning objectives effectively (Jenkins & Hinrich, 2004). Designers who wish to further expand the medium should heed this and focus on acquiring the ability to design custom mechanics.

Acquiring this ability will require new levels of sophistication and collaboration for serious game developers. Game development for entertainment games already requires knowledge of game design, software development, media production, QA testing, management, and other specialized issues. Adding new layers of specialized knowledge for serious game development illuminates the need for even more multifaceted collaboration skills. It is for this reason that this chapter recommends incorporating multiple SMEs, learning science experts, and assessment experts into serious game productions (as opposed to suggesting that developers build those skills personally). Specifically, this means allowing each of these disciplines to bring their expertise to the production in a way that impacts the design of the playable system. For instance, SMEs can illuminate developers on how a real-world phenomenon works so it can be better translated into the mechanics and core messaging of the game. Likewise, learning science experts will help developers see the impact they are having on players in a codified way. This knowledge will push the developer to keep tweaking mechanics until learning science conclusively shows how much players are learning. The field of game design needs developers who make breakthroughs in mechanic design to truly move serious games forward.

CONCLUSION

Serious games are in their infancy today, but have potential to provide great benefit to society as learning devices in the future. Games are well suited to communicate nuanced ethical messages because – unlike linear media – they allow the user to experience acting in ways that are socially
acceptable and socially unacceptable. Through this player-action / system response loop the player learns what is ethically appropriate in a culture. Breakthroughs in the understanding of playable systems, learning science, and the science of assessment will all need to be embraced by our community to reach for this potential. Developers who overcome the elusively difficult challenge of crafting game mechanics that communicate learning objectives through play will lead the way to this future.

REFERENCES


**ADDITIONAL READING**


Chapter 15
Applied Ethics Game Design: Some Practical Guidelines

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ABSTRACT

This chapter presents a case study of the design and development of two original ethics games entitled Veritas University and Knights of Astrus. Through this case study and a review of relevant literature, the authors explore the content creation of, and theoretical rationale for, the design and development of ethics games. Both games use the Adobe Flash® platform and are geared toward an undergraduate student audience as casual games to be completed in a few hours of gameplay. To ground the development of these games, the authors review contemporary research on identity, cognition, and self in relation to video game environments; they also argue for the need for further research and development in this area. From this literature base and their applied design experiences, the authors offer six guidelines as practical suggestions for aspiring ethics game developers.

INTRODUCTION

Designing games for education presents a number of challenges arising from the need to seamlessly incorporate learning content into an engaging interactive experience. Designing games for teaching about ethics is perhaps a more complex process given the inherent ambiguity that arises when there are not necessarily “right” or “wrong” answers and responses can be largely contextual and based on personal value systems as well as situational factors. Such is the challenge associated with the question of learning in applied ethics, a field attempting to more directly address social problems from a moral standpoint via the philosophical method (e.g., Bayertz, 2003). These challenges motivate our chapter, and we use them as a stepping off point for the following set of questions devised to help bound the complexity inherent in developing games for applied ethics:
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- What types of design approaches are most useful for teaching or exploring ethical content?
- How does one begin the task of designing an applied ethics game with limited resources?
- Is it better to start with a strong story, a capable technology base, or fun and interesting gameplay mechanics?
- Do the core gameplay ideas come from existing ethical scenarios that can be translated into a more interactive form?
- Should ethics games use pre-developed scripts, or include some mechanism for players to author their own ethical scenarios based on issues from their own lives?
- How can we conceptualize the notion of player identity so that actions and behaviors in the virtual domain are also useful in the real world?

In this chapter we recount the lessons learned from our own experiences in building two different types of ethics game projects to explore these questions. We hope these experiences will offer useful information and some practical guidelines for other ethics game authors in various stages of conceptualization and development. Before exploring our case studies, we present an argument for games as useful vehicles for teaching ethics.

BACKGROUND: A BRIEF ARGUMENT FOR APPLIED ETHICS GAMES

The idea that computer games can be viable tools for learning has been discussed for several decades, starting with the often-cited work of Malone (1981) and his research with game variants and intrinsically motivating game features. Since then, games have progressed rapidly into forms that would be largely unrecognizable by some of the pioneering video games researchers in the 1980s. Modern games—from role-playing games to first-person shooters—now offer a much more visceral and immediate experience for the player, especially in light of the new affordances allowed by the first-person perspective. For example, Dickey (2005) writes, “the shift from an outside orthographic perspective to a first-person agent embedded in the game space marks a shift in moving the player from outside of the game into becoming part of the gaming environment” (p. 71). From this, it is plausible that games with ethical dimensions are more likely to be impactful through the use of these new immersive technologies. We observe ethical aspects of gaming when players are asked to consider the principles of morality or experiment with different value systems as they play. These aspects materialize through players’ decision making in modern games such as the Grand Theft Auto (Rockstar Games, 1997-2009), Fallout (Black Isle Studios and Bethesda Softworks, 1997-2009), and Fable (Lionhead Studios, 2005-2008) series. Many of these games are explicitly designed with multiple pathways (and not always a simple “good path/evil path” binary dichotomy) to success so as to encourage players’ nonlinear explorations, feelings of authorship, and desires for replayability.

Unexplored Territory

Despite the commercial success of the games listed above, applied ethics games remain largely unexplored as tools for teaching for learning. This is unfortunate because they potentially offer rich, personalized scenarios for exploring humanity in new and interesting ways. As Bogost (2007) notes, video games make claims not about what it is like to be a machine, but rather about what it is like to be human in different types of unusual situations and embodied circumstances (e.g., as a Greek god, as a plane crash survivor, or as an anthropomorphized hedgehog). Despite its technological underpinnings, then, the act of playing video games is fundamentally a human
activity, and one with various social dimensions that encourage different types of interactions (e.g., human vs. computer, human vs. human, human cooperating with computer, human cooperating with other humans). Given this inherent property, it only makes sense that the computational tools used so seamlessly in business and entertainment might also be useful in a variety of ways to examine more humanistic issues such as the nature of being human or the exploration of personal value systems.

Although not always expressly designed as games, we are beginning to see examples of these humanistic and reflective tools through initiatives such as the Virtual Philosopher, a tool for Socratic exploration and inquiry used in online courses (Hornsby & Maki, 2008; see also the Virtual Philosopher web site at http://web.uncg.edu/dcl/courses/viceCrime/vp/vp.html). Here, interaction is employed at a rudimentary level, but one which still offers a pedagogically sound means to enhance the understanding of ethical decision making. Despite the potential of games for use in this domain, only in the past few years do we see video games beginning to be seriously considered in traditional humanistic areas such as the study and consideration of ethics.

Given the potential of first-person perspective to enable learning via exploration of these alternative pathways, a particularly interesting question is whether in-game playing can influence out-of-game behaviors. Can virtual experiences be constructed that encourage ontological contemplation both inside and outside of virtual worlds? Or, to get to the heart of the matter: is making video games to teach applied ethics a feasible and worthwhile pursuit?

**Interactive Risk**

The rich interactivity of games and their potential for encouraging players to take risks provide compelling arguments for using games as tools for teaching about applied ethics. Many scholars acknowledge that interactivity is an essential property of games that makes them unique as procedural representations of the world. These representations are co-authored by players in various ontological configurations (Murray, 1997; Ryan, 2002; Bogost, 2007). As participatory and procedural representations of an authored world with boundaries—and some degree of freedom with which to explore or test those boundaries—games allow players to participate in, rather than just witness, the unfolding of actions with ethical significance. These games function in the “me-thetic,” rather than “mimetic,” sense (Huizinga, 1955, p. 15). Simply put, gamers want to do, not just watch.

Video game players also often have emotional connections to their games and the gameplay experience. As participants, they have vested interests in and connections to the virtual characters they inhabit and the environmental objects they interact with. Arguably, these subjective factors can make ethical principles more relevant and memorable than simply reading about these concepts in an ethics textbook or working through case studies on a worksheet. Furthermore, games offer safe grounds for exploration under the learning principle of the “psychosocial moratorium” (Gee, 2007, p.59), a term borrowed from Eric Erikson (1968) to describe an environment in which the consequences of risk-taking are minimized. As Rouse (2005) notes in his analysis of the oft-discussed game Grand Theft Auto III (Rockstar Games, 2001), the game is successful because it allows players to explore taboo activities in a safe environment. While many people would never do these things in the real world, he notes, the game-world encourages players to take risks. Rouse asks, “in the safe context of a game-world where the worst consequence is having to start your game over, who wouldn’t want to try it out?” (p. 476). Opportunities for risk-taking, trial-and-error exploration, and emotional engagement are all
available and useful for the ethics game designer who wants players to explore unfamiliar and perhaps even uncomfortable moral territories.

**Toward a New Genre**

From this brief analysis, we can extract several different possible reasons for building ethics games. First, as an underdeveloped subject area in game design, the investment in additional time and effort is bound to yield some exciting humanities projects with which to examine morality and the human condition. Even if such efforts are spectacular failures, they are bound to at least open up new areas of research related to simulation and ethics. Second, by allowing players to become co-authors of interactive experiences, we can potentially access deeper levels of cognition, emotion, and reflection by allowing them to have some vested interest in the simulated activities through their own idiosyncratic creative processes and problem solving techniques. Finally, by providing a safe environment in which to test moral decision making and emotional responses, and within which to examine the simulated consequences of those decisions, we provide a sandbox for the observation of behaviors and actions. We can also use these games for studying the relationship between virtual identities and the self. This issue, however, is a complex issue deserving closer attention.

**IDENTITY, COGNITION, AND THE SELF IN ETHICS EDUCATION**

We can further support the theory and utility of games for ethics education by studying the relationship between virtual identity, cognition, and the self. One of the most important questions relating to pedagogical game design for ethics content considers the transferability of learning from a virtual world to the real world environment. If learning is to occur that is useful outside fantasy-based environments, it should transfer from the simulated realm of computer games to the real world in which problems of that type are likely to be encountered. With many types of learning games, the issue of identity is interesting, but of lesser importance. For example, solving a mathematical problem as a scientist in the year 3018 to help refuel a stranded rocket is going to be very similar, mechanically speaking, to solving that same problem as a college undergraduate student in college algebra during a timed exam. When the mechanical knowledge of how to solve such a problem is the primary learning objective, then it does not much matter how interconnected the virtual and real identities may be once the player moves out of the game space and back into the real world space of being an algebra student.

When the particular learning topic concerns ethics, however, the question of transferability is in large part determined by the relationship between a real and a virtual identity, what Gee (2007) has referred to in one direction (from the real to the virtual) as the "projective identity" (p. 57). If the virtual identity is encapsulated neatly and wholly by a medium, then it is difficult to argue that matters of the self can be adequately addressed through the creation of a computer game, regardless of how cleverly that game is designed. What happens in the game-world affects only the virtual self and no trace of that experience leaks out into the real world. If we make the argument that the real and virtual identities are entirely separate, that means that the virtual identity is engaged only when the player begins a game and that it ends when that game ends, neatly retaining any experiences within the game-world as part of its constitution. These properties are then reactivated when the next gameplay session resumes. If this relationship between identities is entirely separated in this fashion, if one leaves the real identity behind and engages the virtual identity during a gaming session and reverses this practice when leaving the game, then the relationship is trivial and not very useful. One could argue in this case that any learning gains are primarily
limited to either the virtual or the real identity. For example, learning in the virtual world will benefit future virtual encounters while real world learning will not be of much use in the virtual world where rules of various kinds (e.g., physics, social dynamics, biology) may or may not be anchored in the realm of what is possible and likely. Thus we may be able to teach concepts at the level of declarative knowledge and factual recall, or even inference, but truly reaching the self in a manner that encourages players to be introspective and thoughtful about their own identities and values seems much more difficult.

On the other hand, if the relationship is one in which the virtual and the real identities meet at some point, perhaps at an instance in which narrative transportation (e.g., Green, 2004) or some other immersive technique has established a suitable degree of presence within the game-world, then developing more sophisticated ethical thinking in video games—knowledge which may include synthesis and evaluation of content rather than just comprehension, for example—seems more feasible. Just as presence has been defined as the overriding of one’s awareness of a primary environment (e.g., real world) by a secondary environment (e.g., game-world) (Slater, 2002), so might the virtual identity gradually take priority over the real identity (e.g., a player ignores the need to tend to his grooming needs and real world socialization activities until his avatar has finished leveling up a certain attribute or an in-game conversation has finished). Given this phenomenon where a virtual identity can take priority over a real identity, might it also be possible for that virtual identity to be powerful enough to have subtle influences on one’s real world conceptualization of oneself? Gee (2007) has already noted that this process routinely occurs in the alternate direction, where we “feel responsible for a character” (p. 58) and project our own beliefs and values onto our virtual characters, as he himself did when playing his character Bead Bead in the game *Arcanum* (Troika Games, 2001).

If we accept this outcome as a possibility, we acknowledge that what one does in the virtual world will affect, though perhaps only subtly, how a person considers new variants of that virtual situation when it occurs in the real world. This continuous model offers more hope for ethics game designers as it states that there is at least some degree of engagement with the self during gameplay. Such engagement might take into account one’s bodily interactions with the game-world through positioning of the body and use of the controller as well as cognitive processes engaged and activated by body and brain when solving problems and interacting with different types of content in the virtual domain. Understanding identity as a construct that takes into account the body and the environment is helpful here.

A focus on the importance of one’s holistic environment in understanding identity leads to a contemporary notion of self that is explained by Clark and Chalmers (1998) in their well-known essay that introduces the extended mind thesis. According to this perspective, the mind is dependent on other scaffolds such as environmental aids (e.g., calendars, calculators, or computers) that require the brain and body to work together “in tandem with the external environment” (Cogburn & Silcox, 2009, p. 13). This argument suggests that the environment actively drives cognitive processes, meaning that a video game can potentially drive thinking about values and examining ethics in a meaningful sort of way. Specifically, cognition does not occur in a vacuum, but rather within a task or behavior (see Clark, 2001; Hutchins, 1995; Rowlands, 2003). The emphasis is on the practice of cognition “by which internal representations are incomplete contributors in a context-sensitive system rather than fixed determinants of output: and they too focus on the ongoing interactive dance between brain and world” (Sutton, 2006, p. 282).

Clark and Chalmers (1998) even use a video game-like metaphor to explain their hypothesis, suggesting that a person might play a game

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similar to Tetris (Tetris Holding LLC, 1985) in a variety of ways. First, she might sit down in front of a computer and answer questions to fit shapes into variously sized sockets. To determine which shapes would fit into which sockets, she would “mentally rotate the shapes to align them with the sockets” (p. 7). Or, she might perform the same operation by choosing to physically rotate an onscreen image to gauge the fit against sockets. As anyone who has played Tetris knows, this gains the player a sizeable advantage in speed as she can quickly permute a puzzle piece into a variety of shapes much more quickly than she can do the operations in her head. Finally, the Tetris player of the future might be able to use a neural implant to perform rotations as fast as the computer in the second example. From a cognitive perspective, Clark and Chalmers ask, what is the difference between these three processes? The first and third examples seem intuitively similar, and as the second and third examples are also similarly computational (the difference being that the second player uses a computer for this process while the third player in the future computes internally via a neural implant) they question the judgment of claiming that cognition ends at the boundary of the skin. They note that many types of cognitive processes (e.g., pen and paper for long multiplication problems, physical rearrangements of tiles in Scrabble, books and diagrams, etc.) have long been used in various types of thinking processes, so why not consider other external media such as computers and video games in the same way? Their primary argument is simple: “cognitive processes ain’t (all) in the head!” (p. 8; see also Clark 1997; 2001).

A summary of this work in identity and cognition presents us with two useful observations. First, in an immersive and well designed game, players care about their virtual identities. Since they care about their virtual identities, there is an opportunity to design games which challenge the player’s moral values and to study the degree to which virtual games impact real world identities.

Second, players can be conceptualized as using games to think by scaffolding or augmenting existing internal mental processes with external, environmental aids. These aids could certainly be gaming hardware (e.g., controllers), but as we argue, players also augment cognition through their external manipulations of virtual avatars in fantasy-based worlds. While the graphical manipulation occurs outside the player’s body, the consequences of the avatar’s virtual actions are internalized and integrated as the player thinks about what she is doing. Continuous feedback from the game means that a player can quickly adjust her mode of thinking as game events occur. For example, the body language of non-playable characters (NPCs) may subtly influence the player to adjust her thinking as she interacts with them and attempts to work through a moment of conflict. The action occurs outside the player, but the immediacy of feedback serves to augment thinking even as it unfolds. This means that in the realm of teaching applied ethics, where a goal might be to challenge students to think about the implications of different actions in regards to different ethical codes and principles, games are potentially just as useful for applied ethics as graphing calculators are for trigonometry. As cognitive aids that allow students to safely experiment with different behaviors as they act out different roles and are portrayed by different avatars, they offer interesting possibilities for pedagogy.

**From Theory to Design**

If we are to accept the conclusions reached by Clark and Chalmers (1998) regarding environment as active in cognition as part of an extended mind model, and if we can accept the ideas offered by theorists such as Cogburn and Silcox (2009) who see personal identity as a connected and continuous experience that can extend into virtual worlds, then there is some hope to the quest for building workable and impactful ethics learning games. Like more mature technologies such as pen and
paper, video games provide us with extended ways of thinking and encourage embodied cognition. The difference is that this happens in kinesthetic relations with the controller, as opposed to physical activities such as chewing on an eraser to focus one’s thoughts, or twirling a pencil before writing to relax one’s mind for a creative sketch. Unlike these physical technologies, though, video games also allow us to experience virtual embodiment; by way of graphical, symbolic representations; as we interact with procedural worlds. These procedural worlds can be authored to allow players to consider ethics in various ways. More importantly, we can make the claim that such experiences will allow players to take something away from that virtual world and to incorporate those experiences into their real world identities, value systems, and senses of self. The next question then becomes one of applied design: how does one build such an ethics game with this goal in mind? More specifically, which types of game mechanics, design strategies, and learning environments will afford players with the proper opportunities for blending real and virtual identities for the purpose of learning about ethics?

In the next section of this chapter, we consider and address these questions by describing our experiences in building two types of ethics games, the first originating from a series of preexisting narrative scenarios and focusing on a narrow subset of ethical dilemmas, and the second beginning with traditional RPG game mechanics and no predefined expectations for how the story should unfold. With both efforts the goal was to build an immersive game-world with interesting scenarios capable of engaging players’ awareness of their moral values and leaving a lasting impression. Both efforts produced radically different results. After briefly discussing each of our ethics games, we return to this question of applied design by distilling the lessons learned from our experiences into six guidelines for prospective authors.

OVERVIEW OF CASE STUDIES

The first game we discuss, Veritas University (VU), was developed for incoming college students and based upon the existing work of designers at EthicsGame.com. EthicsGame.com delivers ethical training scenarios to various clients through Internet media. This project involved a translation of existing hypertext scenarios (in narrative form) into a more interactive, game-based form. VU contains two scenarios, one dealing with plagiarism and the other dealing with how to handle an inconsiderate roommate. The game brings the player through a careful consideration of the ethical issues as organized by stakeholders, duties, and particular foci (e.g., “rights/responsibilities” or “results” lenses).

We designed the second game, Knights of Astrus (KoA), more with the gameplay mechanics in mind than the initial narrative scenarios. In this project, the design team borrowed from existing commercial games that explored ethical dilemmas, such as the popular commercial titles Fable 2 and Fallout 3, and attempted to replicate some of these mechanics on a much smaller scale. The Office of Information Fluency at the University of Central Florida (UCF) funded KoA, which was proposed as a game to help college undergraduates become more comfortable with uncomfortable ethical situations. In building this second game, our aim was to introduce learning opportunities in the domain of applied ethics to a humanities learning game with an audience of college-age students. Our goal in this game was not to be prescriptive in terms of ethical content, but rather to encourage players to make tough decisions that would require moral reasoning. This reflection could later be articulated using an in-game journal.

Design and development for both games was led by the first author, whose background is in digital media, and involved collaboration with faculty from ethics and cognitive science. Development of the games involved a team of
undergraduate students from a variety of majors and skill sets—ranging from artists to programmers to producers—and took place over the course of several semesters at campus-based computer labs.

**Game 1: Veritas University**

**Overview**

*Ethicsgame.com* is an online portal with a variety of ethical training materials focused in different areas such as healthcare, student life, and business. The slogan of the game, “we’ve taken the ‘ick’ out ‘ethics,’” speaks to the aim of the developers to make learning about ethics more fun and engaging. Baird’s book *Everyday ethics: Making hard choices in a complex world* (2005) provides the methodological framework for the web based system. The original content of *ethicsgame.com* is text-based and reminiscent of early text adventure games like *Colossal Cave Adventure* (Crowther, 1976) and *Zork: The Great Underground Empire* (Infocom, 1980). Text-based prompts and online forms lead the player through various scenarios in which they must make decisions that then influence subsequent information presented to them later in the scenario.

Our team was awarded a contract to build a graphical experience for visitors that would re-imagine the existing textual scenarios of *ethicsgame.com* in a virtual, interactive environment. We were tasked with creating two different animated game levels, each focusing on a different area. These two areas involved ethical dilemmas of plagiarism and dormitory room etiquette.

**Creating the Environment**

Our first mission was to graphically create the environment described in the original online scenarios and build an artistic representation of this environment to be navigated from a first person perspective. We chose to use a 2D rather than a 3D representation primarily for the sake of time (the game was produced in a single 16-week academic semester). Although we already had a preliminary narrative script to employ, the script required major adjustments to better fit the virtual environment presented in the game-world. Our graphical portrayal of Veritas University, the fictional location in which the scenarios of the game take place, was therefore an important step in our move to create a more immersive experience for the players of *ethicsgame.com*. We created several different 2D interactive environments such as a courtyard, professors’ offices, a library café, residence halls, and interior dorm rooms. Our aim was to make the university setting as familiar as possible in order to encourage players’ identification with their avatars and create an environment in which projective identity could function.

**Setting the Context**

*VU* begins with the game’s primary narrator, Rian, explaining the gameplay instructions to the player (see Figure 1). The player takes on the role of a new student in the university. An initial scenario is explained in which the player’s roommate, Mark, has been sharing his computer throughout the semester. After using his computer to write a term paper, the player discovers that Mark has taken significant portions of the player’s work and turned it in to another professor for another course. The player then proceeds through various interactive screens to identify the ethical problem, find stakeholders, determine duties and obligations to those stakeholders, and then make an eventual decision based on all available information. Along the way, the player interacts with various environments in a 2D fashion by clicking on characters and objects to gain additional information that may or may not be relevant to the task at hand. Navigation is accomplished by clicking navigational arrows to move through corridors and enter structures such as university buildings and residence halls. A central
courtyard location (see Figure 2) allows the player to explore various parts of Veritas University.

After exploring the campus and gathering information, the player is prompted with an interactive form in which she must answer questions correctly to continue. If an incorrect answer is provided, she is debriefed accordingly as to why she chose the wrong option; in this case, the correct answer is revealed (Figure 3). In a basic type of ethical dilemma such as this, correct and incorrect answers were possible to gauge. While initial questions were relatively straightforward, questions later in the game were more nuanced and often required players to choose multiple answers or use a continuum to assess information contextually based on the stakeholders involved in a given situation.

Additional Design Mechanics

To assist the player throughout the game, we introduced virtual characters and interactive objects into our design. In the original textual scenarios, much information necessary to the player was built into an Ethics Guide, an online reference that could be accessed throughout the game. In VU, we included a mechanism to access the Ethics Guide information and a means for note taking (see Figure 4) as part of the player’s toolset, but we also included a virtual ethics professor named Alice Tanner (see Figure 5) who guides the player in a more natural way, without breaking the flow of the narrative scenario. Professor Tanner appears throughout the game in instances where the player needs additional information about strategies for
problem solving according to particular heuristics, such as a “rights and responsibilities approach.” Similarly, we used scholarship points (also shown in the toolbar in Figure 4) to tally the player’s score. This score is determined by the number of correct answers, the extent to which available information is consulted, and the player’s ability to screen out irrelevant and incorrect answers. Professor Tanner also contributes a copy of the Ethics Guide early in the game that can assist with the player’s decision making. It is the same information that is present in the original textual version, but in this case it has narrative significance as an authored document from a character in the game.

After visiting with Professor Tanner, Rian leads the player through step-by-step analyses of the ethical issues, which in the first scenario involve the aforementioned plagiarism dilemma and in the second scenario involve dorm room etiquette and one’s duties to a roommate in terms of privacy and the right to a good night’s sleep. In several instances, the player is instructed to research concepts or terms in the Ethics Guide to explore certain information in more detail.
Lessons Learned

Because we began the development of VU with an initial story and a set of ethical dilemmas in narrative format, our primary challenges were in regards to making the scenarios more interactive. For this reason, we added additional virtual locations to explore, translated information from documents into character dialog, used voiceovers for speech animations, and developed an artistic style to make the university seem more lifelike. In the end, however, the game was not as engaging as we had hoped it would be, largely due to its reliance on menu-driven forms and the detailed assessment that was not hidden from the user. It proved quite difficult to translate the amount of information contained on the assessment forms into natural, lifelike interactions with the inhabitants of Veritas University. Assessment forms also served as breaks in presence that reminded the player she was expected to be learning about ethics rather than simply exploring a virtual world and becoming immersed in the dilemma. In fact, many of these forms would entirely halt progress in the game until the player provided an acceptable answer or number of answers; some of these forms required a fair amount of thinking from the player (e.g., Figure 6). This was both a positive feature, in that it encouraged reflection, and a negative feature, in that it reduced the immersion of the game-world. Another problem we encountered that we did not realize until later was that Rian the guide would sometimes recite dialog that would have been more appropriate for Professor Tanner; when Rian showed an in-depth knowledge of ethical topics it sometimes accented the artificiality of his character. Prompts from Rian to consult with Professor Tanner or open the Ethics Guide for more information were less intrusive in terms of breaking the player’s immersion (see Figure 7).

Game Ending and Next Steps

The plagiarism scenario ends by asking the player to make a final decision: either confront the roommate and allow him to explain what happened or turn himself in on his own, or bypass this conversation and report the roommate to his professor. The game then directs the player to a final debriefing with Professor Tanner (see Figure 8), and then awards her with a final conversation and potential virtual scholarship given by an authority figure, Dean Nelson. The overnight guest scenario mirrors the same format, but with different content, different references to the Ethics Guide materials, and different object interactions. Players receive various types of awards depending on the scholarship points total at the end of the game. Too low a score leads the Dean to admonish the player and
encourage her to try playing through the game again with more attention to detail.

Additional data on VU is still being collected and analyzed by the Ethicsgame.com business team; further modifications by our design team are likely to occur in the future. As a precursor to the more ambitious ethics game project, VU served a major role in helping us consider more engaging ways for the player to interact with virtual environments with ethical implications. With this game, however, it was clear that a deeply immersive environment with the potential to fully engage a player’s sense of self and make her pay close attention to her implicit moral reasoning processes was not yet present.

For our next project, we strove to create a more immersive and interactive experience with several variations. First, we wanted to use a fantasy environment to make the experience more novel and interesting. Second, we wanted to allow the player to customize her avatar so as to encourage identification with that avatar and foster the projective identity hypothesized by Gee (2007). Finally, and most significantly, we wanted to focus on gameplay mechanics to create a game that was fun to play and less dependent on preexisting ethical scenarios and form-driven assessment. While plagiarism and dormitory etiquette are issues many members of our student audience will face at one time or another in their lives, there are numerous other types of scenarios that can also be used as virtual pedagogical tools to prompt ethical discussions or promote awareness of real world events.
Game 2: Knights of Astrus

Overview

For our second game, we still wanted our players to have enduring relationships with their avatars and the game-world, but we also wanted to make the gameplay experience memorable and exciting. We wanted players to feel as though they were really playing a game rather than participating in a training simulation. The real and virtual would still be connected, but in this case, they would be mediated by a game with a focus on fantasy and role-playing. To help accomplish this, we began by placing the player in a science fiction-based environment with a tough problem to solve. *Knights of Astrus (KoA)* begins with a short cinematic sequence showing a space craft crashing into a gulch on an alien planet. Minimal exposition is given to the player as we want her to explore the alien terrain and its surrounding city to learn as much as possible about the environment on her own. We decided to implement a basic character customization function so as to give the player some sense of ownership and identification with her chosen character. While it only includes a few options for each facet, the customization system allows players to choose a gender and several different hairstyles and skin tones.

