Chapter 10 How Games Can Touch You: Ethics of the Videogame Controller

Mitu Khandaker University of Portsmouth, UK

ABSTRACT

Novel kinesthetic and mimetic video game interfaces, such as the Wii Remote, PlayStation Move, and Microsoft Kinect, are seeing widespread mainstream appeal. However, with games ranging from the family-friendly Rock Band series, to the banned Manhunt 2, this chapter discusses the ethical implications of interfaces that seek to increase the verisimilitude of our game experiences, and offers a position from which to further consider the controller as an integral part of the overall game design.

INTRODUCTION

In 2007, the British Board of Film Classification (responsible for regulating films and videogames in the UK) issued a statement banning Rockstar's *Manhunt 2* ("BBFC Rejects Video Game Manhunt 2," 2007); this was the first game since 1997 to be thusly rejected. The statement claimed that the game "constantly encourages visceral killing with exceptionally little alleviation or distancing." Additionally, four United States Senators at that time also wrote a letter to the Entertainment Software Rating Board (ESRB) to suggest it reconsider its ratings system in light of *Manhunt 2*. Notably,

their concerns specifically addressed the fact that the game was available for the Nintendo Wii. The senators wrote (Tapper, 2007):

[The Wii] system permits children to act out each of the many graphic torture scenes and murders in Manhunt 2 rather than simply manipulating a game pad. This led one clinical psychologist to state that the realistic motions used with the Wii mean that 'You're basically teaching a child the behavioral sequencing of killing'. ... we do believe that the ESRB should take the Wii Remote controller, and future advances in game controllers, which create more realistic gaming environments, into consideration.

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These assertions are exemplary of the "moral panic" demonstrated by the "common media argument," as observed by Sicart, "that games lead to violent behavior and desensitization in the face of violence" (2009). Of course, in the case of Manhunt 2 as above, it is seemingly the kinesthetic mimicry of the motion-sensing Wii Remote controller that raises ethical questions about the game. That is, the way in which the violent actions occurring onscreen must be physically acted out by the player, using the Wii Remote. The game provides a close mapping between the player's real-world action, and the in-game action. We can therefore question whether the game would garner the same kind of controversy had it been developed solely for a classic, non-motion based controller, in which the player's actions (pressing buttons) are abstracted from the character's actions on-screen.

Of course, such "moral panic" regarding new technology is not new; Janet Murray, in her seminal text Hamlet on the Holodeck (1997), describes the cultural history of such adverse reactions and the "fear with which we have greeted every new powerful representational technology." (1997, p. 21) For example, Huxley's Brave New World (1932) described a dystopian vision of the future, triggered by the advent of cinema, in which audiences could enjoy 'feelies': movies which pervade our bodily senses, and feature realistic, somatic representations of "arresting helicopter views, lots of sex, and characters who are constantly bursting into song." (Murray, 1997, p. 20) Murray states that "for Huxley and Bradbury, the more persuasive the medium, the more dangerous it is... as soon as we open ourselves to these illusory environments, we surrender our reason and join with the undifferentiated masses, slavishly wiring ourselves into the stimulation machine at the cost of our very humanity." (1997, p. 21)

This chapter will explore the ethics of videogame controllers, the physical hardware interfaces by which a player may interact with a videogame system. I will explore how interfaces which increasingly map a player's real-life-body to the game system may increase the verisimilitude of "illusory environments." If this does indeed create experiences which are more "persuasive," I will explore the potential ethical implications of this, how much ethical responsibility lies with the player, and the designer respectively. An interdisciplinary approach, combining philosophy and interaction design, will inform this analysis. Where possible, empirical evidence will be referenced in this discussion; otherwise it will be made explicit that the statement is a hypothesis motivated by theory and/or experience as opposed to rigorous empirical observation.

The central thesis of this chapter is that as this verisimilitude of experiences within games increases with innovations in controller technology, from a virtue ethics perspective, there may be potential for misuse by a non-virtuous player. Furthermore, it is proposed that abstract games and simulations lay on opposite ends along a spectrum. As controller technology evolves to more accurately accommodate our bodily inputs, the player's game experience moves away from abstraction and toward simulation instead. It is argued that whilst in certain circumstances (such as training applications) this may be desirable, the sense of aesthetic distance required to critically evaluate one's actions within the game may be lost. Therefore, in terms of games designed for entertainment, any games which do not conform to what we would consider "ethical" in the real world, may have ethical implications if a nonvirtuous person were to play them.

In this chapter, I will first define establish terms. I will look at what is meant by the 'controller', and, importantly what is meant in this context by "ethics" and "ethical implications" in this context. I will also discuss the ethical framework to be used throughout this analysis.

Next, I will examine the notion of aesthetic distance, a concept central to this thesis; the way in which a degree of separation is required for a player to be able to appreciate a game as 'art.'

This will be discussed within the context of the cybernetic relationship between the player and the game. I will argue that games are defined by their capacity for interactivity, of which the control interface is a crucial component dictating the possibilities for physical action. I will also extensively discuss the notion of embodiment in order to highlight the possibilities narrowing the gap between the player and the game, and what this means when simulating games with unethical themes. Finally, I will use this analysis in order to draw conclusions about the ethical responsibilities of both the player and the designer as innovations in controller technology move forward.

This analysis will thus begin with by defining key terms: what is the controller, and what do we mean by ethics in this context?

