



Routledge Research in Aesthetics

THE AESTHETICS OF VIDEOGAMES

Edited by
Jon Robson and Grant Tavinor



The Aesthetics of Videogames

This collection of essays is devoted to the philosophical examination of the aesthetics of videogames. Videogames represent one of the most significant developments in the modern popular arts, and they have recently attracted much attention among philosophers of art and aestheticians. As a burgeoning medium of artistic expression, videogames raise entirely new aesthetic concerns, particularly concerning their ontology, interactivity, and aesthetic value. The essays in this volume address a number of pressing theoretical issues related to these areas, including but not limited to: the nature of performance and identity in videogames; their status as an interactive form of art; the ethical problems raised by violence in videogames; and the representation of women in videogames and the gaming community. *The Aesthetics of Videogames* is an important contribution to analytic aesthetics that deals with an important and growing art form.

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The Aesthetics of Videogames

Edited by
Jon Robson and Grant Tavinor

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1 Introduction

Jon Robson and Grant Tavinor

Videogames are perhaps the most significant development in the modern popular arts, and they provide a fertile field of study for philosophers of the arts (and philosophers more generally). This volume presents the reader with the first anthology exclusively devoted to the philosophical examination of the aesthetics of videogames. Not only do videogames have bearing on a range of standard aesthetic issues, they also raise entirely new topics of concern for philosophically inclined aestheticians. These topics range from the ontology of videogames, the nature of videogame interactivity, the ethics of videogame violence, and the aesthetics of game design and gameplay. While the papers in this volume offer a wide and even conflicting range of perspectives on these issues, their authors are united in the belief that there are important philosophical lessons to be learned from the in-depth study of videogames, and that philosophical aesthetics can make important contributions to the understanding of videogames.

It will hardly surprise the reader to learn that serious philosophical interest in videogames is a recent phenomenon. Videogames themselves are, after all, a very new art form. There is no uncontroversial date for the earliest videogame, but estimates typically vary from the mid-1940s to the early 1960s. By contrast, philosophers of art working in areas such as theatre, music, dance, and poetry have several millennia's worth of material to focus on. And even other relative newcomers on the art scene—such as films and comics—have existed for well over a century. Further, there has been a long-standing tendency amongst philosophical aestheticians to be somewhat conservative in their choice of subject matter—a conservatism that manifested itself both in the choice of art forms studied and the particular instances of those art forms discussed (until recently, for example, philosophers of music had focused almost exclusively on works within the Western classical canon). Fortunately, though, this tendency has become considerably less pronounced in recent years, and an increasing number of philosophers of videogames have shown that they are keen to make up for lost time. In recent years such philosophers have investigated, as the chapters in this volume will illustrate, a truly remarkable range of topics.

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There are many ways in which the consideration of videogames might prove to be useful to philosophers. For example, we may—as Jon Cogburn and Mark Silcox (2008) ably demonstrate—use videogames as an accessible means to illustrate extant philosophical views or arguments. Alternatively, we might use videogames merely as an arbitrary example to illustrate some general points with aesthetics. The contributors to this volume are, for the most part, engaged in a very different project. Their interest lies not in using videogames as a pedagogical or illustrative tool for broader philosophical issues but, rather, in studying the philosophical issues which videogames themselves generate. While we cannot hope to do justice to the full scope of these issues in this introduction, we hope that the brief overviews we offer below will give the reader some indication as to the ways in which videogames are proving to be a fertile topic for philosophical investigation.

The first three chapters in our collection deal with issues in the ontology of videogames, asking questions about the nature of videogames themselves. What kinds of things are videogames? What are the identity conditions for videogames? What distinguishes instances of videogames from instances of other art forms? As with many other art forms, these questions aren't as easy to answer as they may initially seem. We are used to talking as if, say, the particular disc we hold in our hand is identical to a game such as *Lego Worlds*. A little reflection, though, shows us that things aren't so straightforward. *Lego Worlds*, the game itself, would continue to exist even if our particular copy of the game was destroyed. Similarly, it seems as if the same game could be realized in a very different form: as a Nintendo Switch cartridge, or a digital download, for example. The chapters in this volume adopt diverse approaches, but they all aim to shed light on some of the difficult ontological issues that arise from considering the nature of videogames.