Creating the Environment

After watching the opening cinematic and configuring her character, the player is immediately placed in a playable environment. In contrast to *VU, KoA* uses a combination of both third-person perspectives for general area explorations and first-person perspectives for interior explorations and dialogue segments. Although the first level functions as a tutorial for the overall game, the player is not advised of this and instead learns the game mechanics as she navigates the gulch (using the familiar adventure gaming movement keyset made up of the letters W, A, S, and D), explores the buildings in the area, adds items to her inventory, and accesses the quest log. She is immediately advised of the lack of water on the planet, a fact that will have some bearing on her encounters with NPCs and the ethical dilemmas she will face later in the game.

Setting the Context

There are several ethical problems embedded in the gameplay experience of *KoA*. Because of our desire to place players in uncomfortable, but engaging, problem solving roles, we chose to include combat and conflict of various flavors. In the tutorial level, the player learns the combat...
system by being forced to fight some guards who are questioning the player’s presence on the planet. Unlike many enemies in role-playing games (RPGs), however, these guards have personalities and histories which are revealed through conversation. One guard is a bully; the other is being bullied. The player must decide what to do after the combat is finished. She can choose to kill the guards, tie them up and leave them, or let them both go. The fact that the player must choose the same fate for both NPCs is unsettling to the player and helps to set the tone that there are not always ideal solutions to the dilemmas one faces in the real world. In addition, later encounters in the game reveal the consequences of the player’s prior decisions. Many of the ethical choices are made during conversation points in the game. Players are also able to hack into various computer consoles and electronic devices; the decision to hack opens a puzzle-like mini-game that increases in complexity depending on the strength of the device’s security or the current level and its difficulty. We borrowed this mechanic from the commercial game *Fallout 3* (Bethesda Game Studios, 2008) and included it to vary the gameplay experience by introducing a variety of puzzles and challenges.

There are a variety of other ethical dilemmas embedded in the game, from seemingly minor incidents involving only a character or two to major problems that affect the entire game-world. In one scenario, the player comes across an animal trapped in a mechanical device and must decide whether to free the animal or leave it to perish. In another, the player explores a town and is offered a quest to steal a vase from a citizen or to help that citizen by performing a task and receiving the vase as a reward. The quest itself involves another decision; it turns out the citizen runs a dog-fighting ring from his basement, but the dogs have gotten loose and cannot be contained. Do you kill the wild dogs, at the NPC’s request, or do you choose to set them free and risk being injured in battle?

**Additional Design Mechanics**

Additional design mechanics in *KoA* depend upon the specific context of particular scenarios. For example, at one point in the game, the player must enter an underground prison and free an NPC character who is also a member of the resistance movement on the planet, the Knights of Astrus. It turns out the planet is running out of water and the resistance movement believes the government is deliberately keeping water from the people. To free the agent who has information critical to the resistance, the player enters a prison only to find that the structure is collapsing. The player must take advantage of emergency escape pods (which require 8 humans to deploy and contain a maximum of 12 seats) to flee the premises. She can choose to rescue the other prisoners, or leave them to their fate. In addition, to complicate matters further, one of the prisoners is elderly and has a stroke just when the first pod fills to capacity. Do you choose to give up your seat to the elderly prisoner and hope the other pod fills, or do you leave him behind to wait and face an almost certain death?

After the escape sequence, guards emerge and the player is captured in the gulch. After being interrogated for a bit, the guards suddenly leave, and it becomes apparent that a bomb threat has occurred. In fact, it turns out that the resistance has made the bomb threat and that the Knights of Astrus are more fanatical than originally thought. In this scenario, the player finds herself free again and has to deal with the bombs somehow. She does not have much time to decide. With the help of a robotic augmentation system obtained earlier in the game, she can rescue a larger group of adults in an office building or a smaller group of children in another location (multiple bombs are spread out across the city). Or, she can just shield herself and let the bombs go off if she feels it is not her place to decide the value of other lives and she does not wish to put herself at risk with potential injuries from the bombs. The augmentation device projects...
a shield around the player and some number of additional citizens, but its range is limited, which leads to the dilemma.

Lessons Learned

With this project, we found that a more complex gameplay mechanic still needed to be combined with planned checkpoints to ensure players encountered and completed the various dilemmas. We chose to focus on the storyline as a gating mechanism for moving the player through the environment. As with many branching storylines found in commercial games, the overall story of KoA is gated so that a single ending is eventually revealed. Regardless of how noble or heinous a player’s actions are throughout the game, she is eventually rewarded for completing the game by having her ship repaired and being allowed to leave the planet. While there is a single ending, the way in which the player obtains the various parts is quite different depending on her in-game decisions and behaviors. These varying decisions and behaviors will serve as catalysts for the discussion of real world issues and ethical dilemmas as we move into the formal testing and assessment phase of this project.

Game Ending and Next Steps

The last major scenario, which ends the current version of the game, occurs after the bombs explode and the ground collapses in part of the city. The player falls beneath the ground and ends up exploring some catacombs. Eventually, she finds an underground lake, an important discovery in a world with water problems! The lack of a reliable water supply has contributed to the stress of the city’s inhabitants throughout the game, and in the end, it is the player who decides what is to be done with the water. She can choose to tell the government, who has supposedly been repressing the citizens (e.g., imposing a curfew) and using military force, the resistance (who, in the prior scenario, revealed themselves to be fanatical killers), or the townsfolk, who may very well destroy each other in the fight to reach the water. A fourth option is for the player to simply pass the responsibility off on an NPC character, Bill Ten Thunders, who has earlier revealed himself to be a mentor character. He is also the mechanic who will eventually help you fix your ship.

To support replayability and long-term player involvement, we also designed this second project as a platform for students to develop their own scenarios using customizable tools within the game. To this end, we designed the game specifically with customization in mind to allow for other types of user-generated content to be added by students who wanted to “mod” the game. We anticipate that the map editor will also be used later in the development of the project as part of a toolset for user-defined content, or customizable levels in which players can create their own terrains, upload their own dialog trees, and ultimately develop their own ethical dilemmas using this toolset.

An analysis of the dilemmas used in KoA shows that various types of classical ethical conundrums are being considered in the game (e.g., the lifeboat dilemma; see Cohen, 2007). We believe these could be improved further by making the choices more difficult and impactful with consequences linked to future events occurring in the game. Many of these initial scenarios may end up serving as placeholders for more sophisticated scenarios that will be added after additional consultation with our ethics subject matter expert and playtesting groups.

GUIDELINES FOR FUTURE DEVELOPERS

In this final section we provide a brief summary of our lessons learned from these projects. Much of what we learned during the previous two years will be relevant to other ethics game developers.
Rather than focusing on technological workflow procedures, we instead offer what we found to be the six most important lessons learned taken from these development experiences.

**Consider Your Learning Objectives.** First, before starting development on the game, and even before beginning scripting of the ethical learning content, carefully consider the types of learning objectives you want your players to meet. When planning KoA, we initially thought it would be useful for players to learn about different ethical models (e.g., egoism, altruism, or utilitarianism) and then to be debriefed on how their actions correlated to these models. After initial meetings with our philosophy subject matter experts, however, we adjusted KoA so that the game was more open-ended and simply allowed the player to make decisions. We then asked the player why she chose to behave in this fashion by incorporating a game journal that doubled as an assessment tool. In this way, we were learning about the player and her values while she was learning about the consequences of her decision making in the simulated world.

**Balance Fun and Learning.** Second, focus on a balance between learning content and fun. While it is easy to proceed enthusiastically in either direction, it is also quite easy to throw off the critical balance between a compelling experience and an experience from which one can learn. With VU, despite our best efforts, the game turned out to be a little bit too heavy on ethical learning content and somewhat light on fun gameplay. With KoA, in some sense, the reverse was true, since the final game mechanics were more polished than the ethical scenarios players face in the game. To accomplish this critical balance, gathering feedback from one’s intended audience is important. This feedback is best obtained through giving your audience direct experience with your game.

**Obtain Audience Feedback.** Third, playtest early and frequently during development. Playtesting means allowing your audience to experience your game even before it is fully polished. Although we did not handle the playtesting directly for VU, we did present early versions of KoA to attendees at three different conferences during the first year of development. Feedback from these sessions was very valuable in shaping our decision to scratch the first year of development and begin anew with the lessons learned from this initial feedback. If possible, incorporate playtesting early in the design process and pay close attention both to what players find enjoyable and to what they end up learning from the experience.

**Assess and Evaluate.** Fourth, when designing games for learning, particularly for learning complex issues such as those associated with ethics, the nature of the assessment and feedback, and their delivery, is critical. For example, assessing the learner implicitly is obviously ideal. But the computational requirements behind such forms of dynamic assessment running in the background are formidable. Similarly, optimal feedback would be

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<td><strong>Strive for Balance</strong></td>
<td>Identify an appropriate balance between learning content and player enjoyment</td>
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<td><strong>Playtest Frequently</strong></td>
<td>Provide sufficient time to playtest the game throughout its development and playtest as early as possible</td>
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<td><strong>Include Detailed Assessment</strong></td>
<td>Carefully consider the most appropriate methods for learning assessment and feedback</td>
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delivered in such a way that it does not interfere with immersion in the game. Working feedback into the narrative game-flow requires overcoming challenges arising from story-construction and dynamic adaptation of story structure.

**Allow Players to Identify with their Avatars.** Fifth, consider the role of projective identity throughout the development process. As discussed earlier in the chapter, projective identity is the term Gee (2007) uses to refer to the relationship between one’s real and virtual identity as one projects her own beliefs and desires onto the virtual character. If opportunities for the player to feel closer to her virtual character are built into the gaming system, such as the player customization and player feedback mechanisms built into KoA, there are some interesting possibilities for sustaining the learning process and improving identification in both directions, even after the game itself has ended. Similarly, if opportunities in the real world allow players opportunities to discuss, debrief, or even defend their actions in the game, then they are re-engaging that identity and recalling their decision making process to respond to this new challenge.

**Consider User-Generated Content.** Finally, take advantage of opportunities for unique content creation by your players. Although we are not yet in the position to do this fully with KoA, the parallel development of a map editor and the modular use of eXtensible Markup Language (XML) files for item placement and dialog make user-contributed content a possibility for the future. We imagine such tools being very useful for philosophy courses in which students are encouraged to apply the content from that course into creating their own variants of ethical dilemmas. User-created content is also helpful for extending the game into other areas that might have interesting ethical scenarios to consider (e.g., industrial/organizational contexts, discrimination, or international ethics).

**CONCLUSION**

In this chapter, we considered the self as a connective tissue woven between real and virtual space, an important positioning if we are to argue that the self is able to be influenced in a meaningful way in a video game environment. We then considered the design experiences of two different games, one solidly grounded in existing narrative scenarios but lacking in truly game-like mechanics, and the other designed with traditional RPG mechanics in mind and augmented with opportunities for player feedback. Although both games used the same core Adobe Flash® technologies, the overall experience of playing *Veritas University* is quite different than playing *Knights of Astrus*, and in neither game is the experience sufficiently drawn out so as to truly draw the player in and test her moral reactions on a significant scale. Despite this problem, it is important to note that both games were designed and funded with modest budgets, limited amounts of faculty oversight, and small teams composed largely of undergraduate majors in the humanities. Neither game used a “modded” approach, however, so the amount of work done by these students was both surprising and encouraging, even if the ethical learning goals are not yet fully being met in an ideal way. From this experience, we offered six guidelines for aspiring ethics game developers that we believe are helpful for designing games that are both enjoyable for players and useful for pedagogical purposes.

A well-designed and empirically tested ethics game will do much to help educate players about different ethical models, about the impact of their decision making on others, and about the advantages and disadvantages associated with different behaviors from different moral perspectives. More importantly, though, such games may encourage the formation of communities of individuals with a common shared experience of playing that game and understanding its content. In our mind, it is these communities of players who will ultimately lead to the most interesting types of learning in this
domain, particularly if these users are encouraged to interact with one another and if these interactions are observed and studied.

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REFERENCES


Green, M. C. (2004). Transportation into narrative worlds: The role of prior knowledge and perceived realism. *Discourse Processes*, 38(2), 247–266. doi:10.1207/s15326950dp3802_5


Chapter 16
Using Mission US:
For Crown or Colony? to Develop Historical Empathy and Nurture Ethical Thinking

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ABSTRACT
In this chapter, the authors describe Mission US: For Crown or Colony?, a history game for middle school students that they collaboratively designed, developed and tested. The authors argue that empathy is an important component of ethical thinking, and that history games, if well designed, can support the practice of empathy. The authors analyze how they designed Mission US to encourage the development of historical empathy and ethical thinking skills. Moreover, the authors also relate their design challenges, and the ethics of representing the past in games. They conclude with real world results from classroom implementation of the game, and design recommendations for creating games for historical empathy.

INTRODUCTION
How can we use games to foster the development of ethical reasoning skills and encourage citizenship? Ethical thinking and reasoning—the ability to analyze, assess and reflect on our decisions and actions, and understand the consequences and complexities of social issues—is essential to navigating our globally interconnected, rapidly evolving world. We need to be able to successfully understand others’ perspectives—whether locally or internationally—to properly place ourselves in their unique contexts and be able to judge their actions, build relationships with them, and interact appropriately. Therefore, it is important to understand how we can better support the learning and practice of these skills in educational environments.
In this chapter, we argue that one critical aspect of ethical thinking is the ability to empathize, or to understand another individual or group’s feelings and perspectives and employ another’s frame of reference. Within primary school curricula, the development of empathy is often pursued through studying drama and literature, where students explore other’s internal states of mind, character motivation, and points of view (Greene, 1995; Verducci, 2000). But history and social studies classes are also areas in which students can develop and practice the skills associated with empathy and moral reasoning. History as a discipline requires the practitioner to take on the perspectives of those who lived in the past, and try to recreate and reinterpret what happened in the past (Schriever, 2006, Lee, 1983; Seixas, 1996). This involves being able to put oneself in someone else’s historical shoes, and understand their frame of reference and analyze their point of view accordingly. Achieving historical empathy includes understanding the actions of those who lived in the past given the historical context in which they lived. That is, when possible, judging past actions without imposing present cultural norms and mores or assuming those in the past were somehow less developed or less rational than those who exist in the present.

We contend that historical empathy involves a similar subset of skills that relate to and inspire ethical reasoning and thinking, and that the history classroom is a worthy site for the practice of these skills. While there is more to moral reasoning and ethical behavior than understanding others’ points of view and the context in which they develop, its development seems unlikely without them (Hoffman, 1976, 2001). We believe that these skills can transfer to other areas of students’ lives—namely, in arenas in which they must contemplate others’ feelings and points of view—and that the practice of historical empathy in school should be an important objective in promoting ethical thinking (Ashby & Lee, 1987; Barton & Levstik, 2004) in schools.

This chapter presents a case study of the design and implementation of Mission US: For Crown or Colony?, a history video game for middle school students, and its potential for enabling the practice of historical empathy in middle school social studies classes. We begin by first explicating the relationship between ethics and empathy, and the importance of ethical thinking in citizenship and civic engagement. Next, we show how games might be particularly compelling ways to enable the practice of empathy and ethical thinking. The following section of the chapter reviews in detail our design decisions surrounding Mission US, specifically focusing on how we supported historical empathy, as well as the limits of designing for empathy. As part of this, we take a step back from our game’s design, and analyze the limits and implications of representing the past within a video game, and how choices about representing the past in a game can reveal our own ethical assumptions and beliefs. By studying how history is represented in media such as games, and making transparent our game design decisions, we can better understand the ethical implications of our creations, and become better able to reflect on our own ethics. In other words, the very act of designing a game can itself support the practice of ethical thinking and reflection skills. Finally, we include recommendations for the future development and research of games that support ethical reflection and historical empathy.

Defining Ethics and its Role in Citizenship

Ethics, in general, is the practice of enacting choices and moral judgment to achieve the life of a good human being (Sicart, 2005)—that is, the process of making choices according to one’s own conception of how to be a “good” person. This includes diverse, complex skills such as reflection and metacognition; decision-making and information management; evaluation and analysis; an understanding of systems, social behavior and
their interactions; and the ability to empathize and consider multiple perspectives (Schrier & Kinzer, 2009). These ethical thinking skills are necessary not just for behaving appropriately and making critical decisions, but also for developing a democratically engaged citizenship and social participation. For example, in her conceptualization of deliberative democracy, Gutmann (1987) wrote, “A guiding principle of deliberative democracy is reciprocity among free and equal individuals: citizens and their accountable representatives owe one another justifications for the laws that collectively bind them. A democracy is deliberative to the extent that citizens and their accountable representatives offer one another morally defensible reasons for mutually binding laws in an ongoing process of mutual justification” (p. xii). Given the underlying principles of mutuality and reciprocity implicit within this model of democracy, Gutmann argued that the primary purpose of public schooling in a democracy should be to “cultivate the skills and virtues of deliberation” (p. xiii), or what she also referred to as the “cooperative moral sentiments—empathy, trust, benevolence, and fairness…” (p. 61).

Further, Ernest Boyer argues, “Our children must learn how to spot a stereotype, isolate a social cliché, and distinguish facts from propaganda, analysis from banter, and important news from coverage” (Boyer, 1989, as cited in Kubey, 2004, p. 3). By practicing ethical thinking, citizens develop the critical thinking and decision making skills that enable them to exercise informed judgment, deliberate effectively, and participate wisely when acting as a participant in a democracy.

In other words, participating in a democracy is not just about voting and understanding the consequences of one’s voting decisions. It is also about applying appropriate norms in day-to-day interactions and practices. This can be challenging for young and old alike, as people are exercising and developing their citizenship in a variety of new ways, including online and using mobile media. Although many people are becoming media creators as well as consumers, it may be difficult for some to learn the appropriate ethical norms and professional practices, and to understand how to apply ethics, make decisions or reflect on their own ethical behavior (Jenkins, 2006). Mastering this type of thinking is essential for full participation in present and future “public, community, creative, and economic life” (New London Group, cited in Jenkins, 2006). For example, people may not understand the unwritten rules of participating in an online politics discussion board. In one discussion community, Fark.com, a meme originated when a member corrected a person’s grammar, but was incorrect about the change. As a joke, subsequent conversations on the board included members regularly making strikeouts on other member’s correct posts, and making them incorrect. If a person is new to the site, they may not understand why other members are changing their grammar, and as a result, they may not be able to fully participate in the site.

Despite their importance, ethical thinking skills such as reasoning, analyzing, and empathizing, are not fully integrated into standard K-12 curriculum, nor commonly assessed in the K-12 classroom (Zubay & Soltis, 2005). When their development is included as an objective in curricula, reading, listening, journaling and reflection activities are typically the norm for practicing these skills. These methods are often ineffective, however (What Works Clearinghouse, 2006). Research suggests that interactive case studies, problem solving, role-playing scenarios, and contextualized, authentic tasks are more effective methods for helping students to engage in ethical thinking (Schuitema, ten Dam & Veugelers, 2008). In the sections that follow, we present a case study of a history videogame for use in the social studies classroom that integrates ethical thinking and empathy skills.
Defining Historical Thinking and Historical Empathy

“History as a way of knowing”—as opposed to the traditional content of names and dates associated with history and social studies curricula—is often referred to as “historical thinking” (Lee, 1983; Seixas, 1996; Wineburg, 2001) and is modeled upon the disciplinary practices of professional historians. That is, when students are taught historical thinking skills in schools, they are encouraged to think like historians and to craft warranted narrative explanations of past events based on evidence. Elements of historical thinking, which Lee (1983) has referred to as “second-order concepts,” include skills such as examining evidence, analyzing causality, and identifying change over time (Lee, 1983; Seixas, 2006). “Historical empathy” is a major component of historical reasoning. Ashby and Lee (1987) define it as “…an achievement: it is where we get to when we have successfully reconstructed other people’s beliefs, values, goals, and attendant feelings” (p. 63).

To achieve historical empathy, Barton and Levstik (2004) argued, “…we must be willing to entertain the possibility that those perspectives make sense and that they are not the result of ignorance, stupidity, or delusion” (p. 211). In a middle school social studies classroom, such understanding is difficult for a variety of reasons. Students may lack the experience with which to consider the possibility that others (particularly others in a distant past) may have acted in ways that are influenced by unique experiences and circumstances—rather than a student’s own. As Wineburg (2001) argued, “presentism” is the normal state of affairs in judging historical figures’ behaviors: students often judge past actions based on present-day understandings of mores and codes of behavior. To do otherwise requires the ability and willingness to entertain the factors that influenced those who lived in the past, and to try on new frames of reference. Further, students often fail to read primary and secondary sources (when they are used) critically and consider them as arguments or as written from a particular perspective, as opposed to being accounts of “what really happened” (Wineburg 1991, 2001).

As we noted, empathy is an important aspect of ethical thinking and a significant component of morality, in that it enables people to consider others points of view when making decisions and evaluating outcomes. Analogously, achieving historically empathy suggests that one can contextualize these perspectives from within a historical frame of reference or put oneself in the mindset of someone in history—not an easy task. Thus, empathy is perhaps also necessary for holistic interpretation of a series of events, whether they are in the past, present or future. Empathizing with another’s worldview, a component of historical, critical, and ethical thinking overall, is challenging for many young people and even for adults (Kuhn, 1999). We believe that exercising empathy in the context of social studies classes may promote its practice in other areas, though we encourage the incorporation of these skills in other disciplines as well.

Why Games for Ethics and Historical Empathy?

Video games are varied in form and function, but they can all be defined as being rule-based systems with “variable and quantifiable outcomes; where different outcomes are assigned different values; where the players exert effort in order to influence the outcome;…and the consequences of the activity are optional and negotiable” (Juul, 2005). We argue that games can be rich playgrounds for the practice of ethical choices and historical empathy because they offer the ability to iterate and reflect on multiple possibilities and consequences, and they enable participants to take on the role and identity of a historically-grounded character from within an authentic historical context. Games provide
Using Mission US

an authentic context within which to practice and experience ethical dilemmas and critical thinking and decision making. They enable players to reflect on decisions and their outcomes, and consider the implications of choices, without real-world consequences. “In well-designed games, by their very nature, participants can embody and practice the skills, knowledge, and thinking processes related to ethics…. Participants can traverse and transgress boundaries of propriety, try on new identities and investigate diverse perspectives” (Schrier and Kinzer, 2009). Participants can formulate hypotheses, analyze its effect and then revise their original hypothesis. The hope is that participants “may come to realize…certain values and perspectives they have heretofore taken for granted and now wish to reflect on and question” (Gee, 2003, quoted in Schrier and Kinzer, 2009). In the following section, we describe the design choices our team made while developing Mission US to support students’ historical thinking skills.

DESIGNING MISSION US

Mission US: For Crown or Colony? An Overview

Mission US is planned as a series of four to five free online video games set in different eras in U.S. history. This chapter focuses on the first mission that was created, called For Crown or Colony? which focuses on pre-Revolutionary War Boston. Mission US’s development was spearheaded by Channel Thirteen/WNET, and supported by partners Electric Funstuff, the American Social History Project (ASHP), the Education Development Center’s Center for Children and Technology (EDC/CCT), the National Council for the Social Studies (NCSS), and the American Library Association (ALA)/U.S. Association of School Librarians (AALS). It was developed with funding from the American History and Civics Initiative of the Corporation for Public Broadcasting (CPB).

In Mission US: For Crown or Colony?, students navigate colonial Boston, develop relationships with key historical figures, investigate primary documents, witness pivotal events such as the Boston Massacre, and ultimately decide their character’s fate in the face of history. The game promotes students’ historical understanding with game play and classroom materials that foster historical thinking skills, including using evidence to form historical interpretations; understanding the causes and effects of events; identifying turning points where past decisions and actions have affected the future; and detecting patterns of change and continuity over time.

For Crown or Colony? gives students opportunities to consider the perspectives of a number of historical “personalities,” including loyalists, patriots, and those who were “undecided” in the struggle between the colonists and the British crown. To navigate colonial Boston, players interact with a number of figures, some historical actual and some fictional. Each of these figures had some opinion about the British Empire, their policies in colonial Boston, and the presence of troops in the city.

Genre and Format

Mission US: For Crown or Colony? is an adventure-style game that casts the player as a young man who lived during a pivotal moment in history. We felt that the adventure genre—with roots in the text-driven worlds of Infocom (e.g. Zork, Deadline), the graphical series published by Sierra On-Line (e.g. Kings Quest), and more recently exemplified in the Nancy Drew series—was ideal for creating an immersive environment that enabled opportunities for situated learning. Learning that is situated is contextualized using an authentic environment where students can interact with realistic tasks, activities and ideas (Gee, 2003, Shaffer, 2006). By making Mission US an adventure game, we embedded historically relevant tasks, people, places and ideas that could further enable empathy and historical thinking skills.
Another positive feature of adventure games is that they are “turn based,” meaning that the pace of the experience is dictated by the player, which is conducive to thoughtful reflection and discussion during play. For example, students might ask themselves or their game partner, “What do you think we should do now?” or “Why is Royce [one of the non-player characters] acting like such a jerk?” It was also helpful to use the conventions established in adventure games as the lens to first evaluate our design approach. For example, we used conventions such as explorable locations on a map; non-player characters (NPCs) the player’s avatar can talk with; an inventory of equipment; and puzzles and quests that must be solved to progress to the next level.

**Selection of the Historic Event**

We chose the Boston Massacre for several reasons. The event was dramatic and could allow for meaningful player choices and opportunities to develop historical empathy. Moreover, a survey of middle school social studies teachers performed by WNET indicated that they would find coverage of the Massacre more valuable.

To properly introduce colonial U.S. history in such a shortened game period, we had to reduce the scope of how much we covered in terms of our learning objectives. Introducing any concept meaningfully had two impacts: (1) It took more game time (meaning minutes of play) than we initially expected for each incremental objective (and more development time and budget); and (2) It diffused the impact of the other objectives and potentially created player confusion. In short, we found that even as we pared scope, game play was escalating beyond our sixty-minute assumption, and we were concerned that beyond a certain threshold of time, teachers would have difficulty incorporating the experience into their classroom.

To that last point, we refined the structure of the game to be a series of “days” leading up to, and just after, the Boston Massacre of March 1770. We worked together to attach specific themes and learning outcomes to each day of the game, so that teachers could better prepare for each and see tie-ins to their curriculum. For example, one day’s theme is “the role of women in colonial society and the revolution,” and another is “the economic underpinnings of the Revolution.” Each game day was designed to last about 20 minutes, to fit into a 45-minute class (leaving time for log-in, laggards, and class discussion).

**The Avatar-Self Relationship**

We decided that it was important to have the game player control an avatar (in this case, Nat Wheeler, a young man living in colonial Boston, and working as an apprentice for the historical printer, Benjamin Edes). We thought that it was important to include an avatar so that the students could personally connect with the events in colonial Boston, and through this avatar, experience the differing views and perspectives of the day.

We opted to give the player some leeway in playing Nat, with the idea that limiting behavior to only 1770 social conventions would be too foreign to students. To paraphrase James Gee (2005), in playing the game, although the game avatar represents certain embodied knowledge (in this case the social conventions of 1770), the player has his or her own embodied knowledge (modern day), and together they form a new avatar-self, helping and teaching each other.

Looking at it from this lens, we felt the player had the most opportunities to explore ethics and historical empathy if she could make choices from her own knowledge and experience, but could learn what those choices meant in Nat’s world. In other words, if a player guides Nat to chase after the customs official that just smacked and kicked him, the player will quickly learn the consequences of that decision. Similarly, a player could refuse an advertisement aimed at finding a runaway indentured servant when the player...
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Creating Game Play Situations Embedded with Ethical Decisions

We used authentic tasks that a printer’s apprentice would need to perform and focused on tasks outside of Mr. Edes’ shop, so that Nat spent time in Boston, visiting with different types of people. For example, Nat needs to sell advertisements, pick up deliveries at the dock, and help Mrs. Edes, Mr. Edes’ wife, procure items for an upcoming spinning bee.

We also used situations a current-day middle school student would find emotionally engaging. We had them participate in scenarios such as finding a lost dog, dealing with a bully, and orienting oneself in a strange new world.

Mini-tasks give the player immediate tangible goals that serve as a framework for exploration of the historical environment. Meanwhile, the emotional situations engage them in the drama of the game, giving them a storyline to follow and characters that they care about. It also helps them become more aware and empathetic to the varying viewpoints of the characters, and to become more involved with the network of loyalties and relationships in pre-Revolutionary Boston as they continue through the story and eventually reach the final climax and resolution.