Defining the Controller

The controller is a player's crucial link to the game world and is a part of the game experience itself; it is the only component that is physical. These controllers may take the form of gamepads, joysticks, keyboards, computer mice, steering wheels, plastic instruments, dance mats, and so on. Interfaces which are kinesthetic or gestural (those which allow for movement or gestures respectively, such as the Nintendo Wii, Microsoft's Kinect, and Sony's PlayStation Move), mimetic interfaces (those which closely resemble their real-life counterparts in appearance and/or their use, such as the Rock Band or Guitar Hero series), or indeed, the classic controller (the traditional joystick-and-buttons gamepad) are all, nonetheless, notable for the physicality of the interaction they offer. It is only videogames that have maintained such obvious physical reliance on a ubiquitous mechanical controller, separating them from non-digital games (Myers, 2009). Gestural and kinesthetic control mechanisms, such as the Nintendo Wii, Microsoft's Kinect, and Sony's PlayStation Move, have become increasingly notable for their commercial popularity. While the concept of gestural interfaces is not at all new (earlier examples include the *Nintendo* Power Glove, the Sega Activator, and so on), these previous examples were generally commercial failures. However, due to improvements in sensor technology being able to more accurately reflect a player's real-life bodily input within a game, novel interfaces of all types are becoming more prevalent. Such a paradigm is termed by Slater & Usoh (1994) as "Body Centered Interaction," and they empirically show that a user's sense of being there within a virtual environment is maximized with interaction techniques that match bodily proprioceptive (our sense of the different parts of our body in relation to one another) and sensory data.

An Ethical Approach

In beginning this line of inquiry, it is useful to first define what is meant by ethics and ethical in this context. The discussion in this chapter takes place within the frameworks of normative ethics; that is, a consideration for the rules, or norms, for our moral behavior, and the way we assess what is right and wrong, in everyday life (Stewart, 2009). Normative ethics breaks every action down into three components, and three types of normative theory, or moral philosophies, are concerned with each of these: utilitarianism concerns itself with the consequences, deontological theories are concerned with the action itself, and their motives, and virtue ethics concerns itself with the agent, or doer. This applied approach offered by normative ethics, and each of these three moral philosophies, are useful tools in examining our always-physical component of our interaction with videogames.

This chapter considers the ethics of games, with respect to the controller, to consist of tree ethical objects, to be explored throughout, using normative theories of ethics. These are thus:

1. The designed system of the game itself (including the controller) as a set of procedures,

affordances, and mappings. Thus, from a consequential ethical approach (such as that considered by the mainstream media argument), the game may be deemed to have a certain "ethical potential" for consequences. This will be referred to hereafter as the game-object.

- 2. The role, from a deontological perspective, of the game designer in the "distributed responsibility," as those that have given rise to a game with such "ethical potential."
- 3. The ethical subject of the player themselves, and the ethical actuality of their experiences, as informed by virtue ethics, and the framework proposed by Sicart (2009). This will be referred to hereafter as the player-subject.

In this section, I will discuss what each of these ethical objects mean in terms of the central argument of this chapter. Embarking upon this examination, we are initially faced with the same questions asked by Sicart in *The Ethics of Computer Games* (2009): "Is it the ethics of the game, or the ethics of playing the game? Is there such a difference?" and "do game designers have moral responsibilities?" (2009, p. 3).

Sicart (2009) defines an ethical game experience as one "in which the player, a body-subject that exists and experiences the game system, can interact with that system as a moral agent"; that is, that they are a being capable of reflecting on what is right and wrong. Thus, an ethical game is "an experience that allows for the player's ethical behavior, interpretation, and, in the best possible case, contribution to the value system of the game experience" (p. 145). Furthermore, unethical content is posited as "the actions that are designed to simulate what we would consider unethical behavior outside the game, but also simulations that in themselves, can be considered unethical" (p. 191).

In line with this, the analysis in this chapter will also place importance on this phenomenology of playing, due to the aforementioned physicality of interactions with controllers, a concept that will be further explored. Indeed, rather than being "a semantic quality of the game," [ethics] have much more to do with "the ontological nature of the game, as well as with the phenomenological experience of games." (Sicart, 2009)

This player-centric ethical framework uses virtue ethics to inform this approach, due to its concern with the agent, or doer. Virtue ethics is a moral philosophy assuming that what is ethical is defined not only by what "conventional morality requires," but also by "what a virtuous person," or in this case, a virtuous player, would do. This perhaps echoes Aristotle's virtues as related to "what the man of practical wisdom would determine." Thus, Sicart asserts that "the virtue ethics approach is essentially player-centered. It defines players as virtuous beings who make game play choices informed by their practical wisdom, guided by the presence (or absence) of a number of player-specific virtues." Therefore, virtuous players are able to cognitively distance themselves from a game experience, in order to step back and critically reflect upon their actions; this will, in the context of this chapter, be discussed alongside the notion of the 'aesthetic distance' of a given game and controller.

Additionally, the notion of "distributed responsibility" (Sicart, 2009) should be considered, referring to the fact that "in the game experience, there are a number of elements that share in non-proportional ways the responsibility for the game's ethical content." While we will use virtue ethics to inform our approach of the players in their experience of playing the game, a non-consequential, deontological perspective (one that is more concerned with intentions rather than consequences) will inform the consideration of the designer's responsibility.

This is an approach more concerned with the *intentions* associated with the creation of ethically questionable games, rather than on its consequences. Arguably, such a consequentialist approach is taken by the aforementioned "common media argument," purporting that games such as *Manhunt 2* lead to unintended behavior modification; for example, as the US senators stated, "teaching a child the behavioral sequencing of killing." However, these frameworks of virtue ethics, (concerned with the player-subject) and deontological theory (concerned with the designer's intentions) allow for discussion beyond the common media argument.

Considering these three ethical objects will inform the line of exploration in this chapter, which is the extent to which the innovations in controller technology increase the verisimilitude of experience within games, and what implications this may have.

In the next section, I will discuss the notion of aesthetic distance, and, as we consider how improvements in controller technology may move a game experience from one of abstraction to one of simulation, why this notion is required for artistic appreciation of a game. I will also discuss the relationship between the player and the game, as mediated by the controller, and thus highlight the primacy of interactivity within games, and how such improvements in technology lead to an increased sense of player embodiment, as elicited by the controller itself.

