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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

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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

Figure 1. Kohlberg's theory of the stages of moral judgment

<p>According to Kohlberg (1981), moral development, as indicated by moral reasoning, universally proceeds in the following sequence of stages:</p> <p>1. Obedience & Punishment orientation—The morality of behaviors is seen as relative to the severity of the rewards or punishments associated with them.</p> <p>2. Self-interest orientation—With a growing recognition that the thoughts of others are separate from one's own, individuals continue to display an egocentric world view but shift in their ability to negotiate with others in a self serving pursuit of whatever is in their own perceived best interest.</p> <p>3. Interpersonal accord & conformity—A greater awareness of the autonomy and feelings of others, as well as recognition of the different roles one has to play within society, leads to a concern for reputation and peer approval.</p> <p>4. Authority and social-order maintaining orientation—Morality continues to be measured by external indicators, now in regard to obeying laws and authorities in accord with maintaining a stable and just society.</p> <p>5. Social contract, utility, individual rights—The absolute authority of law gives way to a more relative view that individuals are separate from society and participate by obeying laws willingly through social contract.</p> <p>6. Universal ethical principles—At a level that few reach, morality becomes a personal responsibility, with the implication that societies should be actively opposed when laws become unjust.</p>

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 later 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. To explore our claims, we use the term social narrative to describe patterns of social interaction, or rather, meaningfully related sequences of actor's actions, thoughts, emotions, and causally related events. In this sense, the term social narrative is not intended to apply only to stories found in books or on television, but also to encompass the narratives implied in interpersonal interactions and represented internally as schemata.

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

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:

“Belief’s 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 Shakespearean 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.

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

have been found in the adventure genre of games for the past few decades, only it has not been until they have progressed from their earlier text-based role playing forms as MUDs and MOOs (traditional and Object Oriented Multiuser Dungeons) to their more graphical and polyphonic forms that they have received mass appeal. Their evolution has led to the contemporary genres of Massively Multiplayer Online Role Playing Games (MMORPGs and virtual worlds. Representative of these genres, Blizzard's *World of Warcraft (WoW)* MMORPG, and Linden Lab's virtual world, Second Life ranked by the Nielsen Company as the top two most played PC computer games as of April 2009 (The Nielsen Company, 2009a). Given that the majority of WoWs over 1.8 million US players are over twenty-four years old (The Nielsen Company, 2009b), and that Second Life's users must be eighteen or over, their collective popularity gives more credit to the claim that people continue to seek out social-narrative play, even as adults.

Second Life is an interesting case study of some challenges regarding dealing with morality in more adult, open ended forms of social narrative play. It provides an immersive, situated experience centered almost exclusively on social interaction. There is no storyline other than that which participants, or 'residents' as they are called, bring with them. And while the very open ended play focuses on social-narrative play, the themes that players choose to act out may not lead to conclusions considered moral. Popular in-world activities like gambling and virtual sex have brought controversy to this world, and have eventually been respectively banned and regulated. Other challenges that players may face in socially oriented gameplay, include cyber-bullying, harassment, virtual scams, copyright infringement, and cheating. While exposure to controversy and immoral virtual behavior may lead into engaged moral discussion, it may depend on how the world or game is designed to transition from gameplay into critical reflection and how discussions are facilitated.

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/preferences 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 game play demonstrate a balance often difficult to achieve, all the 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 game play 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 game play 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.

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