Moreover, we specifically designed a number of in-game situations that encourage the player to apply ethical thinking and develop their historical empathy skills. These situations allowed the player to choose between possibilities and experience the consequences of their decisions from within a historical context and with consideration to the social relationships and interactions of the time period. For example, we included the following scenarios:

- **Indigo smuggling**: When the player needs to buy indigo, is it better to buy it from a
shady source or from a merchant who is an importer?

- **Buying goods from Constance:** Constance helps run her uncle’s import shop. Mrs. Edes, the printer’s wife, specifically tells Nat not to buy from importers, but Constance becomes a friend and potential love interest who seems very nice.

- **Fighting with Royce:** Royce starts a snowball fight with Nat to test the player’s mettle and the player must decide how far to escalate the battle, up to and including fighting dirty. This scene also foreshadows the escalation of violence that becomes the Boston Massacre.

- **Who should help move the crate?** The player must move a heavy crate from the docks but will need some help to do it. The player realizes that there are multiple solutions, some causing further alignment with the Patriots, some with Loyalists, but they need to weigh the costs and consequences of each solution.

- **Spying on the Sons of Liberty meeting:** Mr. Edes is very circumspect about Nat’s association with this group, but the player has a chance to spy on a meeting and risk being discovered. If the player does decide to spy, who, if anyone, does she tell about what she learns?

- **Mr. Edes refusing Constance’s advertisement:** The player can sell an advertisement to Constance for her lost dog. But Mr. Edes refuses to print it because it would be consorting with known Loyalists. Does the player protest this seeming unfairness? Be a loyal apprentice? Or give the appearance of loyalty while secretly planning to help find the dog?

Any one of these situations is also a good starting point for classroom conversation following each game session, and will spark a mix of student actions and opinions, and further reflection on one’s decisions.

The most critical ethical event in *Mission US: For Crown or Colony?* was the presentation
Using Mission US

Figure 3. This image shows an example of the series of vignettes from the Boston Massacre.

of the Boston Massacre and its aftermath—the deposition—which asks the student to evaluate what happened at the Massacre. We wanted to ensure that the player experienced the chaos of the Massacre. We also wanted to make sure that no two players saw exactly the same series of events, either because of what was presented to them in the game, or because of their predisposition to interpret things in favor of a particular side.

We explored many designs but settled on what we call the “vignette” approach. As the Massacre begins, the player is at street level at the back of the crowd (brought there by chasing and catching Constance’s lost dog. The player then sees a series of four small quarter-screen animated vignettes, such as the redcoats marching, the crowd of colonists throwing snowballs, the crowd of colonists throwing less determinate objects, redcoats affixing bayonets, and Royce taunting the redcoats (see Figure 3). Each of the four vignettes has two possible animations and each player only sees one of them. Each pairing has one that tends to support Patriotic arguments about the immediate cause of the Massacre and one that better supports the Loyalist and British perspective. The four vignettes are chosen at random from the four pairs of vignettes, so that few people in each classroom will see the same exact series of vignettes. Therefore, the Massacre can be viewed with 16 unique combinations, evoking the chaos of the crowd and the multiple reported perspectives within the classroom itself; a situation ripe for great classroom discussion.

More importantly, Nat is deposed on the events the following day. At the deposition the player must decide whether to report events exactly as he thought he saw them or to hedge or adjust his answers based on the political leanings that he has decided that Nat is starting to embrace. For example, the player, through Nat, needs to interact with the main characters, gather information about the Massacre, and then answer who he thought was responsible for starting the violence in the town. In one exchange, the deposer asks Nat what he saw on King Street, and whether the townspeople provoked the soldiers. Nat can answer that it was the soldiers who were provoking, that the townspeople were provoking with snowballs, or that he wasn’t sure what was happening. The player can choose how to interpret the vignettes they saw
during the Massacre, and then answer accordingly. Then, based on their answers, potential friends, such as Royce, Constance and Solomon, may become enemies. The ending of the game is then affected by the way the player decides to answer questions during the deposition.

In the next section, we focus on a major design challenge: balancing historical accuracy with gameplay and ensuring the ethical representation of history in games.

The Ethics of Representation

A core game design tension—which ultimately defines the representation of the characters and world—is between the demands of history and the demands of game. History is fixed, while games that represent history strive to give the player meaningful choices and impact in the game world. Moreover, is history itself enough of a story to engage young people, or do we need to interject additional plot lines or other devices? Does a certain visual style make for a more engaging game or does it detract from our historical understanding?

In this section, we take a step back from the game and describe our design choices and how they relate to the challenges of properly representing the past. What are the ethics around representing history in a game? We try to make transparent what our design choices convey about our own ethics and beliefs about the world, and what is important to use in our everyday lives. The three most significant areas of representation by which we were challenged were:

- The story and character development
- The visual appearance of people and places
- The written and verbal language used

We will provide one example of each, and what it says about our own design ethics.

Story and Character Development

One design challenge was creating a game experience that forced the player to make tough choices and, ultimately, embrace a side—“crown or colony”—but to understand the nuances of both. As designers, we believed that most players would naturally gravitate toward the Patriot cause unless there were compelling reasons otherwise. We wanted to find a way to get the player to explore the Loyalist characters and their views with an open mind.

We therefore did a few things to add a little weight to the Loyalist side. We created the character of Constance Lillie, a young woman who lost her dog and could befriend Nat. Constance is the fictional niece of real historic figure Theophilus Lillie, the Loyalist merchant whose store was being picketed before the murder of Christopher Seider, a young apprentice. She is nice to Nat, and it is easy to sympathize with her cause.

Another example is the young redcoat, Hugh White (based on a real person), who is later at the center of the Massacre. He is reasonably friendly to the player and not happy to be in Boston. The player, as Nat, can draw sympathetic parallels to their own apprenticeship in a print shop. There was some dissension within the design team as to whether we were making our primary redcoat too nice, and ultimately we agreed in a future revision to toughen up Hugh and add in less friendly encounters with other redcoats. On the Patriot side, we made Royce Dillingham, a rope maker’s apprentice, a bully. He teases and sometimes taunts Nat, seeking to goad him into action.

In creating these characters, we hoped that we did not tilt the balance too far in the other direction. Even with some early testing, it was hard to accurately assess the amount of knee-jerk sympathy the Patriots would engender. Thus, the diverse perspectives involved in colonial America were embodied in characters who represented a spectrum of negative and positive qualities, and
who, depending on our actions, could become our friends or foes. By aligning some of the Patriot views with characters with more negative qualities to begin, and some of the Loyalist views with characters with more positive qualities, we tried to balance against the initial biases that players might have. As a result, we created some inaccurate takeaways for some of our students, and took liberties with our representation of historical figures of the time. It was paramount, however, that we gave our players an experience that would enable them to achieve the key learning objectives of learning about and empathizing with a variety of perspectives, either directly from the game or through teacher-led mediation and reflection.

**Visual Representation of the Past**

The first issue we faced in developing the look and feel of the game was balancing a feasible, appropriate game aesthetic with the need for historical accuracy. The challenge was that despite some designers wanting to ensure the accuracy of every detail, nuance, and lighting effect even the historical reference material was not always accurate for the specific usage. For example, a table with carved legs would be provided as source material by the historians. This table would make its way into Nathaniel’s farm house and then we’d later discover that the reference table would only have been used in richer, urban homes. Further, beyond a certain level of detail, production costs and technical concerns create significantly diminishing returns.

To address this, we agreed to adopt an approach that enabled the historians and developers to effectively bid on what each thought should be done. Each time there was a problem with the historical accuracy of a part of the game, the historians needed to fill out a change request. The historians assigned a priority on the change request (from 1-5, with 5 being a “must have”), and then the developers rated each request with a difficulty to implement (from 1-5, with 5 being “very expensive and time consuming”). We then could all review the list and make informed team decisions about where resources should be spent. Sometimes a change with a 1/1 would get fixed because it was so easy, but a 3/3 would not because it was a little too difficult or costly a change to make.

Some major problems with historical accuracy in the images did occur—such as Phyllis Wheatley, a slave, appearing to wear a bit of lipstick—but, on the whole, while certain details were omitted, the overall colonial environment represented in the game is highly historically accurate.

**Language**

The integration of historically accurate language was the easiest challenge to address. While people in 1770 did speak and write differently than today, student understanding of these differences was not one of our essential learning outcomes. It was far more important that students could understand what they heard and read. Therefore, we intentionally simplified the language and made it closer to modern vernacular, although we avoided modern slang (such as “ad” for “advertisement”).

Since no one really knows the kinds of accents people had then in 1770 Boston, we kept it simple. We gave our redcoat a light British accent and our free black sailor a light Caribbean accent, but that was it.

We displayed written materials as they actually appeared, but players could click on “hot” sections and see a transcription in a modern font (for example, where “s” does not look like “f”). In short, while we provided some linguistic flavor of the times, but comprehension ruled the day.

Overall, our ultimate design decisions enabled us to reflect on our most salient concerns. First, student comprehension and meeting our learning objectives were most important. We wanted enough historical accuracy such that the students would be able to experience a meaningful context and be able to understand and judge a variety of
diverse perspectives from within a historic time period and amid historic pressures and concerns. Beyond that, we did not feel it was as important to represent every character and scenario with exact historic accuracy, because it would be incomprehensible to a student today, who does not have the lens of a historical figure or a historian studying that time period.

Our design ethic, as it were, involved centering our choices on the needs of the student player. We put ourselves in the shoes of the student, and thought about what was necessary for both evoking the historic moment and perspectives, and also providing enough scaffolding so that the experience would be meaningful. The act of designing such an experience itself required empathy for the player, as well as for the historic figures, to determine the appropriate balance of their needs in the game.

In the next section, we analyze the effectiveness of our game and our design choices. We first explain our methodology, and then discuss the results, with particular attention to the limits and potential for enabling historical empathy and ethical thinking.

RESULTS OF THE PILOT TEST AND DISCUSSION

Pilot Testing Mission US

In fall 2008 our team pilot tested For Crown or Colony? in two New York City middle schools: the School of Tomorrow and William Howells Middle School. (Please note the names of all institutions and individuals in this chapter are pseudonyms.) We observed three teachers (two from the humanities, which include history and English, and one from social studies) and 123 7th grade students (68 girls, 55 boys) over five days in each school as they integrated the game into their regular social studies classes. The game’s content focus (colonial Boston and the road to revolution) fell slightly outside of the regular curriculum sequence in both schools and the three teachers took at least one class period before the beginning of the pilot project to familiarize their students with the issues related to the growing tensions in the British North U.S. colonies in the mid- to late-eighteenth century.

General Results

Students played the game once a day in their regular social studies class. Working in pairs, they played on PC laptops (some with headsets on, others without) at their desks in the classroom. Students took turns navigating the game and writing notes about their interactions with NPCs, whom they met as they explored the city. They frequently engaged one another in conversation about events in the game and the dialogue choices they had chosen to interact with NPCs. We provided the teachers with additional materials for classroom discussion and activities that related to the personalities and concepts that the students encountered in the game.

Each of the teachers integrated the game differently. One teacher in the School of Tomorrow, Ms. Crick, used the game as a shared experience with which to generate conversation about the historical content and she find ways in which her students could relate to the game. She regularly interrupted students’ game play to discuss issues and raise questions with the whole class. Mr. Kay from William Howells School, however, preferred for his students to go through a full game day without interruption and then discussed the content afterward in their groups.

The teachers had different ideas about what it meant to “play history.” Both Ms. Crick and Ms. Linkletter, the other humanities teacher at School of Tomorrow, encouraged their students to play the character of Nat Wheeler as they wanted, allowing them to play “historically inaccurately,” whereas Mr. Kay expressed some concern that his students should play “accurately,” which is
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Table 1.

<table>
<thead>
<tr>
<th>Student</th>
<th>Pre comment</th>
<th>Post comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ellen, School of Tomorrow</td>
<td><em>I don’t know</em></td>
<td><em>He was a colonist, so he would take the colonists’ side and tell the wrong story.</em></td>
</tr>
<tr>
<td>Esperenza, School of Tomorrow</td>
<td><em>It is from his point of view. I don’t know.</em></td>
<td><em>He is a patriot. He makes it look like the soldiers did everything bad, like it was unexpected.</em></td>
</tr>
<tr>
<td>Sammy, William Howells</td>
<td><em>Revere wants to show how evil the soldiers are and how much control they think they have.</em></td>
<td><em>He is biased and hates the loyalists. He thinks British laws are unfair.</em></td>
</tr>
</tbody>
</table>

to say that their play should be informed by the outcomes of actual historical events, as opposed to the events his students might have liked to see unfold. Given differences in teachers’ pedagogical styles, content expertise, and familiarity and comfort with integrating a video game into their normal classroom practices, it was very important they be able to adopt the game as part of their teaching practices in ways with which they were most comfortable.

In addition to using the materials provided as supplements for teacher-created activities, the teachers at the School of Tomorrow also used For Crown or Colony? to address one of the school’s 7th grade essential questions: When, if ever, is violence justified? By the end of the 5-day unit, after students had played through the Boston Massacre, both teachers asked their students to decide whether the colonists’ protests or the armed soldiers’ responses were justified, given the circumstances in Boston. The question was a useful framework for considering the role that a video game can serve in promoting ethical reflection in a social studies class, as we discuss below.

**Learning Outcomes**

Although Mission US: For Crown or Colony? was not designed specifically as a tool for developing ethical thinking skills, game play often generated classroom conversations about issues of fairness, the motives of historical figures and what might have informed them and, particularly around the Boston Massacre, questions about who should be implicated and held accountable. The dramatic narrative, the ability to witness events firsthand, and the opportunity to interact with NPCs who represented various perspectives on the political spectrum enabled students to become meaningfully engaged with the past. Fully aware that the personalities were images on a screen, many students nonetheless could identify emotionally with at least some of the characters and develop feelings about how they were treated and what became of them.

To assess the learning outcomes associated with game play and class activities, we administered a number of pre/post measures that addressed historical content and students’ skills in demonstrating historical empathy at the beginning and end of the five-day sequence. We also observed all of the classroom activities, interviewed and audio recorded students during and after game play, and interviewed the teachers at the end of the pilot to learn more about their experiences using the game in the classroom. As we did not design these measures specifically to address students’ capacity to engage in ethical thinking, we will discuss the content knowledge outcomes only briefly. Rather, we address the empathy tasks and classroom discourse in more detail, as they provide evidence for students’ consideration of multiple perspectives, as well as their concerns about fairness and justice in their experiences of historical accounts.
Historical Content Knowledge

The students completed a 13-item multiple-choice task immediately before and after the Mission US unit. The test items were drawn from grade 8 NAEP (National Assessment of Educational Progress) exams administered between 2003 and 2007. From pre to post, the average number of correct answers for the three classes increased from 6 correct (45%) at pre to 8 correct (60%) at post. Significantly, students tended to improve most on the three items that related directly to the historical content in the game: the definitions of loyalists and patriots; the forms of protest against the British government; and the reasons for protest against tax policies.

Historical Empathy

We created four tasks to assess students’ abilities to think about the historical context in which the game took place before and after the unit; we will discuss results from two in the section that follows.

Task 1: Revere Engraving Analysis

In the first task, we asked students to analyze Paul Revere’s engraving of the Boston Massacre. Revere, a patriot, depicted the event as a bloody, one-sided rout of defenseless colonists by seemingly bloodthirsty redcoats. Before and after the Mission US unit, students examined the engraving and made note of several details (such as expressions on the soldier’s faces, the blood on the ground, and the language below the engraving). Students had to determine whether they thought the image was a depiction of the way the event actually occurred and provide an explanation.

On the pretest, twenty-three of the thirty-four students who completed this task indicated that the engraving portrayed the event as it actually occurred, while nine students marked that it was a distortion. After playing Mission US, 22 students indicated that the engraving was a distortion and none of them marked that it represented what had actually occurred.

Table I describes several students’ explanations of Revere’s position before and after the game, and illustrates changes in their reasoning about why Revere portrayed the event as he did.

Students met Paul Revere in the game and knew he was a member of the Sons of Liberty, a secret organization opposed to British authority. They also met a number of loyalists, colonists who remained faithful to the crown (for a variety of reasons) despite the tensions in Boston. In the game, students also witnessed the Massacre as it occurred. As described previously, players watched the riot as it unfolded from Nat’s perspective. The game was designed to expose students to the confusing conditions that existed among a crowd of several hundred people and a small band of armed soldiers.

In another section of the task, we asked students about Revere’s perspective and to write how they thought he would have explained the events of the Massacre. Before playing the game, Ariel, a student in Ms. Linkletter’s class, wrote, “The soldiers were fighting against the colonists. This was called the Boston Massacre. Many people died. I don’t really know.” Yet on the post-game test, she wrote, “The Massacre happened on King Street—the soldiers against the colonists. They killed many of our people. We were mad at them for putting taxes on many goods. They never let us have a say in anything.” Ariel described some of the factors that might have influenced Revere’s motivation for depicting the event as he did.

Veronica, another student in Ms. Linkletter’s class, was unable to provide an explanation from Revere’s perspective on the pretest. On the posttest, however, she wrote, “The soldiers were all of a sudden shooting at us just because we told them it was unfair that they were taxing things. They started killing people and the colonists were really scared. It is really disappointing that the soldiers did that.” There are simplifications in both students’ accounts, but it is interesting...
that they were able to adopt Revere’s perspective and consider how he might have explained these events. Veronica clearly recognized that Revere might have had an agenda in depicting the scene as he did. In explaining Revere’s intentions, she wrote, “Because he is a colonist and of course he is going against the loyalists and blaming everything on them. He doesn’t want the colonists to get in trouble.”

Through encountering Revere in the game and by witnessing the Massacre, Veronica was able to consider the Revere engraving as an argument based on Revere’s political motivations. This was true for a number of students: by interacting with patriots and loyalists, they were able to develop a richer understanding of what led individuals toward the loyalist or patriot causes. Further, several became more adept at providing reasons for perspectives, as opposed to broad generalization. To be sure, Veronica’s comment above about Revere’s status as a patriot is a generalization. Read within the context of her understanding of why colonists might have been angry with representatives of the crown, however, it provides a richer explanation for his depiction of the Massacre.

Task 2: Explaining Patriots and Loyalist Reasons for Supporting or Opposing the Crown
In the second task, we asked students to write down reasons that loyalist, patriots, and “undecideds” might have provided for supporting or opposing the British crown. Thirty-three students in both schools completed this pretest and the posttest task. We scored students’ responses using a 3-point rubric for accuracy, comprehensiveness, and detail. Twenty-one students wrote more comprehensive descriptions of the patriot and loyalist positions on the posttest than they had at pre. On the pretest, students’ answers tended to be more generic. For example, one student wrote in the pretest: “Maybe the King didn’t give people enough freedom. The patriots could probably disagree with the freedom given and or want more.” Another wrote, “The King gave them the life of being royal and having a good life.” In the post-test, students were more likely to cite specific issues of the day, especially taxation and importation as sources of conflict. For example, describing the patriot rationale for opposing the King, a student wrote, “(1) Don’t like being controlled by the British. (2) Can’t afford to pay taxes. (3) Don’t believe it’s right for you to pay the taxes.” Another wrote, “A Patriot is someone who dislikes British rules and does not want to follow them. The Patriots think the townspeople should rule and have freedom.”

Classroom Discussions
Some of the most interesting examples of students’ thinking about the historical context in which the non-player characters in Mission US: For Crown or Colony? lived came from the conversations that occurred among students as they played, as well as during whole class discussions. For example, two students in Mr. Kay’s class, Annamarie and Gina, returned to the Edes’ print shop at the end of a day when Nat was purchasing goods for a spinning bee. Annamarie (referring to the dialogue options) said to Gina, “Don’t tell her [Mrs. Edes] about anything with Lillie in it! Her husband doesn’t like Lillie.” A little further on in their discussion, as they told Mrs. Lillie about the goods they had purchased and, more importantly, from whom they had purchased them, Annamarie told Gina that she should “only choose the nice answers, so we don’t get her madder.” By “nice answers” Annamarie meant to lie to Mrs. Edes and neglect to tell her that they had purchased goods from a loyalist merchant, knowing that, as patriots, it would anger both the Edes. To progress in For Crown or Colony?, players need to talk with NPCs to obtain information and complete tasks. If players succeed in getting what they need from these NPCs, they need to have an understanding of his or her motives and what he or she might want to hear. In this case, Annamarie knew that
purchasing goods from a loyalist was bound to displease Mrs. Edes, an ardent Daughter of Liberty and Nat’s patron.

**Problematizing Characters**

In addition to making decisions about how NPCs feel about certain issues, the students had to classify them and decide each character’s loyalties. The bit players in For Crown or Colony? were particularly challenging for students in terms of this classification. As part of the class activities, the three teachers each created T-charts (column charts in which students can place concepts and names that fall under the same categories) and asked their students to place all of the NPCs they had met in one of three columns: Patriot, Loyalist, or Undecided. Some of the characters were obvious for many students: the Edes were under the patriot column, while most placed Theophilus Lillie under the loyalist column. Private Hugh White, a redcoat that students met several times as they explore Boston, was more difficult to plot, however. When Mr. Kay asked his students where Hugh White belonged on the chart, an interesting discussion followed:

*Ernest:* Even though he’s a redcoat, that doesn’t mean that he supports the king.

*Philip:* Didn’t Hugh White say that he wanted to get out of Boston? He doesn’t agree with them, he wants to go back to Britain.

*Ella:* Oh, he was nice to us—he’s a patriot.

*Christina:* To be a loyalist or a patriot, you have to be committed to what you want. Just because he’s friendly to you doesn’t mean anything.

A similar conversation occurred in Ms. Linkletter’s class, though her students put White squarely in the Loyalist column. As evidence, one boy quoted him as saying, “I won’t be talking to any patriots,” which he took to mean that White was a loyalist. These discussions illustrated some students’ awareness that “categorizing” historical figures can be challenging, as their motives may be confounded and they might have multiple loyalties. These discussions suggest that a number of students were inclined to categorize characters based on more superficial issues, such as whether they treated Nathaniel nicely. In conversation, however, some students recognized that characters were possibly influenced by competing loyalties and multiple factors that might determine how they felt about the tensions in Boston.

**Witnessing the Boston Massacre**

_For Crown or Colony’s* most dramatic episode is the day on which students witness the Boston Massacre. After being sent on an errand by Mr. Edes, players wind up on King Street, along with Constance Lillie, in the moments immediately before the redcoats shot into the crowd of protestors. During that game scene, students see four vignettes, which express the mood of the riot, but do not clearly illustrate what may have occurred. Players hear colonists shouting at the redcoats, taunting them to fire; they see snowballs thrown at a guard; they witness redcoats fixing their bayonets and pushing the crowd back; and finally they hear (and see) gunshots. Immediately following the end of the scene, students are deposed by an official to hear the player’s, as Nat’s, account of what occurred.

In Mr. Kay’s class, one student expressed his strategy for answering the questions by the deposer:

*Freddy:* I lied about everything. No, the soldiers were not threatening us. I don’t like the redcoats. They could’ve shot somebody innocent in the crowd, they could’ve shot me and they almost shot Constance and the dog.
Using Mission US

Freddy (in response to a question about what the truth was, as opposed to his “lie”): The truth is that we were provoking the redcoats.

Jacqueline, a student sitting near Freddy, responded to his assertion that the redcoats were to blame, saying, “They didn’t shoot on purpose. One of the soldiers fell down.” Another girl suggested that the massacre was “nobody’s fault—they both provoked each other.” This discussion illustrates multiple layers of student understandings about what may have occurred during the Massacre and who was to blame. Freddy felt that the redcoats were wrong for doing what they did, but they were not to blame for the event. Rather, it was the colonists who had provoked the redcoats.

CONCLUSION

Our observations of classroom activities and student discussion, as well as our assessment of the historical empathy tasks, suggest Mission US: For Crown or Colony? was an effective tool for promoting the development of historical empathy skills in middle school social studies classrooms. Throughout the pilot project, we observed students engaging in discussions with one another about why NPCs, as loyalists, patriots, or undecideds, might have felt or acted in certain ways, or the players questions how NPCs responded to Nat Wheeler. Witnessing the events that led to the Boston Massacre sparked several debates among students in different classes about “who started it” and “who was right and who was wrong” and what the event might mean for the colonists’ future.

By enabling students to inhabit a character within a virtual historical world and to interact with personalities that represented various political perspectives and socioeconomic statuses, Mission US: For Crown or Colony? created a space in which students needed to consider others’ perspectives and motives in their particular historical context. Though the game’s dramatic narrative sometimes encouraged students’ over-identification with the personalities or overly relied on their present-day assumptions about why these characters might have behaved and thought as they did, it is encouraging that game play often led to students becoming emotionally engaged by the events and characters they encountered in the game. We will focus on mitigating the issues with over-identification and the reliance on current-day biases in future iterations of the game.

Moreover, through the journey of the design process itself, we, the game designers, became more aware and reflective of our own ethics. How we decide to represent history, characters, stories and scenarios is a window into our own beliefs, assumptions and ideas about the way the world works. Conversations among the different types of practitioners who collaborated on Mission US—whether game designers, historians, researchers and teachers—revealed the values of our practice. It is imperative when creating this type of game to incorporate these multiple perspectives and value systems, and to be reflective and transparent about them. The designers of such games should continually re-evaluate and reflect on their process to ensure that they are best representing history and the needs of the player, and they appropriately represent the story of the past.

Recommendations Summary

Based on the experience of developing and testing Mission US: For Crown or Colony? we developed a set of recommendations and considerations for creating games that support historical empathy.

1. **Make your players care.** Create dramatic, relevant situations that invite identification, caring and concern, so that players are able to practice empathy for the avatar and other characters.

2. **Incorporate multiple perspectives.** Integrate diverse views on the same topic or situation, and place different types of people
into the world so that players can interact with many types of ideas and beliefs, which can lead to deliberation with others, as well as reflection on one’s own views.

3. **Ensure flexibility in usage.** Make sure that it is okay if every player has a different experience, and every teacher uses the game differently. Provide guides to how it should be used, but allow creativity in how the player can navigate the world, and how the teacher can implement the experience in the classroom.

4. **Use a compelling context.** The context should be historically relevant, with lots of rich content, based on primary sources, historical figures and historical trends and data.

5. ** Appropriately balance accuracy with gameplay.** Make sure that the game balances accurate content with engaging gameplay. Be transparent about what types of historical data and scenarios were altered to enhance the game’s goals.

6. **Consider and make transparent your assumptions.** Ensure that your players understand the underlying assumptions in your game system. Make your players aware of your rationale for your choices in how you represented the past in the game. Show them that this is not the only way to represent history in game.

7. **Enable players to express beliefs and values.** Provide opportunities for the players to express their personal beliefs and values, or to experiment with other values, and to personalize their experience.

8. **Provide context for motivations and intentions.** Enable players to understand the historical context enough so that they can determine the motivation of historic figures and NPCs in the game.

9. **Encourage choice and show consequences.** Make sure that players can explore the world in different ways and can choose their paths through the game, with appropriate constraints. Provide feedback for these choices, and make sure the player understands how the choice led to a consequence.

10. **Allow students to play together in real life.** Enabling collaboration helps strengthen their bond to the game and to the real world, and allows them to work on problems as a team, and help each other make decisions, engage in mini-deliberations, and talk through choices and consequences.

**REFERENCES**


Using Mission US


Chapter 17
Reacting to Re:Activism:
A Case Study in the Ethics of Design

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ABSTRACT
This case study of the big urban game Re:Activism examines moments where failures in the game’s design revealed how the design process itself is a set of ethical choices and actions, illustrating specific strategies for integrating more interesting choices into games. Ethics in a game is not inherent; it is enacted through rules, mechanics and play. This chapter is a “thick description” of the first time Re:Activism was played in which the losing team paradoxically had the kind of engaging experience the designers sought to create.

“Play is free movement within a more rigid structure… When play occurs, it can overflow and overwhelm the more rigid structure in which it is taking place, generating emergent unpredictable results.”

— Katie Salen & Eric Zimmerman (2004, pp.304-305)

“Much good design evolves.”

— Donald Norman (1990, p.142)

INTRODUCTION
The yellow team lost the game, but in many ways they also won. This is a story of how we came to learn some important lessons in the ethics of game design — from the “losing” team.