FROM ABSTRACTION, TOWARD SIMULATION

Aesthetic Distance

Game designer Greg Costikyan in advocates that, in one perspective, "games are a form of art in which [players] make decisions in order to manage resources through game tokens in the pursuit of a goal." (2002) If we note this definition of games as a form of art, then we can propose that the concept of "aesthetic distance" should apply here. This is a literary term, defined by *Encyclopedia Britannica* as "the frame of reference that an artist creates by the use of technical devices

in and around the work of art to differentiate it psychologically from reality" (Encyclopædia Britannica, 2010). Indeed, the term was coined by Edward Bullough to refer to the perspective with which one should contemplate a work of art. Bullough wrote:

Distance... is obtained by separating the object and its appeal from one's own self, by putting it out of gear with practical needs and ends. Thereby the 'contemplation' of the object becomes alone possible. But it does not mean that the relation between the self and the object is broken to the extent of becoming 'impersonal' (Bullough, 1912).

This notion of aesthetic distance is in line with German playwright Brecht's techniques to alienate the play, reminding the spectators that they were experiencing a representation. This arose from his criticism of Aristotelian theatre, which he saw as keeping the audience immersed without giving them a chance to take a step back and critically think about what is happening on stage. In contrast to this, Brecht forced them to think about what they were watching. Blackman (1998) describes similar critiques made by interactive artists, in which the user's expectations were deliberately played around with by introducing into the electronic art works bugs and malfunctions, to disturb the choice offered to the user; these attempt to force the user to reflect upon their own preconceived expectations and desires within virtual space.

Therefore, the use of the virtue ethics perspective is appropriate here, as there is otherwise a tendency to think of the player as a passive, "guilty victim," who is "abandoned by her moral intuitions in a labyrinth demiurgically created by the game developers" (Sicart, 2009). Instead, we may consider a virtuous player, who is one who willingly and knowingly engages in the game; a moral user capable of reflecting ethically on the experiences they encounter in the game, and how it shapes their own values both within and outside

of the game world. Therefore, the virtuous player is someone who is able to critically reflect upon their experience; this is comparable to the effect of enforcing a sense of aesthetic distance within an artistic experience, such as a game.

In this section, I will examine how the player relates the game, as mediated by the controller, and will also define and argue the concept of controller-evoked phenomenological embodiment as a mechanism by which the aesthetic distance is narrowed. By using philosophical and theoretical game design perspectives, I will argue that games played using classic controllers (such as the gamepad and keyboard) actually enforce a sense of aesthetic distance, allowing them to be more abstract experiences, which can be appreciated and evaluated as art by an ethically virtuous player. However, it is suggested that as controller technology evolves, and a sense of embodiment increases, the aesthetic distance actually narrows. This means that the player's experience of the game moves away from abstraction, and instead toward simulation. What this means, and the ethical implications of this, will be discussed.

The Embodied Player

Throughout history, there has been a prevalent belief in the Cartesian duality of mind and body; that is, that the notion that the mind exists separately from our physical selves. Increasingly, however, philosophers, psychologists, scientists, and even interaction designers alike are conceding that our bodily perceptions are the "ultimate foundation of our knowledge about ourselves and the world." As noted by Klemmer, "direct physical interaction with the world is a key constituting factor of cognitive development during childhood" (2006). Further, the neuroscientist Damasio states that "the body contributes more than life support; it also contributes a *content* that is part and parcel of the workings of the normal mind" (1994, p. 226). In short, human experience is shaped by our very physicality and our presence in the world;

we recognize the world through our ability to physically act within it.

The concept of embodiment is rooted in the phenomenological philosophies of the early 20th century. Phenomenology is a branch of philosophy that concerns itself with lived experience and has its roots in the work of philosophers such as Husserl, Heiddegger, and Merleau-Ponty. Merleau-Ponty describes the task of phenomenology as unveiling the pre-theoretical layer of human experience. That is, it is the study of how we each experience things. Dourish, in his seminal text "Where the Action Is" (2001), advocates the idea of embodiment as a sense of phenomenological presence, comparable to Biocca, who defines phenomenological embodiment as "being able to act through one's technologically enhanced body" (Biocca, 1997).

Steven Poole, author of *Trigger Happy*, a book about the aesthetics of videogames, states that "the videogame is not simply a cerebral or visual experience; just as importantly it is a physical involvement—the tactile success or otherwise of the human-machine interface" (2000, p. 73), and describes this relationship between a player and game as a "cybernetic thing." Westecott acknowledges that the classic controller presents a sense of abstraction between the physical actions of pressing the button and the visual happenings on-screen, thus it is tempting to equate the classic controller with a sense of Cartesian dualism; that the physical and the mental are separate (2008).

However, even with a classic controller, there is still a sense of spatial compliance; moving an avatar left, for example, also generally involves pressing the thumb stick or directional pad to the left side. Thus, the space of play, including the body, has always been implicated in the game experience to some degree; in this way, perhaps, the classic controller does not, as discussed above, break the "relation between the [player] and the object... to the extent of becoming impersonal." Simultaneously, Poole theorizes that the "distant mapping" of the classic controller enforces a sense

of alienation from the game world, which he terms as "cybernetic dissonance" (2000); we can thus equate this to the notion of aesthetic distance. It is argued, then, that the verisimilitude of experiences offered by the classic controller are at the abstract end of the spectrum, enforcing a sense of aesthetic distance required for a virtuous player to be aware of their actions.

Of course, we do not play with the controller, but rather with "representations of objects arbitrarily assigned to various controller buttons and sequences." Of course, this assignment is not necessarily arbitrary, but rather a design decision (for a broad overview of this, see the text Game Feel by Steve Swink (2009)). For example, the closeness of this mapping between controller-andgame is variable, as is the nature of the mapping. This is a design decision, which varies from game to game. This concept of 'closeness' in interaction refers to how far an action on the controller relates to real-world action. For example, whilst using the drum peripheral to play Rock Band exhibits very close mapping to playing real drums (i.e. the action of drumming in Rock Band is the same as the action of drumming in real life), using a NES gamepad to play Street Fighter does not closely map to real fighting (i.e. pressing buttons is not the same as real life kicking or really performing a Dragon Punch). Gregersen & Grodal assert that the extent to which an embodied sense of agency, ownership, and personal efficacy is fostered is very much a question of overall design including interface design, and note how games may be designed to selectively target and activate the auditory, visual, and proprioceptive systems (2009). Such design decisions also dictate the verisimilitude of the game, dictating where along the abstractionsimulation spectrum a game experience may lay.

Sicart notes that phenomenological experience of the game is what Salen & Zimmerman define as interaction, and asserts that to interact with a system is to create meaning (2003). If interaction is the phenomenological experience of the game, then it follows that changing the nature of the

interaction by altering the interface also changes the nature of the player's phenomenological experience.

Controller-Evoked Phenomenological Embodiment

In aiding our thinking about the cybernetic connection of playing videogames, and phenomenological embodiment, we may consider the technological degree to which a player's physical self is mapped to a game, via the controller. We can define this hereafter as its cybernetic bandwidth. The cybernetic bandwidth is formed of information channels (such as tangibility, kinesthetic movement, and force feedback) and the varying resolutions of these channels (i.e., how accurate it is). Therefore, the classic controller, while tangible, has one input modality, and thus would have low cybernetic bandwidth (unless there is also a Rumble Pak), whereas the Wii Remote that affords tangibility and kinesthetic movement has higher cybernetic bandwidth. Conversely, Microsoft's Project Natal control mechanism, which may have a higher resolution of kinesthetic movement (e.g., greater accuracy and more information sampled), does not afford tangibility, so has a different cybernetic bandwidth. This concept of the cybernetic bandwidth is therefore an abstract model, helpful in thinking about the degree of verisimilitude of the mapping between a player's physical actions, and the resulting in-game output.

However, increasingly physical interfaces (with a higher cybernetic bandwidth), move us beyond the abstraction of the keyboard or classic controller, and bring a sense of phenomenological embodiment back to the game experience, via the very physicality of the interface. For example, in a game such as *Boom Blox* (on the Nintendo Wii), although the player is disembodied in the sense of lacking any kind of avatar representation, the Wiimote helps to evoke a sense of phenomenological embodiment by being able to manipulate objects at hand naturally, by either using the grab tool (and

being able to maneuver blocks as expected), or throwing the ball. Thus, the sense of embodiment and being able to act through one's technologically enhanced body is strong, despite the lack of visual representation. The embodiment is elicited through a sense of kinesthetic and tactile agency via the particular designed mapping between the Wii Remote and the game.

Therefore, a higher cybernetic bandwidth, arguably leads to his increased sense of phenomenological embodiment. However, as this verisimilitude of experience continues to increase, the game experience becomes one of simulation; this may lead to problems where the game features ethically questionable content.

Narrowing Gaps in Embodiment, Narrowing Aesthetic Distance

When a real life physical action is performed, such as hitting an object with a stick, this will translate into "easily felt force dynamics"; the enactor will feel the effect on their muscle tension, as well as the dynamics of posture and touch. However, such crucial sensory inputs are missing when using an interface such as Wii Remote, Sony Eye, or indeed, Natal, to hit a virtual representation of the same object in a virtual space.

Therefore, the cybernetic dissonance (i.e., the disjoint between the player's physical action and the action that occurs in the game) remains, though somewhat narrowed by increasingly real interfaces. A lack of total phenomenological mapping every sensory sense may still, as mentioned by Gregersen & Grodal, yield a dissociation of sensory experience (2009); that is, there still remains a gap in the phenomenological embodiment granted by the interface. Even though the Wii Remote has some advantage over Natal in this capacity, as it is not only gestural but also tactile, there are still shortfalls in physical feedback.

Therefore, as asserted by Gregersen & Grodal (2009), this yields an incongruent motor realism—which essentially translates to "what you

feel and what you see do not add up." The sense of ownership of the real body is high in such a scenario because body schema processes are activated, as opposed to when than when simply pressing a button on a classic controller, yet there is no visceral feedback to accompany this.

Indeed, empirical research has shown multimodal interfaces are potentially instrumental in reducing the problems associated with this incongruent motor realism (Barthelmess & Oviatt, 2009; Cohen et al., 1989); if a device such as the Wii Remote were, for example, augmented with a force feedback device, then during a tennis serve in Wii Sports, this could be activated, allowing for a greater sense of motor congruence than is currently elicited. There is thus a closer mapping between the player's expectations, and the actual feedback granted by the game system, granting a greater sense of real-world validity to the system, important if we are to design interfaces which are truly mimetic.

Of course, this becomes increasingly problematic as we consider a violent gestural game such as *Manhunt 2*; if ecological validity through the addition of force feedback were applied to the interface of a game such as *Manhunt 2*, allowing a player to feel the physical, visceral sense of stabbing a human being, we may posit that the controversy surrounding this would be greatly heightened.

In the next section, I will explore the way in which, from a virtue ethics perspective, the issue of multi-modal interfaces is a potent one, for both the designer and the player-subject; narrowing the gaps in embodiment lead to a closer mapping between reality and the game. By contrast, I will discuss the way in which classic control mechanisms, with their proposed sense of cybernetic dissonance, do not carry the same weight of ethical implications due to the aesthetic distance they necessarily afford.

Simulating Unethical Themes

The ethical implications of narrowing the embodiment gap become clearer once we apply this to a more morally questionable narrative, such as *Manhunt 2*.