The game in question is Re:Activism, a big urban game first played on June 7th, 2008 in the streets of New York City for the Come Out and Play Festival. Come Out and Play is an annual public event created and curated by game designers featuring games that take place in the public spaces of New York City. The events that took place during that initial three-hour play session sparked a year of reflection and insights as we, the game’s designers,
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tried to fully understand the implications of the yellow team’s loss. Their loss, and the experience they related, generated new questions, new games, and hundreds more hours of playtesting and prototyping.

This chapter is a case study in the importance of failure as a catalyst for reflection about the pragmatics and ethics of game design. The yellow team’s failure to win also marked a failure in the game’s design. The events on that day challenged us to balance the unpredictable vectors of player experience and game/world collisions in big urban games, while still honoring our dedication to the formal structures of game design. Although this chapter describes an experience specific to one instance of a game, the dialogue between players and designers presented here illuminate some interesting and broader questions about ethics, design, and play.

So, who are “we”? We’re a collaborative group of students and faculty in design and the social sciences working together on the creation and study of social games in the research lab PETLab at Parsons The New School for Design. PETLab, which stands for “Prototyping, Evaluation, Teaching and Learning lab,” is a joint initiative between Parsons and Games for Change, a non-profit organization supporting the creation and appreciation of games as a medium for social change. PETLab explores and employs iterative prototyping methods to design games and interactive media, often with partnering organizations interested in using games for public interest engagement. At the time we launched Re:Activism, PETLab was still a nascent research initiative. During this time, we were developing a set of collaborative methods to tackle the creative and technological challenges of game design, as well as the question of how to best design games for change, and how social change, in the context of games, could take form.

Serious Play

Adding a “serious” goal to play is a unique problem in and of itself. One of the six qualities of play Roger Caillois (1962) describes in his book *Man, Play and Games* is that play is “unproductive.” By this he means that the actions and exchanges inside the game stay there, leaving the state of things in the real world unchanged: “…ending in a situation identical to that prevailing at the beginning of the game” (p. 10). In contrast to Caillois definition, games for change propose to use play in the service of actual, lasting change — whether that change is physical, political, economic, ideological, spiritual, or otherwise. The necessity for games to be measurably productive in the “real-world” creates an additional challenge for the designers of games for change and often threatens to overshadow one of the more basic requirements of games: that they be “fun.”

The seeming dichotomy between the unproductive fun of games and the seriousness of social change inspired us to create Re:Activism. We were also inspired by the city, and the constraints and possibilities of a game that had to be played in an urban context. We wanted to make a game that was location-specific and about public space as a site for the interplay of social issues. When first brainstorming game ideas, we asked ourselves: How can we use the city as a setting for a game about social issues? Where do social issues become visible, public, and active? Our questions were answered in part as we encountered springtime waves of activism on our daily commutes to school taking place in nearby Union Square. Protests, rallies, marches, and riots are active and visible practices that we could explore in a game. Looking back at the history of activism in New York City, public demonstrations punctuate a wide array of civic and social issues. From a woman’s right to vote to labor conditions, the streets of New York have been a stage for highly visible and often effective public action. In addition, many of the tactics used by activists are playful and clever in
the way words and actions are combined to create meaning. Thus, we strove to design a game to reveal not just what happened in a time and place, but how the protests happened, through playful reenactment and engagement with the public.

Mechanics and Ethics

Re:Activism is not inherently ethical because of its serious subject matter or what we, as its designers, intended for the game to communicate. Ethics are not inherent qualities in a game; they are created through the action of play and the responsiveness of the game’s design to create meaning through play. Games are active spaces; they must be played to take form. Much of the meaning of games is expressed through their “core mechanics”: the primary actions in which players are engaged (Salen and Zimmerman, 2004, p. 389). A challenge in making games for change or other intentional outcomes such as learning or persuasion is to convey the meaning in the rules and mechanics – what players are actually doing – not just through the narrative or visual content in a game. Henry Jenkins has pointed this out in his Games to Teach group’s research into games for learning: “Most educational games have failed because they use generic game templates (e.g. Pac-Man) rather than original game rules designed to illustrate the rules of a system” (2003). In the game, by placing oneself in the shoes of a historic activist, engaging with the public on issues, and even using the mobile phone in a way that emulates the use of mobiles in political organizing, we tried to express historic material through rules and core mechanics.

In Re:Activism we sought to create understanding not only through rules, mechanics and action, but also interaction. Complex, unexpected and interesting choices and actions on the part of the player emerge by interacting with simple sets of rules (Salen & Zimmerman, 2004). Players in
big urban games inevitably interact not just with designed rules, but also with both public spaces and people. To understand the dynamics of our design in the context of the unpredictable flows of the city entailed a great deal of testing, iteration and discussion with playtesters. The iterative game design process (which involves repetitively designing, playtesting, and then redesigning the game) depends upon a close reading of how players engage with rules, setting, goals, and core game mechanics. To be true to the active and emergent qualities of games and play, I will present Re:Activism as it closely as possible to the way it was played for the first time in a public context.

To do so, I will attempt to provide a “thick description” (Geertz, 1973) of our game as it was experienced by players during the Come Out and Play Festival to gain insight into the relationship between failure and ethics in the design process. Thick descriptions place specific events and behaviors in context to draw a more accurate image. In the book *Thoughtful Interaction Design* by Jonas Löwgren and Erik Stolterman (2004), context is an essential consideration for the effectiveness of design. Löwgren and Stolterman argue, “To begin with, the digital artifact has to be evaluated in relation to a situation. Even though certain aspects of a digital artifact might be independent of the context, its most crucial qualities are always deeply context-dependant” (p. 4). While Re:Activism might not be a “digital artifact,” it is an interactive experience deeply connected to the context in which it is played. In essence, the contexts we are designing for and in are an essential aspect of the game’s design and how it is experienced.

Ethics, in the way I am using the term, is also contextual and interactive; a set of dynamic and contingent relations between one and another, or as the philosopher Emmanuel Levinas (1969) has described it, a face-to-face address between “I” and the “Other.” Judith Butler, another important philosopher on the subject, has added to Levinas’ description of ethics by incorporating social context into the equation. In her book *Giving an Account of Oneself*, Butler points out the importance of being observant and critical of social norms and contexts, while at the same time recognizing the challenge we have in seeing these contexts — and ourselves — fully in the process (2005). These perspectives on ethics resonate with the design process and games in particular. To understand the ethical dimensions of a game, it is important to experience and witness it in action and in social context. For example, a game of tug-of-war can hold different meanings and possibilities for participants depending on whether it’s played at a summer camp or a political protest. In addition, the game design process involves working on an incomplete artifact with unknown outcomes. The meaning only becomes fully visible when the game is played, with outcomes unknown to both players and designers at the start. Instead of focusing on either the ethics of play in games or the ethics of game design, this chapter proposes to consider both in dialogue with each other: design and play as two activities that when considered together form a social context for the ethical possibilities in games. To explore ethical interaction between play and design, we organize the chapter by analyzing the interactions between the player and the game, the player and the public, and the player and the designer(s). What follows is an account of what we, as designers, witnessed, what players experienced, and what we have learned among us.

**Designing Re:Activism: NYC**

//RCVD Sat Jun 7 13:16:27 2008

*Team 1 is at location Start*

*Team 2 is at location Start*
Re:Activism is a big urban game, or a game that takes place in the physical world (often cities), using public space and urban infrastructure as a playing field. While big urban games might incorporate technology, they do so often as only an augmentation to the interaction between players in real-space and real-time. Re:Activism used lower Manhattan as its play-space, with an emphasis on sites where historic moments of activism such as riots, marches, and protests took place. The goal of the game is to race to visit as many of these sites as possible within a restricted timeframe and accumulate points by completing challenges relevant to each site’s activist history.

In addition to being a big urban game, Re:Activism is also what one would call a serious game, or more precisely, a game for change. While serious game is a broader category describing games designed for purposes beyond entertainment, such as games for learning or military training, the specific goal of games for change is social change. As designers, our goal was to create an exciting and engaging game recognizing the civic struggles of New Yorkers over the last several centuries. In addition to these activist histories providing narrative content for the game, we hoped to reveal the actual actions and practices of activists through the game’s mechanics. Play would take form as re-enactments, memorializations, interactions with the public, and activities inspired by actual activist tactics. For example, recreating a “die-in” used in AIDS activism or chants, positions and movements from recent protests on the war in Iraq. Our goal was to expose these tactics to players, reveal through place a sensory echo of these historic moments, and reanimate our interpretation of the issues through public performance.

As designers committed to exploring the formal aspects of game design, we hoped to build a game that honored the concept of “meaningful play” (Salen & Zimmerman, 2004, p.204) by providing feedback for player choices and rewarding strategic thinking. Our design goals, then, were three-fold: to recreate and re-situate history, to demonstrate possibly useful activist practices, and to create an exciting strategic game. In addition to the research involved in finding interesting stories and learning about the tactical activities at each activist site, we needed to design a clear set of rules and enough interesting choices to encourage strategic and meaningful play. We also needed to create time and space boundaries for a game in a city with seemingly boundless attractions and distractions. To do this, we employed a familiar core mechanic: the race.

Moreover, to better design and balance the rules and features of our game, we had to iteratively prototype and playtest it many times. In fact, playtesting began on day one. As soon as we came up with our initial game concept, we tested out the game’s physical boundaries by seeing how far we could get walking or taking the subway between different city landmarks within a time limit. By the time the Come Out and Play Festival had arrived, we had played the game ourselves many times and recruited friends and colleagues to play the game as we were designing it to give us feedback. Our playtests, however, never anticipated the unusual outcomes of the game on the day it premiered live at the festival.

The Game Begins

//SENT Sat Jun 7 14:35:15 2008

Performing and rallying
On an excruciatingly hot Saturday in June 2008, over 40 participants from the NYC Come Out and Play Festival gathered to play Re:Activism in the lobby of Parsons The New School for Design. I announced the rules of the game to those gathered over a bullhorn. Each of the 8 teams, identified by differently colored bandannas, were given a backpack containing a cell phone, the rules of the game, “protest supplies” (chalk, posterboard and markers), a set of 11 numbered envelopes, and a map of lower Manhattan with 11 locations marked by the letters A through K. A last minute addition was made to the supplies that morning — a large bottle of water to assist in proper team hydration on that unseasonably hot day. These supplies formed the material of the game. They were the tools teams would make use of, maps to structure the play-space, and the rules of the game.

Although sites on the map were only marked by a mysterious letter, players were told that they represented protest sites from the past. When they arrived at a site they would answer a question that could only be answered by being physically present at the site and observing their surroundings. When this first question was answered correctly and sent via text message to “Re:Activism Central,” the site would be “unlocked” and the event that happened at that site would be revealed. Teams gained initial points just for unlocking a site. In addition, a message from Re:Activism Central back to the team included a number corresponding to an envelope in their backpack containing more information about the historic event that happened there and a set of three challenges teams could perform to earn additional points. If a team decided to stay and complete one or more of the
Reacting to Re:Activism

challenges, they would need to document it with a picture or video taken on the supplied phone and send a message to Re:Activism Central to report the challenge they completed. The team with the most points at the end of two and a half hours, confirmed by the images and videos on the phones, would be named winner. Every 20 minutes, team points were tallied and broadcast via text messages to all of the players to let them know their ranking in the game.

Mobile phones were used to let players know the current state in the game and they also were used by teams to emulate how activists employ phones in organizing and citizen journalism-based reporting. Learning the basic activist toolset, like how to use mobiles to report elements of a protest was one of the larger goals we, as designers, had for the game. How these and other practices we tried to embed in the game’s mechanics translated back out to players and the public through the stylizations of gameplay is at the core of our investigation in this chapter, through an account of the game and how it was played by its players.

Re:Activism at Play

At 2:21pm the five starting teams burst out of the Parsons building at the corner of Fifth Avenue and 13th street, quickly strategizing which site they would visit first. The teams were diversely proportioned and constructed. Some of them came already formed and ready to play, while others came together that day. One of those groups was also the smallest: a three-person “yellow team” (identified by their yellow bandannas), which almost did not make it out intact. Yellow team member Munish (player names have been changed) described their start:

“Our team was definitely not the most pumped up ego team. It nearly splintered before it started and then we all started by saying, yeah, we’ll probably just go halfway. So we were definitely in the mode of — this sounds like fun. Let’s get some fun out of this.”

Yellow team member Mark also recounted their early strategy:
“So first, we had the map, and there’s definitely an explosive feeling out the door. People are off, we were like — we’ve got to get a strategy really quickly, we were looking at this map and I think part of what I was thinking was, is there a way we can get to places where other people might not go?

The yellow team members were the aforementioned Munish, in town for just the weekend from London, Mark, a Bostonian, and the sole New Yorker (and game designer) Sufong. The first site they decided to visit in their “off the beaten path” strategy was the Stonewall Inn in the West Village. To unlock what happened at that site and the bonus challenges there, they needed to answer the question:

“There is a newspaper in the window of the bar, what was the weather on the day of the riot?”

After reading the front page, they found the answer on the paper’s masthead (“partly sunny”) and sent it in a text message back to Re:Activism Central. Soon after, they received a response with the number of the envelope to be opened. In the envelope, the team found a card with images of the riots and a description of the June night in 1969 when what would be known as the Stonewall Riots broke out between queer patrons and the police resulting in an uprising and a march that would spark the gay rights movement. On the back of the card was a set of three challenges:

*Easy (100 pts) - Ask a passerby why the Stonewall Inn was important to gay rights and document it with a picture.*

*Medium (200 pts) - Stage an improvised re-enactment of the riot scene for 3 minutes and record it with video.*

*Hard (300 pts) - Get a group of at least 3 people to chant the chant heard on the night of Stonewall.*
Be sure to document your chant with pictures or video.

The team decided to choose the easy challenge, honing in on a pair of women who were crossing the street to enter the bar. The yellow-bandanna-clad trio and yellow-shirted duo met in front of the inn, their matching colors visually foreshadowing the synchronicity of their meeting. As Munish describes:

“The slightly surreal thing is that they had just come from a talk on the event. I mean literally, they were walking back to the venue, so it was like, okay, I think we picked the right people. So one of the reasons that it took so long is that they were bubbling with the energy of, you know, I guess they must have enjoyed the talk, and also it’s quite freaky to go to this relatively obscure talk and then a bunch of slightly kooky strangers say: do you know about that talk that you’ve just been to? So part of the energy I think was definitely around that.”

The attempt to achieve 100 points sparked an in-depth conversation about the history of the Stonewall Inn site, the women’s personal relationship to the events, the game and festival, and other sundry details exchanged in the shade of the tavern’s door. After more than thoroughly completing the requirements of the easy challenge, they decided to try the next one. This time, however, the yellow team would be joined in their re-enactment of the riots not by strangers, but by their newly dubbed “honorary” teammates. After playing the roles of cops and patrons in a reenactment of that historic night, the expanded yellow team performed the final challenge, this time bringing additional patrons into the mix to chant: “out of the closets and into the streets!” Each performance was carefully planned, choreographed and carried out, entailing a great deal more care and time in their execution than many of the other teams put into the challenges. Exchanging hugs and wishes for an unlikely victory judging from the amount of time elapsed, the yellow team decided to push on and attempt to visit a few more locations before the game was over. They visited nearby Washington Square Park and tried some of the challenges there but soon decided, perhaps influenced by their first stop, to go into a nearby bar and enjoy a cold beer together in the last few minutes of the game.

//SENT Sat Jun 7 16:12:57 2008

X air temp 95 beer temp 40

—Message from the yellow team to Re:Activism Central

Over beers, Munish, Mark and Sufong discussed their experience of the game, interrupted by text messages from Re:Activism Central reminding them that their team was in last place. In follow-up interviews several months later, I asked how they felt at this moment in the game. Sufong, a game designer, described her thoughts and how her experience inspired some of her later work on a big urban game that debuted several months later at the 2008 Conflux Festival, TiltFactor’s “Massively Multiplayer Soba”:

“...the thing that was really exciting was our moment when we were asking about Stonewall and that was the piece for me that was the most interesting and also that inspired the most interesting work afterwards. ... [T]he thing that I’m always really obsessed with is, how do you design moments of connection between people where you can create conversation or where you can really create moments of understanding? I think in some ways the way the game was designed did not allow for that because you have really specific tasks that
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you’re supposed to do, and that, because it was so
time-based, you needed to do them really quickly
so that you could get points and move on.”

Munish described the significance of his expe-
rience as something that might not have happened
if the team was more driven to win:

“We were actually conscious that we were not
playing the game to get more points because it was
fun — so it wasn’t unconscious. I know that if we
hadn’t been the team that lost one person before
it started and 3 people were like, this sounds like
fun but I’m not sure I can run around the city for
2 hours — if we weren’t that team and we were
a bit more driven — then maybe we would have
obeyed the rule-sets more and we would have
completely missed that. We would have rushed
these two wonderful people that we met. We could
have done that but we didn’t, because we decided
to do something else. I suspect that the team that
came in first — if they had run into the same
people — would have had a completely different
experience.”

The yellow team ended the game in last place.
Despite this, they had one of the most personal,
moving, and interesting learning experiences that
day. At the end of the game, teams convened to
relate their experiences to us and to each other and
Sufong described their exciting meeting with the
women at Stonewall. As we listened to her story,
the realization that our game’s design ran counter
to their experience began to set in. The racing
mechanic rewarded the teams who spent the least
amount of time at each site, rushing to accumulate
points, but not to linger and learn something new.
Moreover, the game’s scoring system penalized
the team that arguably had the most interesting
experience. Our first reaction to this was that our
game was broken: how could we have not seen
this obvious design flaw? The rules, rewards and
racing mechanic of the game ran counter to the
purpose of the game to encourage meaningful
moments of learning and dialogue. We went back
to the drawing board.

Breakdowns and Mechanics

Breakdowns and failures make the conflict be-
tween ideal systems and reality visible. Conflicts
between real-life contexts, the designer’s image of
the design and the larger vision can be “engines”
for creativity (Löwgren and Stolterman, 2004,
p.19). Ethics, too, considers how we can negoti-
ate between ideals and realities, making choices
as best we can within an unpredictable set of cir-
cumstances with incomplete knowledge. If it had
not been for Sufong’s comments on the game to
us that day, we might have walked away unaware
of the conflict between the game’s mechanics and
having deeper, more meaningful experiences at
each site. From Sufong’s comments, the video
evidence recorded on the yellow team’s phone,
and my interviews with team members afterward,
we were able to reconstruct their experience
and ask how we can better balance the game
to enable a team to choose to play more deeply
like the yellow team. On the flip side, the game
itself inspired the impromptu encounter, and the
concomitant meaningful play. The game was the
interface between the players and the women at
Stonewall, enabling play and personal exchange
between strangers. But it took effort, and ultimately
a sacrifice of the winning position on the part of
the team to decide to play differently, strive for
different goals, and take their time.

Thoughtful Design

Choosing the race as an overarching mechanic
was in opposition to enabling full exploration of
the historic site-based activities that were meant
to be the core of the game. Indeed, racing ad-
dressed the problem of defining the space and
time boundaries of the game. So while it solved
one problem (limiting time and space), it created
another (limiting player choice and strategy). This
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is where, for us, a question about the ethics of our practical decision to emphasize racing in the game arose. It might seem heavy-handed to use the term ethics to characterize a relatively mundane design decision like this for a game played only once by most players. But as we witnessed the emergent qualities of our simple rules unfold for players and the people they interacted with, we realized that our design decisions could impact real convivial relations in public that has sustained effects later on, even if just in memory. This was a lesson for us in “thoughtful design,” a term coined by Jonas Löwgren and Erik Stolterman (2004) in their book *Thoughtful Interaction Design*. As they point out:

“Design is very much an ethical activity. Every design process is a combination of actions, choices and decisions that affects people’s lives and possible choices for action. As such, design is deeply influenced by values and ideals. In every design, no matter how small, there are always choices that in different ways will lead toward or away from those values. There is an ever-present ethical dimension in design, manifested in the most practical choices and decisions.” (pp.9-10)

Our initial design choices were practical and well intentioned, but they were not yet also very thoughtful or ethical.

Therefore, the first public launch of Re:Activism marked the beginning of a larger journey through prototyping and playtesting that revealed an ethical set of relationships on three levels: the player and the game, the player and the public, and the player and the designer(s). These three levels in

Figure 5. A map comparing the paths of the yellow team and the winning pink team.
Reacting to Re:Activism

what I will call the “PETLab model” are loosely based on the “classic game model” referenced by Jesper Juul (2005) in his book *Half-Real: Video Games between Real Rules and Fictional Worlds*, “The classic game model is a way of capturing what a game is by describing it in terms of the game itself, the player’s psychological relation to the game, and the relationship between playing the game and the rest of the world” (emphasis added) (p.197). There are some subtle but key differences between this model and the model I am proposing for the sake of this case study, however. The most obvious departure is the inclusion of the designer(s) in the PETLab model. In Juul’s model, the designer and the design process is embedded in the game itself. In the modified model I am proposing, the designer’s role is intimately connected to the interpretation of the game and the continued iteration of the game each time it is played. Because they are often run as events, big games and alternative reality games represent a live, real-time interaction between designers and players. This in itself is a departure from other game formats, necessitating this modification to Juul’s classic game model. In addition, considering the designer(s) in the equation allows us to better illustrate how analyzing the relationship between designers and players in the formation of the game can lead to insights about the ethics of the design process.

The other slight difference in our model is that each of the levels contains a relationship or dialogue between one thing and another, such as player and public. Inspired by the thinking of social scientists (five of our team members were anthropologists), the relationship between designers and players, content and context was more salient and reflective, as well as the underlying motives and context of our design process. We can begin to think of these three relational frameworks as “engines” for ethical thinking and action and a more holistic and thoughtful approach to game design. We believe that this type of approach is particularly beneficial to what we can call the “big urban games for change” genre. Combining the event-based nature of big games and the serious aims of games for change places emphasis on actions in public representing “real-world” issues. To depict the complexity of these situations and fully consider the relationships between the designed structure of the game, player interpretations, and the ramifications of play in public, a relational and multi-dimensional set of perspectives seems like good strategy.

**Player and Game**

“Playing a game means making choices and taking actions” (Salen and Zimmerman, 2004, p.33).

Designing games is a very different activity from designing many other forms of media. In narrative media such as film and literature, and in art forms such as painting and sculpture, the author creates a representation, that while its meaning can change in interpretation, also stands intact as a form in and of itself. What differentiates games is that they actually take form through the action of players. Videogame designer Clint Hocking explains these differences as “induction” and “deduction”:

“In games, it is different. The artist does not only create the specific case of the convicted criminal suddenly set free when his prison transfer bus is ambushed. ... It does not only tell the story of one criminal learning about the importance of liberty and the consequences of unchecked freedom. The artist is also capable of creating an entire expressive system space that explores a potential infinity of different notions of freedom and liberty. Where most other media require the audience to induce their meaning, games afford the audience at least the possibility of deducting their meaning.” (2007)
One of the tendencies in designing serious games and games for change is to slip into “induction” mode, trying to deliver an entire world of factual content through the game or scripting play to render persuasive linear arguments through game content. As Clint Hocking describes, however, the power of games is that it is a system that players are an active part of and the choices they make can generate new meanings that the original designers did not script (2007). In the same blog post, Hocking goes on to describe how the world of the game, as a space to be explored and acted upon, provides the designer and in turn, the player, with many possibilities: “Potentially, because the game designer is able to express himself in systems rather than in examples, infinities can be examined” (2007). Ethical deliberation about what action to take in a given situation is, like playing games, about “making choices and taking actions” (Salen and Zimmerman, 2004, 33). As Clint Hocking describes, games can be ideal spaces to model the multiple possibilities of these choices, because of their inherently systemic nature (2007). It is up to the designer to consider these relations carefully and find ways to allow players to deduce their own meaning from the game.

Thinking of game experiences as an active construction (through the “deduction” of play), the relation between player and game is a dialogue that can be followed only through close observation of a game in play. Ethical actions between the player and game can go both ways — does a player decide to engage truthfully with a game, for instance, or does a game afford players the choice to play differently? These two examples prefer- ence truthfulness and choice, but they might not represent an ideal case; what is ethical action in a game cannot be generalized outside the context of its play. For instance, it might be ethically desirable for players to engage non-truthfully with a game. What if bluffing was allowed in casino video poker, for instance? Would players have a better shot at winning? Just as there is no single correct design solution (Löwgren and Stolterman, 2004, p.19), there’s no single ethical choice that can be considered right without an understanding of the larger situation. Each needs to be considered as part of an interacting set of relations in context.

In Re:Activism, racing from site to site was over-rewarded, leaving the challenges to be skimmed over in the rush of the overall game. While racing added the excitement of heated competition and solved the problem of getting participants to experience a variety of sites in a short period of time, the mechanic of racing in Re:Activism overpowered the more nuanced activities and stories at each site. We had made the mistake of not fully anticipating the social context of the game, between team members and the non-player publics with whom they interacted. Since this first instance of the game, we have tried to balance gameplay by editing down the number of sites and creating more bonus challenges for each site. Providing players with the choice to race between sites or explore them at their own pace recognize this social context more thought- fully in the game’s design. This shift equalized the strategic choice of racing with the decision to spend more time at a particular location. Now, instead of racing as a core mechanic, racing from site to site has become just one possible strategy. Another might be to linger at one or two places, engaging in more challenges and experiencing what or who they encounter there more deeply. Teams can decide to take the “broad” or “deep” approach, or switch strategies mid-stream as they play the game.

Player and Public

“The arena, the card-table, the magic circle, the temple, the stage, the screen, the tennis court, the court of justice, etc, are all in form and function play-grounds, i.e. forbidden spots, isolated, hedged round, hallowed, within which special rules obtain. All are temporary worlds within the ordinary world, dedicated to the performance of an act apart” (Huizinga, 1955:10).
Reacting to Re:Activism

The “magic circle” is a term and concept articulated by historian and cultural theorist Johann Huizinga to describe the invisible boundary between games and the ordinary world. Instead of being a solid boundary, however, there are many instances when the boundary is blurred. Games that propose real-world outcomes, like serious games and games for change, problematize the boundaries of the magic circle by asking how actions in the game can result in changes measurable and visible in the world outside the game. Because big games often take place in public, they also inevitably create events for interaction outside the magic circle of the game and into public life. In an early prototype, we learned that interactions with non-player bystanders generated interesting and spontaneous content. As the yellow team demonstrated, the game created an interface for chance encounters, serendipitous conversation, and learning about the experiences of others.

Re:Activism plays with the boundaries of the magic circle in a variety of ways. The most obvious to the players (and at times the public) is that while it might look like a real protest, the players are playing at protesting. Like animals playing at fighting, this distinction needs to be clear-cut to provide safety for the players. If the participants are perceived to be really protesting, for example, they could be in danger with the law — accused of public disturbance or unlawful assembly. A more subtle reason play with this boundary might be problematic is that what players are asked to do might not be in line with their own beliefs, or fully understood. This issue arose in an incident one team experienced after trying to complete a challenge to obtain signatures on letters to New York Senator Hillary Clinton asking for stronger legal penalties for domestic violence offenders. A person they approached for a signature began asking questions about the policy and why they were trying to gather letters for this issue. We didn’t include enough background information for them to answer, and as team members considered explaining that this was an activity in a game they were playing, they decided instead to move on and try to get a signature from someone else. Here again, a moment was revealed when the game and the world outside of the game generated unexpected outcomes and raised some interesting ethical questions, such as: what are the ethics of asking players to perform “acts apart”, as Huizinga calls it, in public, particularly acts that they would not normally perform?

Big games model the Levinian ethics of “I” and “Other” in “Player” and “Publics” by placing each in the shared social and physical context of public space. Where ethical issues became visible to us in these early versions of Re:Activism are where the rules and mechanics of the game contributed to a rupture in the social and convivial relationships between players and publics. This typically happened in ways that could be thought of as fairly innocuous, such as teams having to move quickly rather than linger, take pictures without always asking, or being unequipped to fully explain the meaning or reasoning behind what they were doing. While these instances may not have cost a team the game, they did form a tangible set of experiences for players and the non-player publics with whom they were interacting. They were conflicts between the written rules of the game and the unwritten rules of social life.

Iterations of the game we have run since have tried to balance the score between game and world. For instance, instead of using incognito mobile phones to capture video of interactions with the public, we equip teams with a recognizable video camera that makes it obvious that players are documenting interviews and actions. One of the things we had right in the original version was to ask players to wear matching bandannas. This marked the participants as members of an organized team — playing an organized game — in the eyes of wary New Yorkers. The game “Massively Multiplayer Soba” (TiltFactor Lab, 2008), addressed the interaction between player and public by providing branded and official-looking cards players would hand to someone to decipher or...
prompt some other form of engagement. Simple game/world interfaces such as printed cards or uniform attire helped negotiate the borderlands of the magic circle and invite passers-by to engage in a moment of spontaneous play. In addition to the aesthetics of big games as a spectacle, these innovations all point to a growing vocabulary on the part of big game designers to encourage new ways for people to meet each other, enjoy a moment of play, and act more openly and ethically with fellow urbanites.

**Player and Designer**

If this model were thought of sequentially, the first and last relationship in our model is player and designer, characterized first by iterations between the prototype and playtest, and finally, the launch of the game. Game design is a “second-order design problem” (Zimmerman, qtd. in Fullerton 2005, XIII). Instead of designing play directly, game designers must design through rules as an intermediary to generate different forms of play. To understand the emergent qualities of play made possible through a designed set of rules, game designers often move between the role of designer and player. They playtest and prototype their games over and over to craft the play experience. Game designers also playtest with other players to see their game through new eyes.

Players often do unexpected things that designers, when playing their own games, do not anticipate. “Emergent play” (Salen and Zimmerman, 2004, p. 539), when players bring their own strategies to the game and interpret rules in new and innovative ways, creates the opportunity for a creative and reciprocal relationship between the designer and the player. The yellow team’s improvised actions during the game helped us understand a failure in the game’s design and reward structure and greatly informed future prototypes. The yellow team helped us see the game from a fresh perspective. Instead of imagining ourselves designing for players, emergent play reveals the benefits of designing with players. Game design, because of its second-order-problem nature, is a practice that demands excellent listening and observational skills on the part of designers, relying on the iterative process of prototyping and playtesting and a dialogue with players to reveal a design’s limitations and possibilities. With big urban games, every instance of the game can be viewed as a new playtest. Because they are often event-based and in public, big games shift in meaning and outcome as the context changes, particularly if it depends on improvised play with non-player members of the public. Balancing designed aspects of the game with unscripted interactions in the city is the exciting challenge in designing these kinds of games. In addition to listening to and observing players, it involves an understanding of context; in the case of Re:Activism, considering urban infrastructure, flows and populations. Learning that there would be more tourists in certain areas, or vendors in another, led to modifications in the challenges, how much space they took and how visible they should be. In addition, based on feedback from the yellow team and other players, we redesigned aspects of the game, such as including more challenges (and opportunities to score) at each location, a smaller playing field (allowing us to section the game into different versions, such as village and downtown), and provide more opportunities for player choice and strategy by balancing racing with lingering as different possible styles of play.

At Come Out and Play, players gave us detailed and helpful feedback about the game. Many of our players were fellow game designers. Not only were they able to pinpoint aspects of the game that could be improved, a group of them incorporated some of the lessons learned playing Re:Activism into their game, “Massively Multiplayer Soba” (TiltFactor Laboratory, 2008), launched several months later at the 2008 Conflux Festival in New York City. A group of us played that game and, in turn, learned some important lessons for Re:Activism, such as using official cards to
communicate game missions to non-player passersby and including more optional challenges for motivated teams. We integrated aspects of these ideas into subsequent iterations of the game and continue to iterate based on what we learn from other big games as we play them. The connection between designers and designers (as players) is generating a field and a set of new practices. As we learn from each other’s games as players, we become more thoughtful designers.

THE FUTURE

Future plans for Re:Activism continue to be inspired by the dialogues with the yellow team, the game design community, and the research questions that arose about the ethics of play and design in the context of big games for change. Several of the students involved in the design of the game have gone on to pursue their own research inspired by the issues arising from their experiences running subsequent play sessions for Re:Activism and in the intersection between learning and big urban games. As this chapter is being written, we are developing newer versions of Re:Activism for communities interested in running the game in other cities, including Boston, St Paul/Minneapolis, and Beijing. Each location contains a unique set of histories and ethical concerns and contexts that are local to the community. In order to enable these communities to run their own versions of the game themselves, we have decided to open source the mobile communication tool we developed for the game and publish a kit enabling local groups to integrate their own site-based challenges into the game’s overall structure. The motivation to release these materials is not entirely altruistic: just as we learned valuable lessons from our player’s innovations, we are hoping to learn from these new instances of the game as well.

CONCLUSION

In a recent talk entitled “How Games Mean” at 92Y:Tribe in Manhattan, game designer Frank Lantz described how games that have been played for generations “deepen” the cultures around them. Using Go and Poker as examples, he said that players, the world surrounding the game, and the game itself accumulate meaning, enriching a “corner of the world.” The small instances described in this chapter: three players’ experiences of a game, a group of designers’ quest to expand its potential, and the role of ethics in making choices during play and design, might seem insignificant in comparison to Lantz’s more culturally pervasive game examples. But the sentiments of Lantz’s observations about the cultural potential of games touch upon the significance of play, big and small, as a creative and collective activity.

Both play and design involve making choices, pushing at the boundaries of systems and learning from failure. Design, as an iterative process, thrives on the clarity failure provides. As we try to design games with the cultural value Lantz describes, we can learn from case studies and thick descriptions focusing on games at play, the design process, and what failure makes visible to us as possibilities. Although the yellow team lost, they taught us valuable lessons in game design. Through their actions they revealed a flaw in the game, but at the same time, the showed us what the game could become. Being responsive to the situated dynamics between players and games, players and the public, and players and our role as designers activates the ethics of the design process. Design’s role is to provide the structure for these dynamics to flourish. And as players, it is our role to actively seek “free movement within a more rigid structure” (Salen & Zimmerman, 2004, p. 304). The choices we make in each of these roles, and the freedom to risk failure, help us and our games evolve.
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REFERENCES


ADDITIONAL READING


Chapter 18

Reality from Fantasy: Using Predictive Scenarios to Explore Ethical Dilemmas

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ABSTRACT

A major difficulty with teaching ethics is that it is relatively easy for participants to state the “right” thing to do when they have no personal stake in the outcome. One way of dealing with this problem is to teach ethics through engrossing, immersive, predictive scenario games in which players are forced to deal with ethical issues as they arise, where they have a personal stake in the outcome, and where there is not always a clear right answer. Predictive scenario games are a form of serious live-action roleplaying in which participants take on the roles of people involved in complex situations. In these games, knowledge of the game world is distributed among the players through overlapping and conflicting goals, and in which ethical dilemmas emerge naturally, without fanfare, much as they would in the real world. There is a high level of tension between cooperation and competition among the players. This structure creates the opportunity for players to experience the consequences of their own judgment in realistic, ethically fraught situations, to receive feedback, and to engage in constructive discussion, within a relatively short time period.

INTRODUCTION: THE PROBLEM WITH TEACHING ETHICS

Ethics is defined in the Miriam-Webster dictionary as, “the discipline dealing with what is good and bad and with moral duty and obligation.” A characteristic of ethics is that, presented with a clearly outlined ethical dilemma in a classroom setting, most people have little difficulty identifying the correct or socially appropriate course of action. At a fundamental level, there is a huge difference between ethical knowledge and ethical behavior (Bandura, 1999). As Bandura illustrates, it is easy to make correct ethical decisions when under no pressure, when the ethical situation is clearly identified and fairly simple, and when the contextual environ-
ment encourages a particular answer (1999). For example, in one psychology graduate program, the ethics class required students to write a brief commentary on the ethics of plagiarism. There is a clear answer—and most students write that it is never appropriate to plagiarize.

While some ethical lapses are arguably knowingly and deliberately criminal, by far the vast majority result from people making alternative choices based on their particular situation and gradually and unconsciously slipping into error. There are a variety of ways in which this can occur. Albert Bandura describes a number of methods by which people disengage their moral compass, ranging from moral justification, advantageous comparison, euphemistic labeling, minimizing or ignoring consequences, to dehumanization of the victims (Bandura, 1999). A person or group might apply one or more of these techniques to justify unethical behavior. The process is largely unconscious.

The Stanford Prison Experiment is, perhaps, the most famous experimental example of ordinary people adopting inhumane behaviors. In the experiment, college students randomly assigned as guards in a prison rapidly became cruel and abusive to the students assigned as prisoners (Haney, Banks, & Zimbardo, 1973). The situation deteriorated so rapidly that the experiment had to be halted after only six days. It is difficult to imagine that, if asked ahead of time, any of the students would have ever imagined that they would behave as they did.

Stanley Milgram’s experiments on obedience provide support for this point. In Milgram’s experimental scenario, randomly selected individuals were instructed to shock a “learner” who failed to correctly answer certain questions (Milgram, 1963). Out of 40 participants, 26 applied the maximum possible shocks. Psychology students, presented with a description of the scenario ahead of time, predicted that at most 3 percent of the “teachers” would apply the maximum shock. The class mean was 1.2 percent. Even observers were reportedly stunned that the “teachers” continued to apply the shocks. A recent replication of Milgram’s experiment found that obedience rates today were scarcely different than they were almost fifty years ago (Burger, 2009).

Excluding situations in which someone is deliberately choosing to act in an unethical fashion, it is useful to look at sport psychology to understand why ethical knowledge does not automatically lead to ethical behavior. It is well known in sports that there is a tremendous gap between learning a skill and being able to exercise that skill under pressure or when tired or distracted (Cox, 2002). One does not learn baseball or tennis by reading about it; physical practice is required. It takes time to practice a skill so that it becomes automatic. Until that happens, executing the skill requires concentration and attentional resources. Attentional resources, a term from sport psychology, is used to denote the amount of attention an athlete is able to focus on a particular situation or at a particular time.

If those resources are not available, the skill will be executed incorrectly or not at all. Only when the skill is automatized can it be executed without needing to focus attention on the process. Because attentional resources are finite (Cox, 2002), it is easy to see that under conditions requiring significant cognitive demands, non-automatized skills become increasingly subject to failure. Furthermore, another key component of executing a skill is recognizing from context which skill should be executed. This is a process known as “cueing,” and also requires practice. For example, it is not enough for an actor to just memorize her lines; she must also know the cues that will trigger her lines. In the case of ethics, merely having ethical knowledge does not guarantee ethical behavior: the situation must be recognized as one requiring the application of ethical knowledge, the knowledge must be recalled from memory, the knowledge and situation must be evaluated for fit, and then an appropriate course of action selected. The number of opportunities for error or for the process to be derailed is significant.
What this all boils down to is that a basic problem with most ethics teaching is that people tend to overestimate their own self-awareness, a point illustrated in Milgram (1963) and Haney et al (1973). Human beings assume that in the situation as described, they would recognize the ethical problem, think through the issues the way they would in ethics class, and come to the right answer. This is an example of the fundamental attribution error (FAE) applied to oneself. The FAE states that when someone is not doing well at something, we tend to ascribe the problem to the person, not the situation (Levy, 2006). In reverse, people will assume that in an analogous situation, they will perform correctly. The FAE should not be confused with interviewer bias, in which an interviewee will give answers that he or she thinks would please the interviewer. The FAE is the tendency to discount situational forces and assume that the observed behavior is due entirely to the individual. As Zimbardo points out, this is very comforting because it allows us to convince ourselves that if we were in an ethically perilous situation, such as the Stanford Prison scenario, we would not succumb to temptation (2004).

The fundamental mistake lies in believing that the situation appears the same from the “inside,” as it does to the emotionally uninvolved observer. In real life, arousal causes a narrowing of focus and reduced ability to absorb and process new information (Cox, 2002; Seligman, 2002). It does not matter whether the arousal is caused by stress, excitement, fear, or other strong emotions, the physiological response is the same. As a result, the situation gradually becomes worse without the person realizing what is happening, rather like the mythical belief that one can boil a frog by gradually increasing the heat of the water. As Bandura (1999) points out, people are not actually as aware either of the ethical implications of the situations they are in, or of the ways in which they are engaging in self-serving rationalizations and other errors in judgment.

The cues to the presence of an ethical problem are often subtle and are often only recognized in retrospect, in much the same way that an untrained athlete might not recognize the warning signals that lead to her defeat (Cox, 2002) until she reviews her performance after the event. People are drawn into a course of action; once drawn in, they have even more trouble recognizing what is going on and how they are behaving. The more committed someone becomes to a course of action, the more they need to defend that course of action to maintain their own self-image, an example of self-serving bias and confirmation trap at work. For reference, a self-serving bias is the tendency to take credit for a successful outcome, but deny responsibility for an unsuccessful outcome, or simply one that makes one uncomfortable. The tendency to look for evidence to support what is already believed true, and ignore disconfirming evidence, is called the confirmation trap (Schermersorn, Hunt, & Osborn, 2003). Furthermore, group effects can have an enormous, potentially overwhelming, effect on judgment: the pressure to go along with the group can cloud ethical judgment and cause someone to make unethical decisions or even doubt the evidence of their own senses (Asch, 1957). Believing strongly in the values or goals of a group can also significantly influence decision-making, especially when the group is one that is held in high esteem (Wheelan, 2005). Ultimately, just as in athletic training, to achieve ethical behavior under real-world conditions, ethical choices need to be experienced under stress, and the specific situational features that cue ethical or unethical decisions need to be identified.

For ethical choices to be experienced in a realistic manner, people need to be exposed to ethical dilemmas through appropriately designed simulations. I have found that these simulations have several distinct characteristics, as described in Table 1. These characteristics were identified through many years of designing and running live roleplaying games in a variety of scenarios,
ranging from entertainment to education to disaster preparedness.

All of these requirements can be met through the use of what I have dubbed predictive scenarios. A predictive scenario is a type of game that simulates different skills and skill clusters, such as ethical decision-making, leadership, negotiation, and so forth, in an entertaining, engrossing manner. It allows people to behave as they would if confronted with an analogous situation in real life.

Finally, solely playing the game, while necessary, is not sufficient to gain the full educational benefits of the experience. It is important to conduct a structured debriefing of the players after the game is over, and, when possible, to have neutral observers who can provide their perspectives on the behaviors they witness. The presence of observers also makes it possible, as part of the debriefing session, to develop an understanding of how an ethical dilemma might look to someone when they are caught in the middle of it, and how it might look to someone who is not emotionally involved in the situation. By building empathic understanding for those who have found themselves unwittingly drawn into ethical lapses, participants can begin to dismantle the defensive assumption that, “I wouldn’t do something like that.” They can begin to see themselves as vulnerable to the same human failings as anyone else.

The rest of this chapter will discuss the use of predictive scenario games in ethical training. It will cover the theory behind why they work, how to design one, and how to debrief the players afterward.

**THEORETICAL BACKGROUND**

There are several distinct threads that combine to form the research that underscores the potentials of predictive scenarios. These threads include concepts from the literature on the psychology of unethical behavior, simulation design, structured goal setting, play therapy, and sports psychology.

Bandura’s (1999) work on moral disengagement makes the important point that evil is not the result of “good men doing nothing,” but of people who are basically good ignoring or minimizing the consequences of their deeds. The further away from the action the result is, and the more innocuous any specific action appears, the easier it is for people to disengage their usual sense of ethics. Furthermore, when engaged in a demanding task, particularly one that involves clear goals, people will tend to focus on the goals immediately in front of them (Locke & Latham, 2002); longer-term consequences are considered only to the extent that cognitive resources are
available. Stress also has the effect of narrowing perception and creating a more short-term outlook (Seligman, 2002). Because cognitive resources are finite (Solso, 2001), people become overwhelmed and seek efficient ways to solve their problems. Thus, it is easy to see how people fail to consider the consequences of their actions, producing Bandura’s moral disengagement.

In his work on how situational effects produce unethical or evil behavior, Phil Zimbardo observed that the more people perceive themselves to be anonymous, the more likely they are to engage in evil behavior (Zimbardo, 2004). This is something that I have also personally observed over the course of 25 years of predictive scenario design, regardless of whether the scenario was created for entertainment or for training and disaster preparedness purposes. In short, players who were given bland, generic roles (e.g. “You are a CIA agent”) were more likely to act unethically, including breaking the rules of the game, than if they received fully fleshed out roles. As an interesting corollary to Zimbardo’s (2004) work, I have observed that when people are presented with an alternate persona, they are no longer anonymous; instead, they become free to experiment within the new role and explore the boundaries of the situation. However, they still appear constrained ethically and are much more likely to both play within the rules and to act in ways the both they and their assigned character would view as “good.”

Simulation design has, of course, been around for a very long time. Military wargames are a very well-known example, as are flight simulators for pilots. Businesses have used simulations of varying complexity, from simple in-basket exercises used to test someone’s ability to process a heavy workload (Levy, 2006), to extremely complex and elaborate simulation games designed to test a variety of different aspects of leadership or team performance (Yukl, 2002).

In the world of sports, individual athletes and teams routinely practice the technical skills of their specific sport, and explore different scenarios for how those skills will be applied. The act of practice, including playing practice games, is a key way of testing strategies and developing comfort and familiarity in different situations. Practice also serves to automatize skills, reducing attentional demands, making it possible for athletes to do several things at once and adapt to changing circumstances (Cox, 2002). Thus, a skilled basketball player can run, dribble, and pay attention to other players all at the same time. Playing practice games helps athletes recognize areas, which they can then strengthen through additional practice. Finally, sports are an environment in which actions and consequences are relatively tightly coupled; it is that tight coupling that enables athletes to recognize their mistakes and improve their performance.

Achieving well-constructed goals increases focus, concentration, and effort (Locke & Latham, 2002). A goal is considered well-constructed when it fulfills several characteristics discussed in Locke & Latham:

- the goal is specific, that is, the person knows precisely what is expected of them
- progress on the goal is measurable, and the goal provides its own feedback
- the goal has the potential for successful accomplishment
- the goal is self-concordant, or personally relevant, to the individual
- the goal is time-bound.

In the context of games, structured goals are critical because they increase player commitment, enjoyment, and learning (Balzac, 2007). Players need to have the goals clearly defined at the start of the game to generate the appropriate level of excitement and interest. Whether those goals are to save the world or destroy it, the effects are still the same. This is not surprising, in that it is entirely possible to be fully engaged with, and to fully enjoy, an activity that has the effect of harming others (Csikszentmihalyi, 1990). Our ability
to become absorbed in what we are doing to the exclusion of all else, including consequences, is ethically neutral: we still become absorbed. In other words, the fact that an action is ethically or morally wrong will often not enter into our calculations when we are thoroughly absorbed in the activity. People recognize the consequences of their actions when they are presented in close proximity to the actions; for example, at the end of a game, when people can see whether or not they accomplished their goals, and can learn how their goals may have affected other groups in the game (Balzac, 2007).

Finally, play therapy takes advantage of the fact that play is a very natural human behavior. It is a technique that is used primarily with children. The primary goal is to provide an environment in which the child can explore and safely act out feelings that they may not be able to verbalize effectively. Games and toys are used to give children plenty of raw materials with which to express themselves. Play therapy is so effective in large part because when the environment is properly constructed, it is permissible to experiment, explore, and act in ways that might not otherwise be acceptable (Winnicott, 1971/2005).

Given Winnicott’s observations about the nature of play, games would appear to be a very powerful tool for teaching and learning ethical behavior.

**Why Use Games?**

Although today the term is generally used to refer to computer games, the phrase “serious game” has been around at least since 1970, when Clark Abt used it in a book title (Wikipedia, n.d.). Serious games are generally defined as games that educate and entertain; it is in that context that I use the term throughout this chapter.

Games have been used in many cultures to teach and practice a variety of critical skills. Medieval tournaments were contests designed to maintain martial skills in peacetime. Modern sports are the present day incarnation of the serious games of the past: fencing, kendo, judo, gymnastics, and pentathlon, to name but a few. Each of these sports once represented the battlefield skills of the elite warrior. Masters of these sports learn early that success comes from being fully involved and from testing their skills under pressure (see e.g. Gallwey (1974), Hyams (1979)).

In the twenty-first century, sword fighting in a corporate boardroom is not seen as an acceptable means of conflict resolution. The serious games of the twenty-first century must focus on a different set of skills: ethics, leadership, negotiation, teamwork, public speaking, improvisation, persuasion, making decisions with incomplete information, and remaining calm under pressure. Like its predecessors, the modern serious game must fully involve participants, forcing them to solve actual problems within the engrossing and absorbing context of the game. In real life corporate situations, feedback may take weeks or months. By the time it is clear that a choice someone made may be causing harm, it has become difficult, if not impossible, to identify cause and effect. The greater the time elapsed between the action and the result of that action, the easier it is for moral disengagement to occur (Bandura, 1999). Playing in a fantasy scenario is like participating in a sports competition: in competitions, you are forced to make decisions under pressure, you get continuous feedback, and you learn the success or failure of your actions within a relatively short period of time. By taking on a role within a fantasy scenario, players are forced to make decisions and face the consequences of their actions over the course of the game.

It is a common practice among businesses to have an employee handbook outlining acceptable and unacceptable behavior. Mandatory classes on sexual harassment and discrimination are a fact of life for the employees of most companies. I have never seen a business state, as a matter of company policy, that it expects its employees to behave unethically. Naturally, when asked or
given a mandatory test, employees will diligently respond as they believe they are expected to respond, or as they have been instructed to respond. As previously discussed, because the questions are hypothetical, the fact that the employee can answer correctly does not predict actual ethical behavior under stress (Bandura 1999). Unethical behavior on the part of employees can not only harm the employee, it can also cause harm to the business: in the early 1990’s, the unethical actions of a single trader at Salomon Brothers almost destroyed the company and led to the resignation of CEO John Gutfreund (Useem, 1998).

Based on the discussion to this point, the problem lies in practicing ethics in an environment that does not feel artificial or excessively cerebral. Because people learn best when they are enjoying themselves, I have found that a well-constructed serious game will provide an entertaining scenario with sufficient challenge that players cannot easily “game the game.” Players become engrossed in the game and, as a result, tend to deal with the problems that come up much as they would handle similar problems in real life.

In sports, teams practice their skills over and over to deal with every conceivable scenario: what you practice is what you will more likely do under pressure. Businesses rarely have the luxury of rehearsal. Serious gaming enables businesses to practice and hone skills before the critical situation in which they are needed. Another advantage of games is that employees also have the opportunity to experiment and make mistakes in an environment in which there are no financial consequences to the business or to the employee.

Most roleplaying exercises used today are too narrowly focused, allowing people to optimize their behavior, or to deny the effects emotion and ego have in decision making. Far too many roleplaying exercises fail to engage participants at an emotional level. They lack clear goals, a sense of urgency, or in-game consequences for actions, all necessary to emotionally involve participants. As a result, participation becomes a cerebral “what-if” exercise, a pleasant abstraction without a sense of real involvement. Emotions are a critical part of our decision making process, and when you strip them away, you get very different decisions than when they are present (Pentland, 2008), compromising the value of the simulation. Also, as previously mentioned, in such an abstract, cerebral environment, making the “correct” moral and ethical choices is easy (Bandura, 1999).

Unfortunately, such uncomplicated scenarios rarely occur in real life. For example, with the exception of a scenario I designed, every pandemic flu exercise that I have participated in, facilitated, or observed, involved participants sitting calmly around a table discussing optimal strategies. There is no sense of personal risk or danger, and, hence, it is impossible to tell what behaviors would emerge under pressure. Participants are in no personal danger from the flu; their simulated corporations suffer no economic penalty for closing too soon, and so forth. Thus, a game that properly supports ethical thinking must provide enough depth to allow natural behaviors to emerge. The game must emotionally involve participants through having clear goals, in game consequences, and a strong personal stake in the outcome.

Features of a Predictive Scenario Serious Game

It is important to understand that a predictive scenario is not trying to predict a specific event or activity such as who will win an election, or what the stock market will do tomorrow. Rather, it attempts to predict how people will behave under various circumstances. A predictive scenario serious game is a fantasy world within which players must confront realistic problems and make authentic ethical choices. In the games I design, players must decide how to motivate teams, they must negotiate with one another, they must weigh short-term gain against long-term advantage, they must decide whether to respect the law, and whether
to behave ethically or unethically within the rules of the game. A player is free to “kill” another player, make a promise and then break it, sign a treaty and then initiate a sneak attack on another player’s country, and so forth, subject only to the in-game consequences of their actions.

Over the past twenty-five years, I have observed that the way people respond to situations within the game, even if the specific content of the scenario is very different from everyday experience, tends to be a strong predictor of the way they will respond to analogous situations in real life: in numerous cases I was able to observe players for months at their regular jobs and could see the correspondence between their game behavior and their “real” behavior. I also have the opportunity to observe students in my classes playing in games that I have designed and also observe their performance during the semester. For example, a participant who deals with an unexpected problem or setback in the game by giving up is also likely to do the equivalent at the office or in the classroom. Conversely, when someone demonstrates unexpected skills or talents within the game, this is often a clue that the person is capable of doing far more than they are currently being given the opportunity to do in their job. The stress of the game tends not so much to bring out the worst in people, but to bring out the most in people.

The distinguishing characteristics of predictive scenario games are their level of detail, complexity, character development, and plot. When designing predictive scenario games, the objective is to create an experience that is highly engrossing, challenging, and which provides players sufficient ongoing feedback that they can become completely absorbed. In other words, players engage in a willing suspension of disbelief. It is only when that happens that the players start to behave naturally and become unable to “game the game.” A situation with no obvious solution, or one where the obvious solution has negative consequences for other groups within the game, are the most fruitful for exploring ethics. The more detailed the scenario and the more personally involved the players are in the outcome, the better. Simple scenarios with clear-cut outcomes do not provide the same potential for ethical dilemmas. As mentioned earlier, when the situation is abstract, virtually everyone will make ethically “correct” choices (Bandura, 1999).

In addition, a final key element is that the knowledge of the game world is distributed among the players in the form of structured goals for individuals and groups (Balzac, 2007). This leads to a high level of player interaction and a constant tension between competition and cooperation. This tension, combined with the fact that many group goals are mutually incompatible, creates both opportunity and incentive to behave in an ethically ambiguous fashion. In addition, groups might have goals that are explicitly evil, such as conquering or destroying the world. In this situation, the conflict between groups creates the opportunity for the “good guys” to engage in ethically inappropriate behavior. For example, in the game Operation: Atlantis, the supposed “good guys” ruthlessly pursued a campaign of kidnapping, blackmail, and murder, which they justified by the fact that their goal was to save the world from a terrorist organization; the terrorists, ironically, were almost completely law-abiding. Russell Almond, Stewart Clamen, and I wrote Atlantis in 1987, during the Cold War, and well before the events of 9/11 and the subsequent governmental response.

**Ethical Drift**

Bandura (1999) discusses the process of gradual moral disengagement. Essentially, people do not move rapidly from ethical to unethical behavior; rather, the process is a gradual one, in which people engage in increasingly unethical acts as they become inured to their own behavior and self-justifications.

Within a predictive scenario, the same pattern can be observed compressed into the time frame of the game. Over the course of dozens of games,
I have observed Bandura’s moral disengagement occur. I have seen it in games that I have written and run, games that I have written and watched other people run, and in games run by others. I have also experienced it first hand in games in which I have participated. In short, predictive scenarios can reliably produce the gradual loss of ethical judgment described by Bandura. Indeed, I worked to design games to take advantage of this phenomenon as I found that it makes for a much more interesting, exciting, challenging, and fun scenario.

Each of the examples that follow is based on my observations and qualitative analysis of the observed actions and behaviors of the players. The descriptions of each game are, of necessity, brief and focused on only the material most relevant to this chapter, as each game involved 75 players, all of whom were involved in multiple plotlines and had multiple goals.

**Becoming the Monster**

In *Operation: Atlantis*, an espionage thriller, my team and I created a scenario in which the Secret World Organization for Retribution and Destruction (SWORD), analogous to James Bond’s SPECTRE, was on the verge of taking over the world. Dr. Rose “Bud” Trellis, an MIT physicist, had accidentally discovered anti-gravity. The United Nations was building a giant flying city, dubbed Atlantis, the seat of the new world government. SWORD’s goals were to seize control of the city government and turn Atlantis into a giant flying weapons platform. World governments, operating in conditions of extreme secrecy, created SHIELD, an extra-governmental organization ordered to stop SWORD at any cost and guarantee that Atlantis would be the seat of a democratically elected world government.

Each of the players had cover roles as diplomats, military officers, businessmen, scientists, reporters, and so forth; in other words, they each had a legitimate reason within the game for their presence in the scenario. Candidates from different countries were vying to be elected mayor of the city. Each country had dispatched intelligence teams and military officials to help their candidate get elected. Complicating the equation was the fear that one of the candidates was actually a SWORD agent.