We may, then, consider the ethics of employing a multi-modal interface in order to purposely heighten the sense of visceral violence in the game. It was asserted that some advanced type of force feedback technology could be employed in order to allow the player to feel the real, visceral sense of stabbing another human being.

Indeed, Slater & Usoh define interaction as "the ability of the participant to move through and change the world" (1994) and divide this into two further categories: the mundane and magical. They assert that "mundane interaction is that which attempts to faithfully reproduce a corresponding interaction in everyday reality," whereas "magical interaction involves actions that are only imaginable in everyday reality" (Slater & Usoh, 1994). We can further extend this to mean interactions which are exaggerated or have an oversimplified sequencing.

A hypothetical version of Manhunt 2 as described above, which offers feedback corresponding to reality, would aspire to mundane rather than magical interaction in order to understand the reprehensible nature of these actions; creating an interface that is fully mimetic in order to more accurately reflect real-life outcomes. Such increased embodiment and agency may in fact heighten the artistic expression intended by a game; however, such a game would also be immensely ethically questionable from a virtue ethics perspective, and would strongly rely upon Sicart's notion of a "virtuous player," that is, "those player-subjects who have actually developed their ethical reasoning" (2009). Further to this, as the aesthetic distance would have narrowed in such a situation, one may posit that the virtuous player themselves must be relied upon to cognitively distance themselves.

Certainly, Bogost, in discussing Manhunt 2 in a column entitled "Gestures as Meaning," also claims, "the game's coupling of gestures to violent acts makes them more, not less repugnant by implicating the player in their commitment" (2009). He asserts that "in Manhunt 2, we are meant to feel the power of Daniel Lamb's psychopathy alongside our own disgust at it. It is a game that helps us see how thin the line can be between madness and reason by making us perform abuse" (Bogost, 2009). This line of argument, however, relies upon the assertion by Salen & Zimmerman that the way in which games create meaning for players is via a mechanism of "double-consciousness," a "multilayered experience" that is "something separate from, but connected to the real world" (2003). In this sense, the player is fully aware of their game character (where appropriate) as an artificial construct. This constant transfer of identity, which Steve Swink in Game Feel (2009) describes as "capricious," is part of what makes games fun and engaging. However, the capricious flow of identity means that this extension can be "withdrawn" at an instant. Swink suggests that in this way, players avoid blame, but maintain engagement, "getting back to the pleasurable sensations of control more quickly" (2009).

The capricious sense of embodiment and cybernetic dissonance elicited by traditional interfaces can be thought of as offering a similar sense of alienation to German playwright Brecht's application in theatre, as described earlier in this chapter.

In this context, one can consider the relationship between the player and the character within a game as one of a puppeteer-and-puppet; however, with an increase in controller-evoked phenomenological embodiment, this increasingly becomes a relationship of direct identification. Indeed, such a scenario, especially when taken to full technological extremes (full spatial immersion), would perhaps seem the ultimate realization of the 'common media argument' of a "murder simulator." Thus, such a move away from cybernetic dissonance, and the aesthetic distance this grants,

seems simultaneously powerful and problematic. Whilst an increased sense of embodiment may strengthen the rhetoric of a game seeking to highlight the reprehensible nature of violent action, it simultaneously creates a dangerous sense of close identification for those who would seek to misuse such an experience.

However, if we note that the games designer may selectively design a system to target and activate the auditory, visual, somatosensory, and proprioceptive systems, we can also consider that the feedback from such an action does not necessarily have to correspond to reality. If we consider instead that a multi-modal interface for Manhunt 2 may instead aspire to 'magical' interaction, we can note the potential ethical implications for such a game which does not "differentiate [itself] psychologically from reality" (Encyclopædia Britannica, 2010), and yet is not intended for a player to understand the reprehensible nature of their actions. Such a hypothetical game would again, require not only an ethically virtuous player, but also one may consider the deontological intentions of the game designer, too. The latter concept is further explored in the next section.

Bogost asserts in *Persuasive Games* (2007), that "videogames have a unique persuasive power," as they provide a systemic view of the world which can promote a certain mental model (Bogost, 2007). He defines procedural rhetoric as "the art of persuasion through rule-based representations and interactions," and "the act of using processes persuasively" (Bogost, 2007); this can, arguably, be extended to the nature of the controller. An increased sense of phenomenological embodiment, it is asserted, also allows for kind of procedural rhetoric that is perhaps more visceral and powerful, by committing the 'forced actions' of the player to their real-world, physical embodiment.

Indeed, in the context of virtue ethics, Sicart asks, "does the act of playing games reinforce moral desensitization?" (2009). While this is a perspective often reflected in the "common media

argument," it can be argued that the greater the sense of phenomenological embodiment, the more the notion of the "virtuous player" must be relied upon, as we will further examine.

However, the player-subject is not the only ethical object that must be relied upon; the following case study of a particularly morally reprehensible game, RapeLay, will highlight the need for considering the deontological intentions of the games designer too, and include the designer as an ethical object who has a part of the distributed responsibility of the ethics of games.

RapeLay: A Case Study in Unethical Simulation

The PC game RapeLay (2006) has garnered much controversy for its content, which would rightfully fit Sicart's definition of 'unethical'; that is, "actions that are designed to simulate what we would consider unethical behaviour outside the game, but also simulations that in themselves, can be considered unethical." Indeed, the game is described thus:

In Rape Lay, gamers direct a character to sexually assault a mother and her two young daughters at an underground station, before raping any of a selection of female characters... Rape Lay, which was released in 2006, encourages players to force the virtual woman they rape to have an abortion. If they are allowed to give birth the woman throws the player's character under a train, according to reviews of the game. It also has a feature allowing several players to team up against individual women. (Moore).

Despite the clearly morally reprehensible theme, a common supporting argument for *RapeLay* is equating the game with other media tackling similar themes. For example, if rape may be addressed in (once-banned) films such as *A Clockwork Orange*, then surely videogames, a medium rightfully striving to show its ability to

handle mature and complex themes, should also be able to portray this. In A Clockwork Orange, however, the audience is meant to feel repugnance at the protagonist Alex's actions; we can equate this to Bogost's assertions about our own disgust at Daniel's actions in Manhunt 2 (2007). Of course, these claims, as examined, remain valid as long as the player maintains a sense of double-consciousness, and if the player is virtuous.

It is, however, outside of the scope of this chapter to discuss the ethics of games in respect to their content, though we can see that comparing RapePlay to A Clockwork Orange in this way however becomes blurrier when the interface is altered, creating a sense of increased embodiment. RapePlay is currently designed for a classic keyboard-and-mouse interface, though can claims of 'artistic merit' be maintained if the game were released, or modified, to be played via a kinesthetic interface, such as the Wii Remote, or even Natal, so that the game could be kinesthetically acted out? This therefore ventures further into the territory of a full rape simulator, with very real potentials for misuse by a non-virtuous player. Would the undoubted public outcry that would ensue be justified in such a case? Again, we may refer to Sicart's assertion that "a designer is responsible for the object, but the players and their communities are ultimately responsible for the experience" (2009), though also acknowledges that "designers also play a role, due to their duties in the distributed responsibility network" (Sicart, 2009).

Furthermore, we can assert that it would be unethical, and non-virtuous for a game portraying rape with a kinesthetic interface to be purposely designed thus. Whilst such an assertion may depend on nuances of the game beyond the potential for interactivity and action, from a virtue ethics perspective, this is unethical to design or play such a game. Authorial intent is important here, and we thus consider the deontological perspective of the game designer's decision process in creating games which may allow for this kind of interaction. As Sicart states, "a player has to have

ludic maturity to understand the reasons behind the simulation and the fact that she is interacting with a game world specifically designed to produce a ludic experience" (2009).

In the next section, we discuss another facet of the potential for misuse of the powers of simulation; one that is the ethical responsibility of the game designer-object. This is the power to *mis*represent simulation, and grant a mistaken sense of virtuosity to players.

MISREPRESENTING SIMULATION

The Problem with Magical vs. Mundane Mimicry

Rock Band is often criticized for replacing teen's interest in real instruments, and certainly Harmonix CEO Alex Rigopoulos is often questioned about this (Dubner, 2009). However, a study by Youth Music in the UK (2007) concluded that such games have in fact yielded more of an interest in "real" music among young people as a result. The report noted that focus group participants in the study were "forthright in their view that how closely a game's interface resembled a 'real' instrument was a vital part of its credibility, both in their eyes, and the eyes of their parents" (Youth Music in the UK, 2007). It's been noted of course, that games with instrument interfaces currently have a long way to go to make this leap—excepting, of course, the Rock Band drums and microphone, which exhibit the highest degree of mapping between the game interface and the real instrument. It does however remain to be seen whether players continue to be interested if they do not achieve the same level of success with real instruments as their simulated counterparts.

Jarvinen, (2009) analyses the emotional experience afforded by such music games, noting how pleasure is derived according to Kubovy's notion of virtuosity; that is, from one's own performance and ability. Juul (2009) suggests

that players engaging with games such as *Guitar Hero*, *Rock Band*, *Dance Dance Revolution*, and *Singstar* are performing a choreographed scene, rather than playing music. These games support the display of virtuosity and creativity through specific motor and auditory skills; an example of something Slater and Usoh's (1994) notion of 'magical interaction'.

The real ethical issues however, perhaps rise in the lack of clarity presented to players about which of their embodied interactions are intended to be mundane, and to reflect reality, and which are exaggerated, magical interactions; and furthermore, the misconceptions in the media about this. For example, Wii Fit has effectively marketed itself as not a game, but as a utility for exercise. It follows then, that many consumers expect this as a replacement for gym membership or other exercise. However, empirical studies found that Wii Fit produced "underwhelming results," in terms of exercise intensity, and in all cases, performing an actual exercise activity rather than Wii Fit's virtual approximation resulted in "significantly higher" caloric expenditure. The Rhythm Boxing activity, in particular, burned one-third of the calories expended per minute of traditional boxing, although overall, Wii Fit burns twice as many calories as a sedentary videogame (Cowan, 2009).

As a subset of considering the designer's distributed responsibility as an ethical object, an additional question of business ethics is thus raised here; just because it is conceded that Wii Fit is more efficient at burning calories than classic, sedentary interfaces, is it ethical to not make the game's magical interaction explicit, given the activities within Wii Fit are not suitable replacements for real activity?

This chapter has largely discussed the potential for ethical problems which may arise when playing and designing games which offer an increased verisimilitude of experience due to the control mechanism. Of course, when played by a virtuous player-subject, such games, akin to simulation, have the potential for benefits, too;

the most notable of example of this is in training applications for military and/or healthcare. Indeed, a study of 33 laparoscopic surgeons found that those who played videogames were 27 percent faster at advanced surgical procedures and made 37 percent fewer errors compared to those who did not play videogames. Indeed, advanced videogame skill and experience are said to be "significant predictors of suturing capabilities, even after controlling for sex, years of medical training and number of laparoscopic surgeries performed" (Association, 2008). Additionally, a second study of 303 laparoscopic surgeons (82 percent men; 18 percent women) also showed that surgeons who played videogames requiring spatial skills and hand dexterity and then performed a drill testing these skills were significantly faster at their first attempt and across all 10 trials than the surgeons who did not the play videogames first (Association, 2008).