The SHIELD agents did not start out engaging in unethical behavior. Their initial approach was a much more detective-like process, in which they attempted to sort through clues, identify the enemy agents concealed among the other players, and operate through the mechanisms for legal sanctions provided by the scenario. As the game progressed over a ten day period, players became increasingly fearful that SWORD was getting closer and closer to accomplishing its goals. This anxiety was generated by the rather interesting fact that the SWORD agents were being oddly quiet. The lack of visible activity convinced players that SWORD was so effective in its plans that no one could detect them.

By day seven, SHIELD and its allies were starting to engage in activities that they would not have considered, and the other players would not have tolerated from them, at the beginning of the game. Over the final three days of the game, the “good guys” ruthlessly trumped up charges to enable them to arrest people they were concerned about, kidnapped and interrogated potential suspects whom they couldn’t arrest, and assassinated those whom they could neither arrest, blackmail, nor kidnap. They did, however, save the world from SWORD. Ironically, it turned out at the end of the game that the reason that SWORD was so quiet was that they were almost completely ineffective in accomplishing their goals. To paraphrase Nietzsche, SHIELD became the monster they were trying to defeat.

While all these observed behaviors are consonant with both Bandura (1999) and Zimbardo (2004), what is particularly interesting is the observation that the process of moral disengagement can also work in reverse: as a process of
moral engagement. In Nexus, a 75-player, two-day game, the back story involved the players being quarantined in a hotel due to the outbreak of a mysterious plague. One of the players was cast as a genocidal mass murderer on the run from the law whose goal was to do whatever it took to escape before the police closed in on him. Much to our surprise, and to the surprise of the person playing the role, he found himself taking actions that ended up making him instrumental in finding a cure for the plague and saving the lives of most of the people there. The player commented later that he did not expect to do that, he never intended to save everyone, and he was planning to double-cross everyone at the end. However, each time he took an action that seemed logical and sensible at the time, he moved closer and closer to behaving ethically until by the end of the game he could not bring himself to complete his double-cross. He stated that it just felt “wrong.”

A slightly different version of moral disengagement occurred in a pandemic flu exercise I wrote and conducted in Washington, DC in the summer of 2006. Unlike the mild Swine Flu pandemic in the summer of 2009, we posited a 1918 style flu virus: highly contagious and highly lethal. In addition to regular news reports about the spread of the virus, I also designed in a level of personal risk: participants could “catch” the flu and be eliminated from the exercise. This triggered a much greater degree of emotional involvement, with behaviors ranging from denial to panic. A number of dubious decisions were made, including one to keep the airports open even as news of the flu pandemic grew worse and worse. The person playing the governor justified his decision at an in-game press conference by arguing that people get the flu every winter and he was not about to panic and cause serious economic damage by closing the airports. As a result, the rate at which the flu spread increased dramatically as visitors “returned home,” carrying the flu with them. The death toll and the economic damage from the flu were considerably higher than if the governor had chosen to close the airports. In this case, the governor was defending his decision by arguing, essentially, that no one could predict how bad the flu was going to be, and that he was averting definite economic harm. This minimizing behavior is also identified by Bandura.

In each of these scenarios, players became morally disengaged or morally engaged through a gradual process described in Bandura (1999). We see, therefore, that by making a scenario sufficiently complex, detailed, and conceptually rich, we create the opportunity to experience both moral disengagement and moral engagement over a very short period of time. The next step is to learn how to design a predictive scenario that will enable these processes.

Designing a Predictive Scenario

Designing a predictive scenario is as much art as science. The goal is to create a game that is fun to play and which allows participants freedom to explore the world, experiment, and act in ways that might not normally be acceptable. In this, the game follows Winnicott’s guidelines for play therapy (1971/2005). The cognitive level of the game will, of course, have to be considerably more complex for an adult audience than for young children. I was rather strongly reminded of this lesson when I was recently asked to lead a panel on live-action roleplaying game design for a group of 6-10 year olds. The children were engrossed for hours by a game that adults would have gone through in five minutes.

The following guidelines are the result of many years of trial, error, and experimentation. These guidelines are not the result of a carefully designed laboratory study, but of empirically learning what worked and what did not when writing games for people who were paying money to participate: when something did not work out, when a plot failed, goals were unclear, or players found the game inaccessible, the feedback was loud and unmistakable. These guidelines
should not be taken as a set of rigid rules, but rather as a way to get started in predictive scenario design.

In order to learn from running a predictive scenario game, it is as important to look at what the players are actually doing as it is to read feedback received afterward. I look for several key “tells” that let me know how effectively the game is running. I wish to emphasize again that these tells did not come from a carefully designed laboratory study. They are the result of empirical observation and experimentation driven by the desire to keep players coming back. In other words, after each game I would incorporate my observations and guesses into the next game and see what happened. Like writing a novel or painting a picture, my decisions were driven as much by feel and a desire to give people the opportunity to have a good time as by any sort of rigorous logic.

First, I always wanted to see if the players were sticking to their characters or metaphorically throwing them out the window. For example, in my early, week long, games I noticed that such supposed enemies as the CIA and the KGB would be cooperating within hours at the most. When I inquired about this rather surprising behavior, I gradually learned that lacking in game goals other than stopping SWORD, they saw no barriers to cooperation. This led to my increasing the level of detail, making the characters more three dimensional and assigning each group incompatible goals. More generally, I found that too much cooperation meant a lack of conflicting goals, while too much conflict meant that players did not perceive themselves as needing the help of others.

I would also look to see if players were remaining engaged with the game. If I saw players sitting around doing nothing, I would again inquire as to why. The answers varied, ranging from not enough to do, their team leader had not contacted them, their goals made no sense, they could not understand their character, and so forth. This led to my breaking goals down into smaller chunks, providing additional background information so that team members could function with a greater degree of autonomy, better written characters, etc.

I also paid attention to how rapidly players solved the different problems put before them. If a long-simmering diplomatic dispute was settled in minutes, I learned that meant that either the solution was too simple or there were no in-game consequences to, or rewards for, any of the players involved. If people were too quick to give up resources, it meant that there was not a sufficiently strong perceived value to those resources.

Ultimately, the best way to become skilled at designing predictive scenario games is to write a number of them and learn from the inevitable mistakes. Iterative design techniques, such as those discussed in Schein (1999) can be useful here. Much of the information that follows is based on articles I wrote in the 1990s for Metagame magazine and on talks I have given on the subject of game design. For more information see, Balzac & Yermish (1992), Balzac (1993b), Balzac (2008), Balzac (1991), Balzac (1992a), Balzac (1992b), Balzac (1993a), Balzac (2007), Balzac (1993c), Balzac, O’Neil, & Yermish (1991), and Yermish (1992). A point that must be emphasized is that non-trivial ethical dilemmas come out of complex plots and conflicting goals, not the other way around. Starting with the ethical dilemma tends to limit imagination and constrain possibilities too early in the creative process. In other words, tell a good story. Unlike a story, a well-written predictive scenario has as many main characters as there are players. The multiplicity of overlapping and conflicting goals virtually guarantees that conflict will emerge.

**Overview of a Predictive Scenario Game**

A game will typically have between twenty and eighty players. Why these specific numbers? While it is possible to have fewer than twenty or more
than eighty, I have found that such games do not work as well. Smaller games do not have enough players to generate the level of complexity and interaction necessary to allow ethical dilemmas to naturally emerge. Games above 80-100 participants become so overwhelming that players fragment into smaller groups based on individual plots and the bigger picture is lost in the noise. Huge games also become logistically difficult to manage and run.

A game can run in as little as an hour, and up to several days. Typically, games with fewer participants are also shorter in duration as it is more difficult to maintain the necessary level of intensity with fewer people.

Game play looks rather like any business seminar or meeting: people are talking, disappearing into private conferences, negotiating, debating, giving presentations, and so forth. They are pursuing both public and hidden agendas. As much as possible, the activities of the game are easy to conduct so as to permit differing behaviors to emerge.

Games are conducted by one or more Game Masters (GMs). The job of the GM is to settle rules disputes, help players who are frustrated or confused, act as an interface to the outside world, and generally act to keep the game running smoothly. A smaller game, especially one running for only an hour or two, might have one GM. In most cases, however, a game should have from three to five GMs, all of whom are in constant contact with one another.

These recommendations are summarized in Table 2.

### The Void and the Vortex

Two terms that I use frequently in discussing game design are the Void and the Vortex. The Void is that big empty space on the screen that you have when you are first starting to write a game. It is the space of all possible ideas, plots, characters, and events that could be put into a game. The Vortex is the space of interaction among all ideas, plots, characters, and events that are actually in the game. I think of it as a “vortex” because my goal as the game designer is to have all the plots, etc, densely and dynamically interconnected. As a theoretical concept, everything in the vortex should be intertwined: a player who follows every plot thread available to them, and every thread that those threads connect to, should end up interacting with everyone in the game. In reality, any game involving more than two or three dozen people will probably not last long enough for this to actually happen. Despite that, it remains a valuable conceptual objective as planning for that level of

<table>
<thead>
<tr>
<th>Structure</th>
<th>Common Choices</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Game Size</td>
<td>Typically 20-80 participants</td>
<td>Based on empirical observation and practice, it’s easier to write games in this range. Smaller and larger games are certainly possible, but more difficult.</td>
</tr>
<tr>
<td>GamesMasters</td>
<td>Typically 3-5</td>
<td>You need enough GMs that players are not waiting around when they need help, but not so many that information flow among GMs is hampered. Larger GM teams are certainly possible with practice.</td>
</tr>
<tr>
<td>Game Length</td>
<td>One hour to several days</td>
<td>Different types of games require different time frames and different time frames lead to different game behaviors. Shorter games are more intense with less character development. Longer games tend to have lower intensity, but more room for characters to develop and change in response to circumstances. Longer games are also more exhausting for the GM staff and players.</td>
</tr>
</tbody>
</table>
complexity helps create the fertile soil from which the ethical dilemmas will emerge.

How is the Game World Different from the Real World?

Dealing with the Void stage is quite possibly the most difficult part of game design. Because the possibilities are completely open, it is actually very hard to know where to begin. Therefore, the first step is to define some structure in the form of the “fantasy overlay.” The fantasy overlay is a statement of how the imaginary world of the game differs from the real world. The overlay can be very minor, such as in Operation: Atlantis, a James Bond style espionage thriller, set in a “real” world where movie spies are real and secret organizations vie for control of the world. A slightly stronger overlay is that of Secrets of the Necronomicon, an occult mystery based on the works of H. P. Lovecraft. In Secrets, mysterious forces of black magic lurk just behind the everyday world with which we are familiar. In Stopover, the game takes place in a far future world where space travel is common, while Dragon, based on Steven Brust’s popular fantasy novels, is set in a distinctly different world from our own. However, despite these differences, in each of these games people are still people and characters’ desires, motivations, and goals are basically the same as those possessed by real people in the real world. In other words, people are no different, and behave no differently, in a medieval fantasy than in a space opera; only their surroundings and scenery have changed.

Defining Individual and Group Goals

Once the plots are defined, the next step is to translate them into clear and measurable goals for both individual players and for groups. Structured goal setting is critical (Balzac, 2007). Each group needs to know what its overall goals are, specifically and clearly defined in the context of the game world. In other words, they need to know what success looks like and how they will know it when they see it. They also need to understand what failure looks like, and how they will be able to see it coming. Finally, each group needs to understand how each group member fits into the overall goals of the group. The exercise of translating the plots into player and group goals is a valuable one: if it cannot be done, that immediately tells you that the plots are not sufficiently defined. If the goals of a team cannot be broken up into individual components for the members of the team, then this tells you that either the goals are inappropriate for a team or that the team is too large (Wheelan, 2005). In either case, the plot or the team structure needs to be examined. If the goals are not well-defined, the players are less likely to become engrossed in the game, and hence less likely to actually experience an ethically questionable situation.

In addition to their group goals, each player should have important individual goals as well. In part, this protects the player in case one or more of her groups fail badly: the player still has plot hooks and can still enjoy the game. However, it is equally important to constantly weigh the benefits and risks of cooperation and conflict. It is vitally important that the plots matter within the context of the game, that not every plot can be successful, and that no plot be so self-contained that it can succeed without the cooperation of people not initially involved in that plot: for example, only one person can be elected president, but that person needs a great deal of help to pull it off. There is no real opportunity for ethical decision making when war, or peace, breaks out.
deeper level, however, more detailed goals help flesh out the character and make it more real to the player. More detailed personal goals leads to greater enjoyment and commitment on the part of the players, which, in turn, leads to the players becoming more involved in the game. This virtuous cycle is extremely similar to the High Performance Cycle of goal setting, described in detail in Latham & Locke (2007). Goals also keep the players focused where you, as the designer, want them. It is very important that the players have the illusion of freewill, even though their actions are actually highly constrained by the nature of the game (Balzac, 1993a).

Translating the Goals into the Character Sheets

Next, it’s time to write individual character sheets. The character sheet is the player’s entry to the world that you have created. As such, it is particularly important that it give the player both the knowledge of his goals and information about how he sees the world and his place in it (Balzac, 2006). Again, the more vividly and skillfully the character sheet is written, the more likely the player will accept the character’s goals as his own, and act accordingly.

These recommendations are summarized in Table 3.

The Art of the Debrief

To a very great extent, it is important during the running of the game to allow the players to make their own decisions. There are some exceptions, depending on the exact nature of the game and the particular approach to ethics training that you are taking, as will be discussed in the next section. For now, though, remember that when dealing with a dynamic system, everything you say is an intervention (Schein, 1999), so it is important to save your comments and feedback until the end, and contribute them as part of the overall debriefing.

Your goal, by the end of the debriefing, is to have educated the players on how their actions affected the other players in the game, and how those actions might appear to an outside observer. You want the players to understand the longer-term consequences of their actions and how those actions might affect the world beyond the end of the game. This longer-term perspective taking is a key part of avoiding or neutralizing some of the mechanisms of moral disengagement discussed in Bandura (1999).

The use of the game and the debriefing can be viewed analogously to problem- and project-based learning, as described in Barron, et al. (1998). Barron observes that projects, and the lessons learned from them, are more successful when students

<table>
<thead>
<tr>
<th>The Void</th>
<th>The big empty space on the screen when you first start writing a game. It represents all the possible ideas, plots, characters, events, etc, that can be put into your game.</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Vortex</td>
<td>The space of interaction among all the ideas, plots, characters, and events that are actually in the game. In theory, every plot should somehow connect to every other plot such that a player could conceptually interact with every other player in the game.</td>
</tr>
<tr>
<td>Fantasy Overlay</td>
<td>How the world of the game is different from the real world. Remember that people are still people; only the scenery changes.</td>
</tr>
<tr>
<td>Plotting</td>
<td>Create plots that force mutually incompatible goals. If all goals can be accomplished, no conflict will occur and ethical questions are unlikely to arise.</td>
</tr>
<tr>
<td>Goals</td>
<td>Clearly delineate individual and group goals. If you can’t, you may need to revise or rework your plots.</td>
</tr>
<tr>
<td>Character Sheets</td>
<td>The player’s doorway into your world. Vividly show them who they are and why they care about their goals.</td>
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</tbody>
</table>
are first presented with the material in a smaller problem and allowed to reflect on it. In this case, the long-term project is the development of ethical behavioral skills and the short-term problem is the game scenario. The debriefing allows the players to learn from and reflect on how their actions within the game feed into the long-term project of ethical skill development.

Player debriefing has several parts. Delivering feedback needs to take into account the players’ mindsets and how triumphant, upset, excited, or discouraged they might be feeling. Players who have successfully accomplished their goals are going to be justifiably proud of themselves. Players who failed or were blocked might have been exhilarated by the ride, but still frustrated or angry. Note that whether or not a character accomplished his goals, the player will still be able to reflect on their ethical choices. Also, recognize that part of why a game works as an educational tool is that it allows people a certain sense of plausible deniability. In other words, they didn’t fail, rather, their character failed. They didn’t do something unethical, but their character did. Separating the actions from the person is similar to the narrative therapy technique of externalization: by putting the problem outside a person, the person is now free to examine the problem and work toward a solution without feeling personally threatened (Freedman & Combs, 1996).

Games are also a tool for exploring different decisions and experimenting with different ethical behaviors without the risk of real world consequences. This separation of reality and game reality creates the opportunity for the player to hear feedback without feeling personally attacked; otherwise, a player who successfully accomplished their goals, but engaged in unethical behavior to do so, would potentially lose face when presented with the consequences of their actions. As Schein observes, attacking someone’s face is not a good way to get them, or others, to accept feedback (1999). Therefore, do not break the illusion, even at this point.

The first step of the feedback process, therefore, is to gather all the players together and summarize the game. Lay out the plots, the different groups, and their goals. Give everyone the big picture, so that they can see how their goals interacted with one another. Then, allow each of the groups to stand up and talk about what they did and how they did it. Avoid being judgmental. However, I have found that it can be very useful to use humor to highlight ethical points. In fact, my observation is that a bit of humor will permit the GamesMaster to make points that would otherwise not be acceptable. For example, as previously mentioned, the forces of SHIELD cheerfully fixed the elections to make sure that SWORD was shut out. Consider the following statement:

“So, in other words, you subverted the democratic process so that the villains could not.”

Said seriously, it could easily be perceived as an attack on the players who are busy congratulating themselves for having successfully stopped a SWORD takeover of the government. They are likely to push back and engage in self-justifying behavior. Said with a smile and a laugh, however, it becomes a joke. They can hear it without feeling threatened and that opens the opportunity for further exploration of the ambiguity of their actions.

The debriefing is a dynamic process. If you find yourself engaging in argument with the players over the rightness or wrongness of their actions, then back off. Resolving ambiguity and ambivalence is not something that is done through logical argument. The more you argue your side, the more the players will justify their side (Miller & Rollnick, 2002). Rather, it is important to take the other side of the argument, and explore the players’ decisions with them through the use of open-ended questions: “I know your goal was to prevent the terrorists from subverting the election. Could you explain how you approached it?”

Along with open-ended questions, you can also reflect their statements back at them, to help
them hear what they are saying. If, as happened in one game, the players state that their tactic of killing off characters whom they could not prove were not the terrorist leader successfully stopped the terrorists in their tracks, you might respond: “If I understand you correctly, you felt that it was worth it to assassinate several possibly innocent people rather than risk the terrorist leader getting elected?” It is very important to be able to ask questions like this in a tone of genuine inquiry. Practice in front of a mirror until you can do it without giggling or sounding sarcastic. The goal is not to forcibly confront them with their own moral lapses, but to encourage them to explore, to realize their own errors, and to develop empathy and compassion for themselves as characters and to understand how they could go astray in similar ways in real life. This part of the debriefing can be done with the whole group, or in smaller breakout sessions.

It is also possible to discuss not just the ethical decisions themselves, but also the nature of the ethical problems. Situations are often ambiguous and there is not always a right answer. For example, in the second run of Operation: Atlantis, the forces of SHIELD decided that they were the exemplars of a higher moral code, and that they would not compromise their ethics. In that run, SWORD took over the world. Would it have mattered if SHIELD had made a different decision? What is the societal price of ethical versus unethical behavior? The answers are not always obvious. Ethical ambiguity is a fruitful area of discussion and one that we hear echoes of in the news all too frequently. It is, however, perhaps a little disturbing to note that in every run of the game in which SHIELD took the higher moral ground, SWORD was victorious.

The Role of the Observer

While there are many people who could end up watching a game, for the sake of this discussion we have two types of observers: omniscient observers and non-omniscient observers.

A distinguishing characteristic of predictive scenarios is that there will always be “omniscient” observers: the GMs who are running the game, answering player questions, resolving disputes, and providing access to information or resources that the players might legitimately have but which are not in the game. For example, a player in the role of a diplomat could choose to call his embassy for instructions. Because the GMs have read all the game material, they know what every person and group is trying to accomplish, what hidden agendas exist, and so forth. As a result, the GMs will inevitably have a great deal of influence on the game. Rather than fight this reality, it is far more useful to take advantage of the opportunities it presents. With a carefully chosen word here or ruling there, the GMs can highlight different courses of action and influence which ways the players go. The GM can also act as a neutral sounding board for players, although this can be difficult and takes practice to do well because the GM’s knowledge of the game can make it difficult for them to avoid giving things away. Nonetheless, a GM can subtly influence a player to morally disengage or morally engage. It can be useful to discuss such actions during the debrief as a way of illustrating just how easily someone in authority can influence those around him.

Next, there are the non-omniscient observers. They, too, can be divided into two groups: the GamesMothers and the shadows.

GamesMothers are people who have no power to make rulings and may or may not have any detailed knowledge of the game scenario. They exist as extensions of the GMs, and may be assigned to play specific roles for brief periods. They also serve to help confused or upset players and, like GMs, act as sounding boards for players. Unlike GMs, their significantly limited knowledge of the game gives them considerably less ability to influence the course of action. As such, they serve a valuable role because they can be used to inject information or assistance into the game with considerably less risk of giving anything away.
Shadows are observers who have a broad knowledge of the scenario and the characters within it. They do not have specific, detailed knowledge about group plots, or individual or group goals. They have no power to make rulings and should be considered “invisible” as far as the game is concerned. Their role is to follow groups or individuals, watch what they do, and take notes. Some games have used video as well. During the debriefing, the job of the shadow is to discuss the players’ actions with them: ask them why they made particular decisions, and share their perspectives as outside observers. Did they see an ethical hazard that the players did not, or vice-versa? How did that come about? What were the factors that each one was reacting to? This discussion can very powerfully illustrate how an ethical dilemma can appear quite different to the person caught in the middle of it than it does to the person looking from the outside in.

A very good example of using shadows is the Pandemic Flu simulation I mentioned earlier. In this game, our goal was to help players recognize psychological gaps in preparedness should a deadly flu pandemic strike. Participants included government officials, both local and federal, military officers, doctors from local hospitals, and representatives from the business and non-profit communities. What we observed in the course of the game was a tremendous level of panic and denial, leading to rapid, uncontrolled spread of the flu, a high death toll, and significant economic damage.

The debriefing was handled as a set of breakout sessions to discuss different aspects of the game and what alternative strategies and decisions might have been taken. Observers asked participants to explain their actions. In several cases, participants commented that they had become “caught up in the moment” and simply did not consider longer-term consequences of their actions. They just did not believe the flu would be all that severe. One doctor, reflecting on the collapse of medical services, observed: “We do all sorts of disaster simulations, but we’ve never done one where we [the doctors] got sick.” In terms of our goals of identifying gaps in preparedness and stimulating examination of the problem, the game was successful. It was also gratifying during the 2009 Swine Flu outbreak to see the Obama administration taking many of the steps outlined in the breakout sessions.

**CONCLUSION**

Because of their interactive and competitive nature, predictive scenarios can be very powerful tools for exploring ethical issues and choices. The compressed time period of a game allows players to make decisions under stress and learn the longer-term results of their actions within a relatively short period of time. This makes it considerably easier to connect cause and effect both logically and emotionally. As I have already discussed, Bandura’s process of moral disengagement (Bandura, 1999) and Zimbardo’s situational influences on negative behavior (Zimbardo, 2004) can both be reproduced in a game. The inherently fun nature of the game, and the presence of a rules system to prevent and limit actual interplayer conflict, act to prevent the type of problems demonstrated in Zimbardo’s Stanford Prison Experiment (Haney, Banks, & Zimbardo, 1973).

**FURTHER RESEARCH**

There are several ways in which the use of predictive scenarios can be expanded and made more immersive. These types of games are currently limited to players physically located in the same location, such as a hotel, conference center, or university. Mobile phones and the internet could be used to design games in which players need to work with, or against, other players who are never physically present. The moral disengage-
ment created by physical distance, the process of acting through others, and the process of receiving orders from faceless others can be explored through such scenarios. Some attempts have been made to do this, including an online component to my Pandemic Flu simulation. For the most part, the off-camera players were primarily included as “color,” with little or no ability to actually influence the main plotlines of the game, although they could be affected by those plotlines. The off-camera, online players were playing the inhabitants of an imaginary small town on the outskirts of Washington, DC. As the game progressed, and the news reports became increasingly more ominous, the off-camera players became increasingly panicked. Eventually, law and order completely collapsed in the town. Because the offline characters existed only to react to news reports and announcements, their influence was limited to posting to a message board and hoping someone in authority would notice and care. Increased interactivity, control of resources, and so forth, would add an additional level of complexity and detail to the game.

Finally, ethical exploration can potentially be enhanced in real-time by having what I have dubbed the Greek Chorus. This is a purely theoretical idea at the time of this writing. The Greek Chorus is based on the concept of reflecting teams frequently employed in narrative therapy and family therapy. A detailed discussion of reflecting teams can be found in Anderson (1991). Briefly, however, the concept is that two or more therapists will work with a family in a room with a one way mirror. Behind the mirror sits the reflecting team. At various points in the discussion, one of the therapists might say, “Let’s see what the team thinks.” The mirror is lifted and the family and the therapists can watch and listen as the reflecting team discusses what they are observing. The team never speaks directly to the family or the therapists, and the team never makes statements about what they should or should not do. The team merely talks amongst themselves and may possibly raise questions such as, “I wonder if they’ve considered…” or “What do you think would happen if…” When the discussion is over, the mirror goes back down and the therapists and the family return to work, incorporating (or not) the information they have gained.

In the context of a predictive scenario, the Greek Chorus would consist of several teams of 3-5 people assigned to different groups within the game. These teams would follow their respective groups and when the group requests it, they would sit and discuss among themselves what they are observing. As with a reflecting team, the Greek Chorus would be non-judgmental and non-directional. Their purpose would be to ask questions of each other and highlight different courses of action.

Because it is critical that the presence of the Greek Chorus not break the illusion of the game, they would need to be written into the story. In a game with a strong science-fictional element, the Greek Chorus might be written in as Artificial Intelligence; in a game based on Greek mythology, they might be the gods. The ability of players to call upon the Greek Chorus would also need to be made part of the scenario, perhaps through single use ability cards. In other words, each player has the power to activate the Greek Chorus, but can only do so a limited number of times per game. Other constraints, such as how long the Chorus remains active after being called upon, how frequently the players can call them, and so forth, would need to be determined empirically and may well vary according to the scenario. To the best of my knowledge, no one is exploring this element of predictive scenarios.

REFERENCES


Chapter 19

The Mechanic is the Message: A Post Mortem in Progress

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ABSTRACT

This chapter provides two entry points into Brenda Brathwaite’s series The Mechanic is the Message, a group of six non-digital games that explore difficult topics. Brathwaite writes from the perspective of the game’s designer, covering the inception of the series, its inspirations and the challenges inherent in working with content one might deem questionable in the game space. Sharp, on the other hand, writes from the perspective of a game designer and an art historian and critiques the game’s entry and reception into both the world of art and games.

INTRODUCTION

Brenda Brathwaite’s series The Mechanic is the Message is composed of six non-digital games, each of which invites the player to explore a difficult topic and engages the player in an ethical simulation. The first game in the series, The New World, was completed in February of 2008. As of this writing, the series is half-way to completion.

During the process of design, Brathwaite talked regularly with a number of individuals, one of whom was game designer and art historian John Sharp, a colleague at the Savannah College of Art and Design. Their shared perspective as two game designers led to conversations during the design process, and Brathwaite shared many of her experiences as well as her reasoning with Sharp, particularly during the development of the game, Train.

In the essays that follow, Brathwaite and Sharp independently look at the series as it stands as of the early summer of 2009. First, Brathwaite discusses the origins of the project, her design process, and her thoughts on the early reception of the series. In the second half of the chapter, Sharp looks at the series as games within the traditions of art and
exhibition. The essays were originally written blind without one another’s input. Only in the final editing process did Brathwaite and Sharp share their essays with one another.

**Brenda Brathwaite, Game Designer**

There is a moment in the design of every game where its designer asks a fundamental question: What is this game about?

Games have themes, narratives (both in-game and player-made) and opportunities for wish fulfillment and conflict resolution. Even the most abstract games like *Tetris* have stories both inside and outside the game. The interaction of the player and the rules, the story that arises from the play of the game, or in the case of Tetris, the designer Alexey Pajitnov’s story of forfeited profits, all present compelling game stories to explore.

But if all games are about something, what experiences should we simulate or tell through games? As I write this, Konami’s “Six Days in Fallujah” is embroiled in a controversy and finding support and condemnation in equal amounts. Rockstar’s *Grand Theft Auto* series has evoked similar feelings for its inclusion of violence, racial tensions and sexual themes, something one might critically appreciate in Academy Award-winning films such as *The Godfather*, *Taxi Driver*, or *Scarface*. And what responsibility does the designer have to the situations, feelings or tensions she evokes? By viewing the games in the series through the lens of game design and art criticism, we can begin to answer these questions.

Games, in their digital form at least, are a relatively new medium in which artistic decisions and player reactions to those decisions are occasionally questioned as appropriate, ethical and ultimately acceptable. Designers self-censor, knowing certain narrative paths, rules or visuals ought not to be explored lest they make something commercially unviable, cause it to encounter retail resistance or obtain an undesirable Entertainment Software Ratings Board (ESRB) rating. Even the term “game” is problematic and evocative of something that must be, or intend to be, fun and entertaining. Games could provoke us. They could make us angry, make us think, call us to action or make us cry. They could leave us feeling shaken. They could touch all our emotions just as other arts do. I have cried standing in front of Jackson Pollock’s *Lavender Mist*, felt nauseated by photographs of war and felt my Irish Catholic upbringing instinctively flinch at the Seranno’s *Piss Christ*.

In the creation of the six games that make up the installation *The Mechanic is the Message* and particularly the game *Train*, I had not intended to explore these questions. Rather, the exploration started spontaneously at the confluence of two events: a chance conversation over dinner between two photographers and an equally chance creation later titled *The New World*, a game about the Middle Passage that was originally played between me and my daughter Maezza at the kitchen table.

**Photographer to Photographer**

In early 2008, I was invited to a dinner sponsored by the Savannah College of Art and Design (SCAD) where I am presently chair of the Interactive Design and Game Development department. The dinner included a number of other SCAD faculty as well as staff from other colleges. There were two photography professors at my table, and their conversation turned toward an innate challenge of their art form: “Should I take the picture or not?”

This particular evening, one of the photographers at the table told of his 2005 trip to the Red Lake Indian Reservation in Minnesota where a 16-year-old boy had just killed nine people before committing suicide. “I couldn’t take the pictures,” he said, referring to the people in the town and their reactions. The photographer, a Native American himself, had not gone to cover the story for any media outlet, but rather to capture the experience of his people on film as he had
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done many times before. He decides to leave the situation be, however, and I am fascinated with the artistic and medium-based freedom that allows him this choice. I surrendered this freedom a long time ago.

As a game designer, I am so constrained by the yoke of commercialism that these possibilities fail to rise on my horizon. My ability and desire to create something unique notwithstanding, I have a profoundly limited awareness of the full scope of topics that could be made into a game. From the very earliest games upon which I work, the field of potential—of acceptable—topics is shaped by what is palatable and salable in the commercial market. I remember receiving letters signed “Concerned Christian” from someone who told me I was going to hell because of the monsters, spellcasters and occasional greater demons that roamed the dungeons of Wizardry, a game series I worked on for 18 years, eventually becoming its lead designer. They came monthly, sometimes more often. Other letters came in the form of ESRB faxes telling me what content in my game would merit an adult’s only (AO) rating and hence the retail kiss of death. Big box stores won’t carry adult’s only titles, so having the rating of “AO” is as good as throwing a sales effort into a ditch. My possibility space for games has been shaped, constrained, subtly and slowly over the course of 25 years by these forces. Rather than seeing my medium as something capable of exploring the full range of the human experience, I look at it through the lens of the commercial game industry, always asking myself, “Is it fun? How will it be rated? Will they sell it in Walmart?” The larger possibility space silently slips away, and I never even notice.

Photographers, painters, filmmakers, writers, sculptors, actors—every other artist in every other medium enjoys a degree of freedom in their exploration of topic. The conversation between the photographers gets me thinking. What if all films were fun? What if every book makes you feel like a hero? What if all music uplifts and all lyrics end on a positive note? What if all paintings feature scenes of war with our hero and his BFG victorious? What if art constrains itself to game box cover fare? I toy with the thought of game mechanics as paint, and reason that along these lines, games can explore so many more topics than we presently explore. I think they could capture and express difficult emotions just like film. I really do.

The dinner behind me, however, I go back to work on a writing project, a strategy guide for an Xbox 360, PS3 and DS title. In it, I tell the reader how to kick ass, take no prisoners and dominate the world. However, I will return to the conversation soon when a chance after-school encounter with my daughter leads me to step beyond the commercial possibility space I had unknowingly constructed for myself.

The New World

A month after the dinner, my eight-year-old daughter, Maezza, comes home from school, and as I do every day, I ask, “What did you do at school today?”

She tells me, “The Middle Passage.”

I stop what I am doing. Her father is a West Indian, a Barbadian, a descendant of Irish and African slaves. It’s a mix that leads to every color in the tan-brown-black rainbow: dark or red curly hair, and occasionally blue eyes and freckles. This discussion came sooner than I expected.

“What did you learn?”

She tells me, and it sounds something like this, “These black people are kidnapped, and they get on a ship, and they sail to America where they are forced to work long, long hours and have no freedom until Abraham Lincoln comes along,
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signs the Emancipation Proclamation and frees them and then things got better and can I play a game now, Mommy?”

I say nothing, but for 10 seconds I stare as she returns to her homework. I am surprised by the lack of emotion in the retelling. I was not expecting tears or confusion or pain, but that’s it? This is her heritage. So, I answer, “Yes.” In asking to play a game, she’s given me a good idea.

I grab some small, wood people from a prototype part box in my office, and place several dozen in front of her. “Make Mommy some families, okay?” She starts to color the wood pieces, and 30 minutes pass. One family is red. Another family has a green band around its center as its identifying feature. She is just about to finish coloring when I sit down and grab a handful of people from her group.

“We’re going to America,” I say and put the people on a 5 x 8 index-card turned boat.

“You didn’t get everybody,” she says.

Figure 1. Maezza Brathwaite creating families in Brenda Brathwaite’s The New World
“I know. That happens. That’s how it works.”

“You forgot the baby and the Daddy. They want to go, too.” She moves the other pieces toward the people on the makeshift ship. I push them back.

“No one wants to go, Maezza.” She looks at me, and I look back at her. We’re going to America.

There are ten turns to cross the ocean, and we have 30 food units for the journey. Each turn, we roll the die to find out how much food we use on that turn. This turn is six. The next is one. By midway across the ocean, it’s obvious we will not make it to the other side.

“We don’t have enough food,” she says.

This is a challenging point for me as a parent. I tell her we can either hope people don’t get sick, or we can put some people in the ocean. I say it as gently as I can, but she knows what I mean. I see the look on her face, and I stop the game. These people matter to her. They are her people.

“I don’t think it’s very fair,” she says. More silence. “Did that really happen, Mommy?”

We talk for a long time afterward about the Middle Passage and her abstracted understanding of it. She inquires how the slaves felt, and how those left behind must have missed those who went. “I bet they were scared,” she adds. When her father arrives, they talk, too, and she asks him questions about his ancestors and his feelings on the journey she’s just witnessed. The mechanic, in this case, is the message, and she is touched. Me, too. I see the magic of games.

They mattered because she knew them and named them and spent time with them. Abstracted as they were, they were not at all abstract. I was moved by the power of the mechanic. I was moved by the power of games.

I recalled the conversation between the photographers and my own wonder at their ability to explore a myriad of topics, including painful and difficult topics. In this simple exercise, I begin to see the potential of games to do the same.

The Transition

I decide at once to make another game, and not just one, but six. My reasoning is as protective as it is projective. Reiner Knizia, the prolific German board game designer, works on multiple games at a time. The intellectual exercise of modeling his process is compelling to me. Of greater motivation, however, is my concern about the boundaries I may be crossing. Making six games invites people to consider, for a moment at least, whether there’s a “bigger picture here” before jumping to conclusions or labeling me a racist. I decide to focus on my own heritage, Irish Catholic, for emphasis. In spite of, or perhaps because of my concern, I tell no one about the games for quite some time. The freedom of material and my medium feel uncomfortable together to me.

Though I have no plans to do anything with the games, I start this series like I do all my other games. I write a “core statement”:

The Mechanic is the Message captures and expresses difficult experiences through the medium of a game. Much like photographs, paintings, literature and music are capable of transmitting the full range of the human experience from one human to another, so too can games. Due to their interactivity, games are capable of a higher form of communication, one which actively engages the participant and makes them a part of the experience rather than a passive observer.
In doing these six games, I am also truly testing my medium of choice. Can mechanics truly capture and express a difficult emotion? Doing it once is one thing. Six is quite another.

**Reaction**

Ian Bogost is an Associate Professor in the school of Literature, Communication and Culture at Georgia Institute of Technology. At Bogost’s tenure party, I tell a long-term industry friend about the six games I am making. I list off the topics that I plan to cover: the persecution of Irish Catholics in the Cromwellian invasion and the Penal Codes that followed, the Middle Passage, and now, the Holocaust.

The reaction is decidedly one of confusion.

“That’s not fun,” she says. “It doesn’t make any sense.” There are, frankly, a whole host of issues present when one frames it from an industry perspective, greatest of which are the perceivably untouchable topics I am exploring. Where do you sell it? Who buys it? Does it get rated? Is it okay to do that? The last question I hear more than once.

I push at the basic thesis. “It’s not fun, but it’s not supposed to be,” I tell her. “Why does it have to be?”

I add that it’s not digital, that I don’t plan to sell it, and that I am only making one of each for each topic. This compounds the confusion.

“It doesn’t make sense,” she says.

I recognize her on the other side of the divide. I was there not so long ago myself, constrained or created by the industry box we put ourselves in. Must games only be created to sell? Must they follow the path of least resistance? Must they be commercial? Must they avoid certain topics lest they go deeper and deeper into the cultural hole? Why are *Roots* and *Schindler’s List* acclaimed, and my games not?

For all the seeming confidence that I have—the genuine interest, the passion, the challenge—the conversation has an unsettling effect. I think, “Maybe this isn’t worth pursuing.” An hour later I tell Ian Bogost, an articulate game designer, critic and professor who is completely comfortable tearing an idea down. He doesn’t do that, though. What he actually says is this: “That’s interesting,” and we talk about it for quite some time. The conversation serves as an interesting bookend for me, and is ultimately, a substantial lesson in power of game studies and academic game development. It is here, beyond the bounds of commercial constraints, that artists have the freedom to wonder “what if?” In talking to Ian, the doubt that I’d felt the hour before was washed away.

A few months later, the topics for the rest of the *Mechanic is the Message* series have crystallized, even if the mechanics for each haven’t:

- Cromwellian Invasion
- Slavery
- The Holocaust
- Illegal Immigration
- Politics and Poverty in Haiti
- The Trail of Tears

**Train**

I start work on *Train* in the Spring of 2008.

In mid-April, three students are in my office for our weekly independent study on non-digital game design. Today, we are playing my prototype. On my desk, I draw three, separate but parallel three-foot lines in pencil, and place an index card marked “Station” at one end of the lines. Each turn, we draw cards that determine our movement, but the first play is painfully slow. I add in cards to encourage player interaction, and it starts to become fun. Michelle is the first to arrive at the terminus, and takes the card at the end.
It reads, “Auschwitz.”

Her face changes. She stares at me and curses. Laura says, “Are we in Germany somewhere?” and Chris is angry, “You haven’t heard of Auschwitz?” All but one of the reactions from the players are uncharacteristically strong. Michelle says she feels nauseated.

I test *Train* six more times with “Auschwitz” and many more without. In my own home, my daughter and I play a game about racing to Disneyland to ensure that the mechanics are solid, though I suspect at the time that no one will play *Train* to a traditional game conclusion in its finished form. I add a line to reflect this: “*Train* is over when it ends.”

The Rules

The final rule set for *Train* is completed in May 2009.

The rule set of this game, of any game, is the single most important thing a designer crafts. The rules of the game are the game. The pieces, the parts, the board? The table, computer or console? The graphics, the viewpoint, the angle of the camera? They are all there for one reason only—to allow us to play out the rules. They embody the game, they help to immerse us, but they are not the game. The rules are.

And so, these would be the rules for the rules of *Train*. There were several things I wanted to accomplish.

First and foremost, the game needed to be an abstracted representation of the SS system. I wanted it to be able to very efficiently deliver its passengers, just as the original system could. I also wanted the player to explore a place in the experience. Would they just blindly follow the rules, taking comfort in the order demanded of them? Would they question the basic set up of
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Figure 3. Brathwaite typed the rules for Train on a vintage Nazi typewriter. Note the “5” key.

The game? Would they recognize the inherent symbolism in the smashed glass, the yellow tokens, or the boxcars? The answer, as I found out later, was that yes, some do. Many more do not. Would they try to subvert the entire thing and save everyone? The rules needed to allow for it all. In short and based on a single set of rules, the game needed to allow for multiple interpretations and those interpretations all needed to work together simultaneously.

To allow participants this ability, it was necessary to construct a degree of ambiguity wherever it was possible. This ambiguity, in turn, produced complicity. To illustrate, consider past experiences with non-digital games. There is most always the moment known as “rules lawyering.” There is something questioned, something uncertain, which provokes one player to grab the rules stating, “Let me see! That’s not right.” Train provokes these by design.

Consider the action “derail”:

**Derail:** Causes the train to go off the tracks and returns half the passengers to the starting location. The other half refuse to re-board. To use derail, select the boxcar to derail. Derail only affects the boxcar, not the entire train.

What becomes of those passengers who refuse to re-board? I have seen all the following:

- Players re-board them anyway.
- They died.
- They were removed from play.
- They were left on the side of the tracks and added back into the train by die roll.
- They went to Denmark and safety.
- They were saved.
- They were placed in someone’s pocket (and therefore safe).

The derail action is only a single spot of ambiguity. There are many, and they are all intentional. I have watched players put it all together during play. They reach for the rules looking for a way through and around—a way to save people. And they can, and they often do. It is an interesting moment when player turns on player, starts to
question the rules, joins all the cars together and begins derailing or stalling them one after another. It is in the shared time with the experience that something happens. In every play of the game to date, and there have been over 50, there is always at least an hour of discussion that follows. People discuss how they felt playing and watching. They want to know about the rules. They wonder if I did things on purpose.

In a sense, I believe it can be said that the games in this series were transformative to me as a designer, and in giving a game anything less than our own meaningful decisions—something we try to present the player—we perhaps do a game justice, or as much justice as we are able. In all, I agonized over every single line in the rules. I debated the math. The choice of paint, the choice of window, the placing of every last component, each had meaning and intent.

The rules are displayed and written upon a World War II Nazi typewriter. Next to breaking the glass for the installation of *Train*, I dreaded typing the final rules the most, but it felt like cheating to do it any other way. I typed a single set, and with that, the rules were done.

The Physical Build

*Train* ultimately asks players to question their assumed knowledge of a system, in this case, a game—we are here to have fun, and we are going somewhere good. When the destination is known, the dynamic of every mechanic completely changes and now means the exact opposite. It produces a powerful, visceral, nauseating strike to all players involved. In this, some have accused *Train* of having a trick ending, as if there were but one experience to be had. There is, of course, no trick ending to the Holocaust or to any of the games that I have created or will create in this series. Likewise, the experience of watching a game differs from its play, and discussing player reactions (or lack thereof) is just as valid an experience. There are many paths through *Train*.

In the early design of the game, I wanted players to see the game differently. I didn’t want them to approach it as they would anything else. So, I was thinking of this challenge as I traveled to Project Horseshoe, an invite-only game design conference held in Canyon of the Eagles, Texas every year. At the conference, I talked with several of my peers, Jason Rohrer, Dan Cook, Steve Meretzky and John Sharp about the games. The typical questions came. I answer that it’s non-digital, that I don’t plan to publish it anywhere, and that I am only making one. Someone asks what I am going to do with them when I finish. My answer is, “Nothing.” I wish I could recall who it was who said these words, “You have to do something with them!” I felt pressed, pushed to show the games. I felt very vulnerable in that thought, too. But I agreed to talk about the games publicly.

It was on the way back from Project Horseshoe in November 2008 that I heard a story on NPR about Kristallnacht. In that instant, the window-as-gameboard was envisioned. It resolved the tension I had about manipulating the player, by presenting something that appeared completely innocent and game-like (I wanted the presentation of the game to suggest the possibility of something other than fun). I wanted to take advantage of that assumed knowledge without pushing it. I also wanted to give the player who knew, the opportunity to bow out before the game even began.

I searched for and selected the window at an architectural salvage place when I returned. I resisted the desire to make it wholly clean, but I got enough of the dirt off so that a good coat of white paint stuck. The process is an intimate one, and I struggle using that word. There is something that happened between me and the window there in the backyard. I don’t look at it like a window that was picked up at an architectural salvage place. Instead, I looked at it like a window into Germany, and thought of the family inside. It gained weight.
Tracks

I enter the local railroading hobby store. It’s the only one for 200 miles around, so I consider myself fortunate that it’s here in Savannah. I ask for three tracks, and all the high quality materials necessary to make them. I am surprised at my own reaction when the clerk offers to give me some pre-made plastic tracks. It feels like cheating, and so, I say no. I paint the board, glue the cork to the foundation, glue the track to the cork and wait overnight. The next evening, I put the ballast on the tracks, and it takes three hours to finish a single one. As a bonus, it looks terrible and will have to be done again.

I looked at the unfinished track and the finished track, and for a moment I was tempted to brush all the ballast off, but someone will know that I cheated. I will know that I cheated and took the easy way out. To me, that would be a sign of disrespect to the topic and to the medium. In digital games, I’ve cheated a hundred times with my favorite being an alleged elaborate neural net among NPCs. In actuality, if a fact is “true,” you have a 1 in 20 chance of being busted. It has nothing to do with pre-existing knowledge at all.

The Blessing

I take Train to Rabbi Belzer on January 15, 2009. A formal blessing is arranged at the suggestion and request of David Dirlam, a former colleague of mine. David discovers the project in the course of interviewing me for his book A Trillion Ways to Design. He was shocked and gutted, by the end of the game, and displayed the same reactions everyone does in five seconds—shock-disgust-nausea-shock-exclamation. It happens almost
every time. I think the subtle way a hundred dominos fall backward to give each action a new meaning is my favorite part of the experience, and how those dominos falling in turn create meaning for the player. When I told David about the game, I did not know he was Jewish.

The meeting with the Rabbi is two hours long. I lay the game bare and discuss every last piece of symbolism in the board, the components, the glass and the rules. I note the places where I deliberately leave some of the rules vague so the participants bridge the gap. He asks about my design decisions, about my intent and more, for a very long time. In the end, he says, “I am going to say a prayer here in a minute, but first, I want to say this. You have brought your game for a blessing, but you brought us a blessing. This game is a Torah…” He said one prayer in Hebrew. Then, saying that this game was a form of Torah, he said it was a blessed event to have shared this. Because of the blessed nature, he noted that Jews say a second prayer. So, he said it, also in Hebrew.

I cry. We all cry.

The following week, I set up the game so it can be photographed. On a table covered with black paper, I lay several panes of glass, and get my hammer. Before the first strike, I reflexively say a prayer, say “I’m sorry,” and hit it.

Breaking the glass feels horrible.

In the hours I’d spent with this single window and this piece overall, it had become far more than just a window to me. I spent weeks researching the Holocaust, and staring at the families of those affected. So, when I took that hammer into my hand, I wasn’t smashing glass. I was starting the horror. I thought of what I would feel like, my kids asleep in their beds, to hear glass smashing around the house. And even figuratively, even abstractly, with something as terrible as this, it felt utterly terrible. I never want to do it again.

**Early Reception**

I am half-way through the series of games in *The Mechanic is the Message* now, and have prototypes of two games in progress, *Mexican Kitchen Workers* and *Cité Soliel*.

*Train* was more or less announced April 1, 2009, at the Triangle Games Summit. I talked about the game and the process in detail. A reporter from *The Escapist*, Jordan Deam, captured it well. Since then, it has taken on a life of its own. I am not sure what I expected from the audience, but it was not the tears that I received. When I talked about the game at MIT in June and later CMU, I saw the same tears, and it still humbles me. Players thank me for the experience. They cry quite a bit. One woman, the one *The Escapist* wrote about, openly sobbed when she heard the rules and play of the game discussed.

The crying still surprises me. I haven’t asked people why they’re crying, but some tell me. At the Game Education Summit at CMU, two people said that I helped them to understand what game
design could be. They teared up because they saw the power in the medium of the mechanic. For others, it is a question of heritage made bare in a game, something they never suspected they’d see. After I spoke at Full Sail, one person instant messaged me to apologize for not speaking to me there because he was going to cry. “Powerful stuff,” was how he summed it up. For others, it’s the experience of complicity in such an abstraction or the potential for the same. Ultimately, I think whatever happened to me that night in the kitchen when I finished *Train* is part of it. I felt like I hit the “shape” for the game; it had filled all the space it could fill. I genuinely felt like I was being taken by the game and the experience it held and not directing it, and I think the tears are what that feeling looks like reflected in the eyes of others. I can’t explain the feeling any better than they can. Ultimately, I don’t know.

In covering this new territory, in wondering if games could capture and express difficult emotions, I have also evoked some. There are those who charge I am being sensationalistic and others who charge that I have exploited these topics or even tricked the player. Sometimes, there is hostility.

Still, I come back to the question the photographers asked of one another, “Should I take the picture or not?” Are there topics we ought not consider? And if we say, “No, all topics are fair game,” then what responsibility do we as designers have to the emotions we evoke and the questions we raise?

**John Sharp, Art Historian and Game Designer**

I am writing this in July 2009, in the months leading up to and following the display and play of the first two of the games in the *Mechanic is the Message* series, *Train* and *Síochán Leat*. This simplifies the task of examining the series to some degree, as I’m able to consider the series more or less in the vacuum of theory and speculation, and without taking into account the full messiness of reality. It is from this position that I will think about this series of non-digital games created with artistic intentions for exhibition in a gallery whose game play addresses complex ethical situations.

There are many overlapping concerns at play in Brenda Brathwaite’s *The Mechanic is the Message* series of six gallery games—artistic and expressive intentions and the possible gap in audience reception; the intersecting affordances of games and the “white wall” exhibition space; the expectations placed on serious games; and the delicate cultural and ethical challenges surrounding the difficult historic and cultural phenomena the games address.

Before examining these concerns, a bit of background. I am an art historian by training and a graphic, interaction and game designer and educator by trade. Since my junior year of college more than 20 years ago, I have studied art history and worked in a variety design fields—graphic design, fabric pattern design, DJing, broadcast design, web design, interaction design and game design. As part of my design work, I consult for a number of contemporary art institutions including Dia Art Foundation, Electronic Arts Intermix, SculptureCenter and the Warhol Foundation. I always saw design and art history as vaguely complimentary but mostly unconnected threads in my life—design was my career and art history was a subject I studied.

This began to change in 2000 when I began teaching in Parsons Design & Technology MFA program. I began to see more useful connections between my two worlds. I began to look for ways to connect my historic understanding of material culture to the practices of creating cultural artifacts in which I was engaged. This process gained momentum around 2004 when I began to turn my scholarly interests toward the cultural position and history of games. In the years since, I’ve become more and more engaged in game studies first as an educator and more recently as a scholar.

Brenda and I are both professors in the Interac-
The Mechanic is the Message
tive Design and Game Development Department
of the Savannah College of Art and Design—
Brenda is our chair at the Savannah campus, and
I am faculty at the Atlanta campus. I’ve followed
her work on the series from early on. As a result,
I have some insight into her decision-making
processes on three of the games, The New World,
Síochán Leat and Train with lesser exposure to
the several others.

It is from this vantage that I am looking at
Brenda Brathwaite’s The Mechanic is the Message
series of gallery games at the nexus of the worlds
of art and games. My discussion is framed by a
series of questions that I have either asked myself
or heard asked by others.

How can a Game Address
Ethical Issues?

Beyond the play on McLuhan’s statement turned
aphorism, the presumption inherent in the series
title, the idea behind The Mechanic is the Message
is that through the designed actions of the game,
the player will receive the message intended by
Brathwaite. Most media use what Frank Lantz has
called the “Message Model of Meaning” (Lantz,
2009)—whereas an author of a cultural artifact
embeds a message in their work that is received,
intact, by their audience. In this model, where
a film is going to deliver its message through a
combination of script, cinematography and acting,
a game is going to deliver its message through
rules that define the possible actions of players.
Extending this out to games that address ethical
concerns, a game’s rules, goals and the permis-
sible player actions need to speak to the ethical
consideration.

This points out the basic problem with games
as conduits for the Message Model of Meaning:
a film is essentially identical for each viewer,
and so, in theory, each is able to consume the
filmmaker’s intended message. With a game, the
game-maker is at a disadvantage if their goal is
within the space a game creates, players can have
innumerable experiences with wildly varying out-
comes. But if the game-maker sets out to provide
experience framed by the rules and the permissible
actions a player can take during game play, then
they are more likely to find success.

The title The Mechanic is the Message speaks
to this point rather directly—Brathwaite intends
to provide a particular kind of experience crafted
through the specific actions the players make in
pursuit of their goals. This can be a very effect-
ive way to think about game play. The direct
engagement afforded by games can provide an
acutely focused experience. In his book, Balance
of Power: International Politics as the
Ultimate Global Game (Microsoft Press, 1986),
Chris Crawford identifies an important aspect of
games as frameworks for examining the human
experience:

“T am first and foremost a game designer, not a
political scientist. Simplification to achieve clarity
is the essence of my work; clarity can be extracted
from a muddy reality only by denying some of
reality’s richness” (Crawford, 1996).

In this statement, I hear Crawford saying
that when designed well, a game can frame the
particulars of the human experience in strikingly
clear ways without necessarily implying a single
correct interpretation. Game designers tackling
ethical concerns take on the challenge of creating a
space of possibility that provides latitude to make
what society might consider both right and wrong
decisions. And this needs to be okay.

In Train, for example, Brathwaite focuses
on the transportation of Holocaust victims to
concentration camps as the lens through which
the atrocities of the Holocaust are confronted. By
designing the mechanics of the game around the
packing of tokens abstractly representing people
into boxcars and strategically moving the boxcars
towards terminus stations, Train acutely focuses
the player on the horror in the ruthless efficiency
of the German military. Brathwaite does not show nor tell the player anything; instead, the experience unfolds through the player’s actions within the framework constructed by the rules, mechanics, goals, tokens and play space of the game. Players can choose to play along or to thwart progress toward the concentration camps. The game allows you to take either approach.

In Síochán Leat, Brathwaite’s game on the invasion of Ireland, the player is forced to make decisions on the displacement and enslaving of the Irish people in the face of Oliver Cromwell’s invasion. The players are put in direct competition with one another though they both are controlling portions of the Irish population. Their hands are forced by the continual advance of Cromwell; both players become complicit in Cromwell’s movements as they determine which portion of the Irish population is forced from their land. The winner is the player who has been able to protect the most of their own portion of the Irish people at the expense of their opponent’s. Again, Brathwaite allows the game system to reveal the complexities and ethical dilemmas present during Cromwell’s invasion.

By designing a game, and not crafting an animation or essay, Brathwaite has created a medium-appropriate exploration of her subject matter. With Train, players begin the game engaged with achieving the game’s goal: deliver as many passengers as possible to the terminus. To do this, the player has five different actions that can be used to advance their cause or thwart the progress of the opponents. In Síochán Leat, players can strategically protect their own group of Irish people, they can co-operatively work with their opponent to protect both groups of Irish people, or they can actively work to decimate both populations. The mechanics of the game support all three approaches to Cromwell’s invasion.

By using the mechanics of Train to pursue the game’s goal of transporting the most passengers to the station, the players are suddenly confronted with the ethical implications of their actions. Brathwaite avoids many of the pitfalls of serious games by embodying the message in player actions, not in the content of the game.

Will People Play them Twice? Or at All?

Early on in Brathwaite’s design process, I thought about the replay value of the games in the series. Train in particular raised this question, as it has what I will call a “punch line” for a lack of a better term—the revelation that players are moving their tokens toward concentration camps. In theory, first-time players will probably operate under the assumption they are enjoying a competitive game without meaningful ethical consequences. But once the first player triumphantly reaches the station and flips over a terminus card, the implications of their actions become apparent. What seemed like a fairly common race game becomes something much more dire and consequential.

Will there be a reason to continue with the game, to continue to deliver passengers to additional concentration camps? Will there be a reason for any of the players to continue playing? In the rules, Brathwaite states, “Train is over when it ends.” For a new player, this may seem like an odd way to define the conclusion of a game. This intentional ambiguity is unusual for a board game, but once the “punch line” is uncovered, the rule seems prescient. The entire rule set transforms, though not a word changes. The player’s interpretation of the rules and their own actions become weighted with ethical consequences.