Sicart asserts that "game designers are ethically responsible for the ways they have created the formal system of rules; that is, according to the behaviors they want to encourage in players" (2009). For the purposes of this chapter, this formal system includes, of course, the control mechanism. He further states that "games force behaviors by rules: the meaning of those behaviors, as communicated through the game world to the player, constitutes the ethics of computer games as designed objects" (Sicart, 2009). With respect to controllers with higher cybernetic bandwidth, often these behaviors are kinesthetic and gestural, such as in the example of *Manhunt 2*.

TOWARD A CYBERNETIC HEGEMONY

Poole theorizes that "in general, cybernetic developments [that is, innovations in controller technology] will always increase the possibilities of closer and more pleasurable interaction with a video game." However, he also goes onto question

how far this notion remains relevant as interfaces further evolve: "Will [total immersion], then become the dominant means of video game control? Perhaps; but if so, the spirit of Heidegger will rise again to warn that such cybernetic hegemony will necessarily narrow the field of possibilities" (Poole, 2000).

He suggests that "the perfect videogame feel requires the ever-increasing imaginative and physical involvement of the player to stop somewhere short of full bodily immersion" (Poole, 2008). Thus, the ethical game-object, and how it relates to the experience of the player-subject requires a boundary.

Such an assertion is in line with Salen & Zimmerman's concept of the immersive fallacy, which refers to the widely held, but seldom examined idea among gamers and developers alike that "the pleasure of a media experience lies in its ability to sensually transport the participant into an illusory, simulated reality" (2003, p. 450). We can see the widespread nature of this immersive fallacy manifest itself in countless commercial games which promise more and more realistic graphics, and thus, greater immersion. This notion is something that "takes over all our attention, our whole perceptual apparatus" (Murray, 1997). As Salen & Zimmerman point out, the danger of immersive fallacy "is that it misrepresents how play functions... and game design can suffer as a result" (2003). In other words, the immersive fallacy is the mistaken idea that the more realistic a game, the better, or more worthwhile it is; the way in which games create meaning for players is not through an abundance of technologicallydelivered sensory information that aspires to reality, but, as Salen & Zimmerman suggest, via a mechanism of "double-consciousness"; that is, it is "something separate from, but connected to the real world" (2003).

This idea of a boundary between the player and the game is also one that is explored in the 1999 David Cronenberg movie, *eXistenZ*. In an analysis of this, Keane says that "much of the distinctive-

ness of the film lays in its deliberate resistance to similarities with prior videogame and virtual reality films. Part of that distinctiveness is exactly the fact that Cronenberg concentrates so much on the physical interface between player and game" (2002). Keane cites Cronenberg speaking of the movie: "It seemed to me that what people are really doing in computer and video games is trying to get closer and closer to fusing themselves with the game... So I went that little bit further – if I want to be the game, the game will also want to be me" (David Cronenberg quoted in Keane, 2002).

Indeed, eXistenZ presents three kinds of control systems: the first one that the viewer is introduced to are Meta-Flesh Game Pods, which are connected via an UmbyCord into a bioport (an opening in the player's spinal cord). This highly invasive interface paradigm is further exacerbated in the game-within-the-game by the MicroPod, which disappears into the player's spinal cord completely. Finally, at the end of the film, the non-invasive VR system worn by the players is revealed. Therefore, from VR system, to plugging into spines, to pods disappearing completely into spines, Cronenberg increasingly "fuses" the player with the game, making the technology used to do so more invisible, and more intrusive, each time. Indeed, one of the movie's most iconic lines is its last, in which the protagonists ask: "Tell me the truth: Are we still in the game?", thus suggesting the blurring of the boundaries; a warning, perhaps, about the dangers of virtual reality and simulation.

Of course, we may equate this to Janet Murray's review of the early concerns about cinema and television, as mentioned in the introduction o this chapter; the ethics of becoming absorbed in a passive technical medium manifested themselves in the cultural media of the time through works such as *Huxley's Brave New World* (1932). Indeed, cultural theorist Steven Shaviro notes that "Each time we extend ourselves technologically, some part of the real gives way to the virtual. This is why every cultural innovation is attended by an ambivalent sense of loss" (2003, p. 104). This

idea of extending ourselves technologically, akin to the idea of phenomenological embodiment as already discussed, is also presented by Marshall McLuhan. Shaviro cites McLuhan's assertion that "every technology is an extension of ourselves," although "in each instance of technological change... we misrecognize the very extensions that we have created and see them as forces alien to ourselves" (2003, p. 104).

Shaviro presents this notion of technological extension to being a cyborg, stating "I become a cyborg when some part of my actual body is taken over by the virtual. My sensory apparatuses, and my organs, are always being replaced or extended by technological devices. This process is coextensive with the whole of human culture" (2003, p. 103), and he notes that the distinction lies particularly in the use of "electromechanical devices" (2003). Therefore, "perhaps just wearing glasses doesn't quite make [one] a cyborg, but watching television certainly does" (Shaviro, 2003, p. 104).

Therefore, Shaviro presents a possible counterargument to the central thesis of this chapter; if we have always been cyborgs to some extent, as he suggests, then are concerns over the ethical implications of increased fidelity of simulation unwarranted? If the boundary (the aesthetic distance) between ourselves and the game are minimized, is this cause for concern about nonvirtuous players? Or can this be equated to early dystopian concerns about cinema, as in *Brave New World*?

However, as we have discussed, games are defined by their capacity for interactivity, differentiating them from other mediums. Indeed, as Sicart argues, "there are some specific ontological properties of computer games that raise unique ethical challenges" (2009), namely the primacy of interactivity. Therefore, it is argued that games can potentially offer an enhanced sense of verisimilitude to reality, given a controller with a high cybernetic bandwidth. Therefore, whilst we can place other mediums on the 'abstraction' end of

our proposed abstraction-simulation spectrum, games offer an unparalleled potential for simulation, greater than other forms of media.