In an email conversation among a number of members of the art-games community, Jason Rohrer made the comment that “games don’t have spoilers.” By this Rohrer suggests that the experience of a game should not be ruined by someone telling you some detail from their own play experience. Train appears to have a spoiler—to know what is on the terminus cards is to know
The Mechanic is the Message

the ethical implications of player actions during the game, and to draw into question the very act of playing the game.

Does this take away from efficacy of the game? My initial reaction was that this would drastically impact the likelihood of replays, and quite possibly of first plays. While I do maintain this concern, I have been intrigued to hear about the responses to Train by the varying communities with which it has come in contact. As Brathwaite’s experiences suggest, for some members of the Jewish community, the game is a means of actively exploring the ethical implications of the infrastructure that led to millions of Jews being transported to their deaths. For the game development community, the game has been a touchstone for thinking how games can address societal concerns, the potential for expressive elegance of game mechanics and the value of well-designed educational games.

Observing play sessions of Train at the Game for Change Festival in 2009, I saw two things I never expected. In one play session, a player reached the terminus, realized the implications of the terminus cards, but still continued to play. When asked about this by Brathwaite, she said she was role-playing, and mentioned putting herself in the position of a guard with a family to feed. This took everyone aback at first. It seemed untenable to continue to play like this, but this is part of the power of games—to explore situations and mindsets that you would never otherwise have opportunity to do. The player’s actions made a very strong rhetorical point on the ethical crisis of the Holocaust.

The second unexpected occurrence was the play strategy used by some to thwart their own and their fellow players’ progress toward the termini. These players uniformly either knew the “punch line” or suspected it from various clues within the game’s rules and physical properties. Some of these players would derail the cars, while others would create virtual “Denmarks” to give refuge to the tokens. Train’s rules of course permitted all of this, giving a richer, more nuanced play experience that gave players the opportunity to actively consider the Holocaust. What has yet to happen, however, is for players “in the know” to reveal that knowledge to those in the dark. So, if one player releases the game is about the Holocaust during play, to date, no player has ever revealed that to the others, though they will very actively try to thwart the progress of those players.

Brathwaite has constructed a system in which the players engage with a rule set to explore a particular aspect of the human experience. It is this very aspect of Train that has captured the imagination of members of the Jewish, serious games (the term used to loosely group games with goals beyond entertainment), and game developer communities, and educators alike. The non-digital game community has as well taken notice. Brathwaite has kept the rules of the game incredibly simple, which allows clarity of action and understanding. This simplicity opens up the game for a larger audience than just gamers and game-makers, making the game rules and mechanics and their relationship to the subject matter easily understood. What gamers, game developers and game studies academics might see as spoilers and problems, another community sees as the core value of the game experience.

Around all play sessions I have witnessed, Train sparks conversation between players and observers, often for sustained periods of time. At the Games for Change Festival, many of the players and observers were fairly new to the world of games, and yet productive conversations took place.

This is also an interesting case study for Ian Bogost’s concept of procedural rhetoric (Bogost, 2007). Bogost suggests that games reveal a rhetorical position through their rules, narrative conceit, play mechanics, goals, etc. For example, Jason Rohrer’s game Passage establishes a rhetorical space for exploring the passage of time, the relationship between pursuing one’s own goals and the responsibilities of committed relationships. Daniel Benmergui’s Today I Die creates a space
in which players explore the difficulties of helping a loved one struggling with depression. Train has a rule set so seemingly clear and simple that people with a wide range of game literacies can understand the system without seeing it in motion. People are able to quickly pick up Brathwaite’s rhetorical position without actually playing the game. This is highly unusual for a game. I will be curious to see what reaction the remaining games in *The Mechanic is the Message* series garner from the communities whose experiences they address. I look forward to the response of the art community.

**Why Art?**

From the beginning, Brathwaite has considered these games as art, or as she calls them, gallery games. She also conceived of them as non-digital from the outset. This is a curious distinction to make for someone with 25 years of experience making commercial computer and console games.

I have two questions here. First, why is Brenda creating non-digital games exploring some of the darker moments in human history, not fantasy? The ur-moment for the series is the design of *The New World* game for her daughter, which Brathwaite designed as a tool for exploring the Middle Passage. This led Brathwaite to see the expressive potential of non-digital games to model and provide a vehicle for exploring complex and difficult phenomena. But this doesn’t explain why Brathwaite positions the games as artworks rather than designed objects. In fact, this suggests educational games, not art games. After more than two and a half decades as a practicing game designer, Brenda began a second career as an academic at the Savannah College of Art and Design. This provided her with distance from the constraints of the commercial game development industry. Whereas her money was previously earned by producing commercial digital games, she now earned her money teaching game design, free from the demands of the entertainment industry. She could think about her work in new ways, and take on challenges she would never have considered. The emergence of art game-makers like Jason Rohrer, Rod Humble (*The Marriage*) and Daniel Benmergui also had profound effects on what Brenda though of her chosen expressive form. Artgames take the position that (1) games can be as expressive as painting, sculpture, film, photography, etc. and (2) the expressive power of games is found in game mechanics and game play. For Brathwaite, the artgames movement provided her with a new way of thinking about her work and the potential to explore alternate possibilities for the play experiences her games can provide.

Approaching her games as works of art became an important facet for Brathwaite. I imagine this seemed like going as far as possible away from her previous work; instead of designing games produced by large teams and mass-produced in quantities measured in the thousands, she would produce one-off games by herself. This was something new and different, something only possible in her new distance from the game industry.

The hand-made nature of the games seems to be very important to Brenda. In conversations with her about the production of the games, she told me about knitting the grass for *SíochánLeat* and about the deliberation over how to break the glass window pane of *Train* and the importance of using a Nazi typewriter to produce authentic text for the game rules and cards. She approached the conception and production of the game objects with careful consideration, with a real rigor for staying true to her goals of creating tightly constructed games that explore difficult topics
The Mechanic is the Message

through their play. Her intentions for the games were to create works of art.

The second question I posed about The Mechanic is the Message and its games—why should they be considered art in the first place—is more about reception than authorial intention. So far, in the months following the display and play of the games at places such as the Games for Change Festival, MIT’s GAMBIT lab and the Game Education Summit at Carnegie Mellon University’s Entertainment Technology Center, the games have been approached more as educational than as art.

I will however venture a possible response that frames the series as art, though not in the way I believe Brathwaite intended at the outset of the project. I can imagine these being framed as a form of conceptually-driven art (though not Conceptual Art). If, once the “big idea” of a game from the series is known, is it really necessary to play it to think about the idea space it inhabits? In other words, do the games in the series have to be played at all in order to be valued?

The history of conceptually-driven art over the last 40-plus years suggests that the answer here is no. The response of the Jewish and game developer communities to Train reinforces this idea. When Brenda told me the story of Rabbi Belzer’s response to the game, I was struck by the story. The description and walk-through of the player experience, the explanation of Brathwaite’s design decisions and symbolic framework was sufficient to lead the Rabbi to declare Train a work of Torah. Game developers who have only read an article are critiquing the game’s mechanics, its use of narrative and other design decisions—all without having played or even seen the game.

In the contexts I have seen the games, there have been more people watching play sessions than actually playing. This has not slowed the commentary and critique at all. The elegance of the games’ rules and material form do in fact permit a level of understanding through observation and discussion that most other games do not.

This is not to say that all second- and third-hand observations have been completely accurate in their interpretation of Train, but there have been many fruitful and constructive conversations about the game by those without direct experience.

Why in a Gallery?

Brathwaite refers to the six games in The Mechanic is the Message series as gallery games. From early on in the series, Brenda conceived of the games as being designed for consumption in a gallery. I think there is more going on here than just the naïve conception, “that’s what you do with art.” Since I heard Brathwaite’s intention and insistence that these were to be played in a gallery, I have asked myself the following question: does the exhibition space impact the “gameness” of The Mechanic is the Message series?

Our contemporary understanding of gallery spaces is fairly young—the modern idea of museums as spaces for storing, protecting and exhibiting important artifacts can be traced back to 19th century Europe. Museums have the effect of isolating an artifact from its context, and suggest that the object is to be considered, but not touched (O’Doherty and McEvilley, 2000). The exhibition space as well imposes expectations of a certain kind of consideration or appreciation; an art museum suggests considerations of aesthetics, craft, the historical importance of the artist or style, etc.

I will float another guess while waiting to see what occurs once the games are exhibited in a gallery contexts (thus far, Brathwaite’s games have been displayed and played in conferences and academic centers). The gallery space can frame games in a way that can separate them from the typical assumptions—a form of mass media that entertains, something only interesting to boys, etc.—and that can permit more thoughtful consideration. By aligning the six games with the traditions of museums and galleries, Brenda creates a space in which the game rules, tokens and
play space can be given more serious attention.

At the same time, limiting the games to exhibition spaces limits the likelihood that the games will reach out beyond those who appreciate the ideas expressed through the games. This runs the risk of “preaching to the converted,” to those already in agreement with a particular position on the subject of the game. This has certainly been the case thus far—the games have been positively received. It should be noted that the players and observers I have witnessed have been overwhelmingly involved in educational games and serious games and from the worlds of non-profits and academia.

I can see traditional AAA-title game players and game developers being the group most likely to be impacted. Their assumptions about what games can and cannot do will be challenged by the series. Thus far, the commentary of game developers has tightly grouped along opposing lines—those who interpret the games based on commercial intentions and thus see them as in bad taste or exploitative, and those who see the elegance and form-appropriate use of games.

Museum and gallery spaces come with certain trappings—exhibition titles, didactic materials, educational programs, artist’s talks, etc. All these will provide a framing for the games that will more than likely expose the general theme before potential players have the opportunity to play. Galleries and museums as well have implicit “do not touch” cultural conventions, which will further separate players from the games and their intended consumption through play. The gallery space may transform the games into cultural artifacts to be examined, considered and appreciated, but not experienced. I will be very curious to see if the “museum effect” applies to the six *The Mechanic is the Message* games. Brathwaite is currently in discussions with several museums about exhibiting her games. An important requirement for Brathwaite is the ability for museum-goers to be able to play the games rather than just observe them. The likely outcome is that play sessions will be treated like artist talks or performance that will take place at specified times. The idea of the games being playable whenever the museum is open has not yet entered the realm of the possible.

**What Impact Will *The Mechanic is the Message* Have?**

Most serious games—a term used to generally describe games that are designed to be more than entertainment—fall into two traps that I believe negatively impact their efficacy. The first pitfall for serious games is the overt embedding of a particular rhetorical position in the game’s decision points. Rather than allowing a player to discover the “correct” ethical position through their game play experience, many serious games present a strong, unavoidable rhetorical position from the outset. This position is then reinforced through the decisions players are allowed to make as they move through the game. The second mistake found in many serious games is the poor modeling of the systemic forces of the phenomena through the game mechanics and goals. The mechanics of a game should be abstractions of activities found within the larger system the game models.

Brathwaite has avoided both of these mistakes. Many of the topics addressed in six games in *The Mechanic is the Message* series are fairly black and white from an ethical point of view. At the same time, there is nothing inherent in the mechanics, rules and goals of *Train* that suggests delivering passengers to the particular termini is a bad thing. The weight is on the cultural baggage we associate with the names of the concentration camps once a terminus card is revealed. Should people not know what these camps are, presumably they will be able to continue to play the game until all passengers are delivered to the station. But some of those who know will find the idea of continuing the game to be difficult. At the same time, there is also nothing in the rules requiring players to deliver their tokens to the termini.
Brathwaite has created a series of games that do not take an overt position, but instead model aspects of the systems within the given phenomenon and allows players to explore a particular aspect of the Holocaust, the New World, Cromwell’s invasion of Ireland, etc. By trusting that she has designed a system that makes clear the ethical concerns relating to the topic, Brathwaite can allow players to make decisions that may be ethically questionable, but that will nonetheless lead to an exploration of the phenomenon.

My conclusion about the series is pretty straightforward. *The Mechanic is the Message* is a powerful, medium-appropriate series of serious or educational games. I will be very curious to see how they are received and the impact they have once they are exhibited and more widely publicized.

**REFERENCES**


Compilation of References


Cooper, A. (2002). The inmates are running the asylum. Indianapolis, IN: Sams Publishing.


Green, M. C. (2004). Transportation into narrative worlds: The role of prior knowledge and perceived realism. *Discourse Processes, 38*(2), 247–266. doi:10.1207/s15326950dp3802_5


Latour, B. (1992). *Where are the missing masses? The sociology of a few mundane artifacts.*


Nietzsche, F. (1886). Beyond good and evil.


Compilation of References


Compilation of References


About the Contributors

Karen Schrier is a doctoral student at Columbia University and an adjunct professor at Parsons The New School for Design. She also currently works full-time as an executive producer at Scholastic, where she spearheads digital initiatives for the Corporate and International divisions. Previously, she worked at Nickelodeon, BrainPOP and Barnes & Noble’s SparkNotes. Karen was the Games Program co-chair of the ACM SIGGRAPH Conference in 2008 and 2009, and she currently serves on the advisory boards of the Computer Game Education Review (CGER) and the 2010 LEEF Conference. She has spoken on games and learning at numerous conferences, including GDC, SIGGRAPH, AERA, Games for Change, NECC, and SITE. She has also co-developed numerous games, educational materials, and digital properties, including Mission US: For Crown or Colony?, Scholastic’s Summer Challenge and Scholastic.com; SparkCharts and SparkNotes; and Nickelodeon’s ParentsConnect, which was nominated for a Webby Award. Karen holds a master’s degree from MIT and a bachelor’s degree from Amherst College. (kschrier@gmail.com)

Dr. David Gibson conducts research at the Equity Alliance at Arizona State University (http://www.equityallianceatasu.org/), the Region IX assistance center of the U.S. Department of Education, and serves as Executive Director of The Global Challenge Award (www.globalchallengeaward.org), a team and project-based learning and scholarship program for high school students that engages small teams in studying science, technology, engineering and mathematics in order to solve global problems. His research and publications include work on complex systems analysis and modeling of education, Web applications and the future of learning, the use of technology to personalize education, and the potential for games and simulation-based learning. He is creator of simSchool (www.simschool.org), a classroom flight simulator for training teachers, currently funded by the US Department of Education FIPSE program and eFolio, an online performance assessment system. His business, CURVESHIFT, is an educational technology company (www.curveshift.com) that assists in the acquisition, implementation and continuing design of games and simulations, e-portfolio systems, data-driven decision making tools, and emerging technologies.

* * *

Stephen R. Balzac is the president of 7 Steps Ahead, an organizational development firm focused on helping businesses dramatically increase revenue and build their client base. He is also an adjunct professor of Industrial/Organizational Psychology. Steve’s passion for game design started out as a hobby while he was attending the Massachusetts Institute of Technology. His games have ranged in
length from two hours to two weeks, and in size from eight to over two hundred players. They have
been played at numerous locations around the United States and in Europe. Steve’s games are noted for
their richness of detail, depth of characterization, and intricate plotting, enabling the willing suspensor
of disbelief. Carefully-designed, easy-to-use game mechanics provide the structure which makes
the world of the game feel real. Players become immersed in the game scenario, acting and reacting
in highly realistic ways. The skills participants acquire, such as negotiation, communication, public
speaking, leadership, teamwork, flexible planning, and crisis management, transfer readily to real-world
situations. Many players have cited the experience of playing in Steve’s games as being instrumental
in their career development.

Brenda Brathwaite, a 27-year veteran of the video game industry, is an award-winning game
designer and has worked on 22 internationally known titles including titles in the Def Jam, Dungeons &
Dragons, Jagged Alliance and Wizardry series. Brathwaite serves on the board of the International Game
Developers Association (IGDA), was the chair of the IGDA’s Education SIG Ad hoc Committee and the
co-founder and chair of the IGDA’s Savannah chapter. She was named one of the top 20 most influential
women in the game industry by Gamasutra.com in 2008 and of the 100 most influential women in the
game industry by Next Generation magazine in 2007. Nerve Magazine also called her one of the “the
50 artists, actors, authors, activists and icons who are making the world a more stimulating place.” Her
current works lean toward non-digital, art and social media games. She is presently building a series of
six gallery games for an installation titled The Mechanic is the Message.

J. Alison Bryant (Alison@PlayScienceLab.com) is Founder and President of PlayScience, a research,
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has published extensively on youth, families, media, and education, including three edited books—The
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Degand has also developed curricula and led classes for corporate clients, nonprofit organizations and
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James Diamond is a research associate at the EDC/Center for Children and Technology, where he works on several projects related to the development and use of video games in K-12 science and history education. James has taught at the elementary, undergraduate, and graduate level, in addition to developing professional development programs for teachers in the area of educational technology. He has a bachelor’s degree in history and an Ed.M in educational technology, both from Boston University, and is currently at work on his Ph.D. at New York University, focusing on the use of video games for developing disciplinary skills in social studies, history, and civics education.

Jordana Drell is the Director of Preschool Games in the Nickelodeon Kids and Family Games Group. Jordana is responsible for Nick Jr. games across all platforms including, NickKJr.com, NickJrArcade.com, myNOGGIN.com, mobile, console and handheld. She produced the first game for preschoolers on the Wii, Diego Safari Rescue. Before joining Nickelodeon, Jordana was a producer in the Interactive Group at Sesame Workshop, where she produced numerous Flash games for Sesamestreet.com. Jordana lives in Brooklyn with her husband, mini-dachshund and two retired racing greyhounds.

Stephen M. Fiore, Ph.D., holds a joint appointment with the Cognitive Sciences program in the Department of Philosophy and the Institute of Simulation and Training at the University of Central Florida. He earned his Ph.D. in Cognitive Psychology from the University of Pittsburgh (2000) working primarily in the Learning Research and Development Center. He is Director of the Cognitive Sciences Laboratory (CSL) and is co-editor of recent volumes on Distributed Learning and on Team Cognition; he has published extensively in the area of learning, memory, and problem solving at the individual and group level. Through numerous collaborative efforts, Dr. Fiore has helped to manage over $10 million in research funding from organizations such as the National Science Foundation, the Transportation Security Administration, the Office of Naval Research, and the Air Force Office of Scientific Research.

Sam Gilbert is a researcher on the GoodPlay Project at Project Zero, a research center at the Harvard Graduate School of Education. Under the direction of Howard Gardner, the GoodPlay project seeks to understand the ethical dimensions of young people’s online gaming, social networking, blogging, and general new media practices. In conjunction with GoodPlay, Sam works with a group of Boston-area researchers and game designers to explore how videogames can address ethical issues and create meaningful experiences. Sam’s research interests include the role of web design in the formation of online norms, the ethics of gaming, and the interface between social networking websites and offline social life. Sam graduated from Harvard University in 2007 with a BA in social studies and plans to pursue graduate study in the social sciences.

Erin Hoffman is lead designer at HumaNature Studios and an independent game design consultant at Philomath Games. She has been a working game designer for over ten years on an assortment of games for PC, XBox, PlayStation 2, Nintendo DS, and GBA. In 2006 she was included in Next-Gen’s list of “top 100 women in games,” and her independent designs have won awards in the games for health space. She is also a freelance contributor to The Escapist, Gamasutra, and other video game and speculative fiction magazines, in addition to co-editing Settlers of the New Virtual Worlds, an essay collection exploring user rights in the future of massively multiplayer online games. In 2004 she authored an essay on working conditions at Electronic Arts under the pseudonym “ea_spouse,” and has since been involved in grassroots developer-driven efforts to reform quality of life practices across the industry.
**Henry Jenkins** is the Provost’s Professor of Communication, Journalism and Cinematic Art at the University of Southern California and was previously the Peter de Florez Professor in the Humanities and the Co-Director of the Comparative Media Studies Program at the Massachusetts Institute of Technology. He has helped to launch innovative projects in the areas of games-based education (Games to Teach and the Education Arcade), media education (Project New Media Literacies), civic participation (The Center for Future Civic Media), consumer relations (The Convergence Culture Consortium), and game design (The Singapore-MIT GAMBIT Games Lab). He is currently helping to launch a new initiative focused at bridging between participatory culture and public participation. He has written or edited 13 books on media and popular culture, including *Convergence Culture: Where Old and New Media Collide, Fans, Gamers and Bloggers: Exploring Participatory Culture*, and *From Barbie to Mortal Kombat: Gender and Computer Games*. He blogs regularly about fan studies, transmedia stories, media policy, and new media literacies, among other topics, at henryjenkins.org.

**Neha Khetrapal** is currently a graduate student at the Center of Excellence, Cognitive Interaction Technology, University of Bielefeld in Germany, studying the interaction of spatial processes and language and is supported by a grant from DSF. The author has been a holder of various prestigious awards and has done work on developing theoretical frameworks that have been well received both nationally and internationally. The most important recognition earned by her is from Marquis Who’s Who in the World for 2009.

**Gene Koo** is a Fellow at the Berkman Center for Internet & Society at Harvard University, where he researches the impact of new technologies on learning, particularly in legal and civic education. He has piloted numerous educational ventures, including the civic engagement project Hub2 (winner of the 2009 MacArthur Digital Media & Learning Competition); two online virtual law programs, CyberOne and State of Play Academy; and the Center for Legal Aid Education. Mr. Koo holds a J.D. from Harvard Law School.

**David Langendoen** is a principal at Electric Funstuff, a New York-based design and development company founded in 1998 that specializes in applying motivational principles from the computer game world to the realm of educational software. David has served as lead designer on Scholastic’s *ReadAbout* reading comprehension program, on Scholastic’s new transmedia property *The 39 Clues*, and most recently on *Mission US*, one of the projects funded by CPB’s American History and Civics Initiative.

**Colleen Macklin** is an Associate Professor in the School of Art Media and Technology at Parsons The New School for Design in New York City. She is also director of PETLab (Prototyping Evaluation, Teaching and Learning lab), a joint project of Games for Change and Parsons focused on developing games and interactive media for experimental learning and investigation into social and global issues. She is a member of the game design collectives Local No. 12 and The Leisure Society. Her interactive work has been shown at Come Out and Play, SoundLab, The Whitney Museum for American Art and Creative Time and she has collaborated on projects with the Boys & Girls Clubs of America, Open Society Institute, UNESCO, Wildlife Conservation Society, and the Yes Men. BFA, Media Arts, Pratt Institute, graduate studies in Computer Science, CUNY and International Affairs, The New School.
**Rudy McDaniel**, Ph.D., is an Assistant Professor of Digital Media at the University of Central Florida (UCF). His research interests include XML, narrative theory, video game technologies, and knowledge management frameworks. He received his doctorate from the University of Central Florida's Texts and Technology program after building an online software application for the narrative classification and analysis of organizational knowledge. He holds additional degrees in Psychology, Technical Writing, and Computer Science. Rudy is co-author of *The Rhetorical Nature of XML: Constructing Knowledge in Networked Environments* (Routledge, 2009) and is technical editor for *Emotion Notions: Modeling Personality in Game Character AI* (forthcoming from Cengage Learning). Rudy is currently producing ethical learning games for multiple clients (including EthicsGame.com in Denver, CO) out of the Partnership for Research on Storytelling Environments (PROSE) Lab at UCF.

**John Nordlinger**, a 10-year veteran at Microsoft, leads education initiatives for Microsoft External Research. In this role, he covers the use of transmedia to enhance education—ranging from multi-touch (MS Surface and Tablet PC), to games to enhanced video. He also manages a broad program on Gaming & Computer Science, producing related assets (such as the Microsoft Research Gaming Kit) and events. In 2008, he was responsible for the creation and launch of the Games for Learning Institute at New York University. John recently co-edited the book *Wrath of the Philosopher King: Philosophy and the World of Warcraft* with Luke Cuddy. John has also written, directed and produced a short film “Allegory of the Game“ (a MMOG interpretation to Plato’s “Allegory of the Cave”), which was selected to be shown at the 2008 Chicago, Los Angeles and San Francisco Short Film Festivals. John has philosophy degree from Northeastern University, has lived in Thailand and India. In addition to playing Massively Multiplayer Games online, John also enjoys things that purr including his cats and Enduro motorcycle.

**David Phelps** is graduate student at Indiana University studying Learning Science. He holds a B.A. in Theology and Psychology from Hanover College. He has designed several in-game machinimas for the educational software *Quest Atlantis*. He is currently assisting his graduate advisor, Joshua Danish, with research that examines how game-like simulations and electronic technology can enrich young children’s comprehension of complex systems. His studies and artwork focus on the relationship between time, technology, and ethics. He was born in Austin, Texas.

**Scott Seider** is an Assistant Professor of Curriculum & Teaching at Boston University where his research focuses on the sociopolitical development of adolescents and emerging adults. His work has been published in scholarly journals such as the *Journal of Adolescent Research* and the *Journal of Moral Education* as well as practitioner journals such as *Educational Leadership* and *Edutopia*. A former high school English teacher, Dr. Seider earned his Doctorate in Education from Harvard University where he trained under Dr. Howard Gardner.

**John Sharp** is a game designer, art historian and educator with over 20 years experience. John’s design work is focused on Twitter and social platform games, artgames and non-digital games. His current research is focused on game design curriculum for after-school programs, the history of play and the early history of computer and video games. John is a professor in the Interactive Design & Game Development department and the Art History department at the Savannah College of Art and Design-Atlanta. He also is a member of Local No. 12, a social network game collaboration; a member of The Leisure Society, an artgame collective; and a partner in Supercosm, a digital media consultancy. John’s work has been recognized by ID Magazine, the Art Director’s Club and the Webby Awards.
Miguel Sicart is an Assistant Professor at the IT University of Copenhagen, where he teaches game design. He received his Ph.D. in game studies 2006; taking a multidisciplinary approach to ethics and computer games, he studied issues of game design, violence and videogames and the role of age-regulation codes. His book, *The Ethics of Computer Games*, which is based on his doctoral work, is published on MIT Press. He is currently working on developing a design framework for implementing ethical gameplay in digital games. Email: miguel@itu.dk.

David Simkins holds an MS and is completing his PhD in educational technology at the University of Wisconsin–Madison. He is a founding member of the Games + Learning + Society group and has held the position of co-chair and facilities manager for the GLS conference. An avid fan of most game genres, his first and true love is role playing. He has been playing role playing games since 1975, and is actively involved in designing and organizing face-to-face role playing games and events. Before returning to graduate school, David worked in training and change management for the Illinois and Wisconsin state child welfare social work agencies and used games to teach science and systems thinking to secondary school students. David holds a BA in Philosophy and History from Earlham College.

Dan Staines is currently completing a Ph.D. on videogames and moral pedagogy at the University of New South Wales, Australia. An avid gamer for almost 20 years, Dan has spent much of the last decade working as a professional games critic and writer for the *Australian Enthusiast Press*. His current (profane, sometimes NSFW) blog can be found at http://www.eegra.com.

Jaroslav Švelch is a Ph.D. candidate at Charles University in Prague, Czech Republic. He teaches game studies and new media studies at both Charles University and Masaryk University in Brno. He has been a video game enthusiast since the eighties, when he played Super Mario clones on East German computers. From 2007 to 2009, he was a Fulbright visiting scholar at the MIT-Singapore GAMBIT Game Lab and the Comparative Media Studies program at MIT. There, he took part in the Harvard-MIT Valuable Games initiative. His main research interests are history of video games in Eastern Europe, innovations in game design, and popular culture in new media. Besides research and teaching, he works as a journalist and translator.

Chris Swain is a game designer, USC professor, and co-author of the textbook *Game Design Workshop*. Chris directs the USC Games Institute and was a founder of the EA Game Innovation Lab at USC. His research projects include: *SurgeWorld* (funded by the NIH and created with Children's Hospital LA), *The Redistricting Game* (funded by the Annenberg Center), *Immune Attack* (funded by the NSF and created with the Federation of American Scientists), *ELECT-BiLat* and *ELECT-urbanism* (funded by the US Army for the Institute for Creative Technologies). Chris led game projects in industry for Microsoft, Sony, Disney, Activision, and many others. He was a founding member of the New York design firm R/GA Interactive. At R/GA he lead over 100 projects for clients that include AOL, PBS, Intel, IBM and many others. Chris served on the Board of Directors of the Emmy’s from 2000-2004. His work has received many awards including *Time Magazine*'s Best of the Web.

Roger Travis is Associate Professor of Classics in the Department of Modern and Classical Languages of the University of Connecticut. He is also the Director of the Video Games and Human Values Initiative, based at UConn, an interdisciplinary online nexus for online courses and scholarly activities
About the Contributors

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