Such an idea is akin to the notion of the aesthetic distance required to appreciate a game as a game, and thus for a virtuous player-subject to be able to critically evaluate their actions within a game. Thus, it is posited that an increased sense of aesthetic distance from a game, created by the controller, provides the player-subject with an abstract experience; it is suggested that such an abstract experience is required for players to be able to critically evaluate their actions as art. This is particularly salient when considering games which may feature "unethical content," as examined earlier in this chapter.

CONCLUSION

In this chapter, I have argued that increasingly accurate controller input modalities strengthen the prosthetic cyborgian relationship between a player and a game. In other words, as controllers get closer and closer to mapping a player's reallife, physical body, into a game, more and more parts of our experience are essentially replaced with this prosthetic relationship. Therefore, the experience no longer has as many mediating factors (e.g. abstraction from classic controllers) to help "differentiate it psychologically from reality" (Encyclopædia Britannica, 2010). This therefore, decreases the player's sense of aesthetic distance required for the player to critically evaluate a game experience as art.

Perhaps the only way in which we may be certain of the capricious transfer of identity may be to maintain cybernetic dissonance, so one may argue this is appropriate for the aesthetic distance required for tackling controversial themes. Conversely, as pointed out, in order to portray the reprehensibility of certain themes, one may assert that an increased sense of embodiment as granted by kinesthetic, mimetic interfaces is

useful, when aspiring to mundane rather than magical interaction.

However, this increased verisimilitude means that rather than being appreciating an experience as a game, the game moves along the spectrum from abstraction toward simulation. This does not have as many ethical implications if we hold the notion of the virtuous player, who is able to "understand the reasons behind the simulation and the fact that she is interacting with a game world specifically designed to produce a ludic experience" (Sicart, 2009). However, if a non-virtuous player were to play the same game, this may be ethically problematic, as discussed in the analysis of RapeLay.

Sicart states that "games are powerful simulation tools that convey worldviews, messages, and values" (2009), and this power becomes even more prevalent with increased controller-evoked embodiment. Sicart continues that "Emptying games of ethical reflection in their design and using unethical content for its shock value as a marketing resource means not only devaluing the possibilities of games as a means of expression, but also making products that are unethical objects" (2009).

In the case of *RapeLay*, or indeed, *Manhunt* 2, we may also place ethical responsibility upon a designer not to create games which could be misused by an non-virtuous player, though simultaneously, we may also consider whether ethical concerns over the embodiment elicited in a game such as *Manhunt* 2 may be reactionary and sensationalist in a current cultural context.

However, as videogame technology continues to evolve, including, but not limited to, the controllers, graphical fidelity, and other factors increasing the verisimilitude of game experiences, we can see this as an ongoing march toward the concept of the "Holy Grail" of the *Holodeck*; a notion addressed by Salen and Zimmerman (2003) as the immersive fallacy. Such a concept is explored by *eXistenZ* in the tradition of dystopian media regarding new technology, though

can be considered a specific warning against control mechanisms and games which are unable to "differentiate [themselves] psychologically from reality" (Encyclopædia Britannica, 2010), if we are to consider the Bullough's definition of aesthetic distance. Indeed, Cronenberg seems, in eXistenZ to present a dystopian scenario in which there is no boundary at all between the game and the player; a cybernetic hegemony. As stated by Cronenberg "it seemed to me that what people are really doing in computer and videogames is trying to get closer and closer to fusing themselves with the game," (Keene, 2002) and eXistenZ is the ultimate extrapolation of this trend, in which any boundaries between the player and the game, and thus, any aesthetic distance, is eliminated.

Cultural theorist Jean Baudrillard states that "a possible definition of the real is: that for which it is possible to find an equivalent representation" (2003). He asserts that "abstraction today is no longer that of the map, the double, the mirror, or the concept. Simulation is no longer that of a territory, a referential being or a substance. It is the generation by models of a real without origin or reality: a hyper-real which is henceforth sheltered from the imaginary, and from any distinction between the real and the imaginary" (1988). Indeed, game designer Harvey Smith suggests that "we might, paradoxically, have a truer experience swimming together through simulacra; an experience almost exclusively focused on the things that make us human, on the things that separate us from bacteria, shrubs or insects" (Smith, 2010); that is, it is perhaps the abstract experiences which have the most to teach us.

It may also be argued that dystopian media, such as the movie *eXistenZ* is typical of the "describes the fear with which we have greeted every new powerful representational technology" (Murray, 1999) and revisit Shaviro's assertion that "every cultural innovation is attended by an ambivalent sense of loss." It may also be argued that the philosophical and theoretical game design perspective undertaken in the analysis in this chap-

ter has yet to be empirically proven. However, at the same time, in summing up the concerns and ethical implications highlighted within this paper, we may keep in mind this from Shaviro (2003):

You may say that all this is merely science fiction. None of it is happening, not now, not here, not yet. But science fiction does not claim to be reportage, just as it does not claim to be prophetic. It does not actually represent the present, just as it does not really predict the future. Rather, it involves both the present and the future, while being reducible to neither. For science fiction is about the shadow that the future casts upon the present. It shows us how profoundly we are haunted by the ghosts of what has not yet happened.

These epiphenomenal overviews of the ethical impact of the videogame control mechanism raise much uncertainty, and further questions as control mechanisms continue to evolve and mature. It is the ethical responsibility of game designers to explore the ethical issues raised by the decision to use a particular interface type in a game, and how the game uses the possibility space afforded by that interface. Indeed, Perron & Wolf (2009) question whether, as control mechanisms evolve, and new controllers and peripherals appear, there are universal statements and claims about interactivity that will hold up in the light of such future innovations. With this evolution, the scope of what games are able to achieve are also broadened. From this uncertainty, one conclusion can be drawn – the unethical course of action is then, perhaps, to not thoroughly consider the implications of the choice of technology and interface for games moving forward.

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Models, Techniques and Frameworks

Karen Schrier Columbia University, USA

David Gibson Arizona State University, USA



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