In “Ontology and Transmedial Games,” Christopher Bartel considers the claim that certain games are “transmedial.” That is, that there are certain cases where literally the same game can be played across disparate media. It seems, for example, that two competitors could play a game of chess using physical pieces, using a computer program, or merely by representing the game in their own minds. By contrast, it seems much less clear that someone who plays a computerized version of ice hockey is *really* playing ice hockey in a different medium. What is required, then, is some method by which we can determine whether we are dealing with two distinct games or a single game across different media. Bartel considers, and rejects, a view according to which sameness of game is determined solely by sameness of rules, before proposing his own preferred view. According to Bartel sameness of game is determined by a combination of sameness of rules and sameness of skill required to play the relevant games.

In “Videogames as Neither Video nor Games: A Negative Ontology,” Brock Rough focuses not on what videogames are but on what they *aren't*. Rough argues for the surprising conclusion that, etymology notwithstanding,

videogames need not be games and they need not involve any kind of video display. Rough begins by considering Bernard Suits' influential definition of "game" according to which "playing a game is the voluntary attempt to overcome unnecessary obstacles" (2014: 43).¹ He then argues that there can be videogames that fail to qualify as games on Suits' account. Rough then goes on to focus on the "video" part of "videogame." He begins with the observation that videogames, particularly many modern videogames, are not merely visual affairs. Rather, they may also make use of other sensory modalities such as touch and hearing. From this, Rough argues that there could be (and, indeed, may actually be) videogames that lack any visual element. What this all means—perhaps echoing the definition of art debate—is that definitions of videogames may need to look beyond intrinsic or perceptible features towards intentional or historical analyses.

Shelby Moser's chapter, "Videogame Ontology, Constitutive Rules, and Algorithms," argues for a positive ontology of videogames that identifies a particular videogame with its algorithm. Before she arrives at this position, however, Moser seeks to reconcile this algorithmic ontology with the earlier and familiar claim that specific games can be identified and individuated by their rules. According to Suits (2014) it is "constitutive rules" that individuate games: to use Moser's example, adapting a running race so that the "runners jump and clear hurdles as they run toward a finish line, we [would] now have an example of hurdling." The problem with applying this rule-based account of game identity to videogames is that there are reasons to think that different playings of the same videogame may involve varied and even incompatible rule sets. By drawing on illustrative precedents from interactive and non-interactive art forms, but also on a careful account of the nature of algorithms, Moser argues that the philosophy of the arts has the resources to account for this ontological peculiarity of videogames. This leads Moser to formulate the concept of a *complete game algorithm*, an abstract structure that is physically instantiated within a videogame program that is interacted with in the individual playing of that game. Different playings may manifest different Suitsian games; however, it is the complete game algorithm that explains why these different games are playings of the same videogame work.

The next three chapters investigate important connections between videogames and some perennial debates within aesthetics. Traditional theorizing within the philosophy of art has focused on issues relating to art in general—definitions of "art," the nature of aesthetic value, and so forth—but this emphasis has begun to change in recent decades. Following influential work, such as Kivy (1997), it has now become more common for philosophers of art to look not only at these general issues but also at specific issues that arise concerning particular art forms. This tendency toward the specific can also be seen in much work within philosophy of videogames. While some philosophers of videogames have focused on general issues (asking, for example, how, if at all, the new phenomenon of

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videogames fits within traditional definitions of art), others have focused on what is specific to videogames. These latter philosophers have asked what it is that distinguishes videogames from other art forms, how our aesthetic assessment of videogames differs from that of other related art forms (such as film), and much more besides. The chapters in this section largely fall within this camp. That is, while they address issues (such as creativity and aesthetic value) that have been of interest to philosophers of art in general, they focus specifically on the ways in which these issues arise with respect to videogames.

In “Appreciating Videogames,” Zach Jurgensen sets out to develop a new account of the aesthetics of videogames. While Jurgensen is sympathetic toward those who have argued that videogames are (or are capable of being) genuine artworks, he believes that the methodology they have employed has had some unfortunate consequences for our understanding of the aesthetics of videogames. Efforts to establish the art status of videogames have, understandably, focused on the points of commonality between videogames and traditional artworks but, Jurgensen argues, this has sometimes led philosophers to underplay those aspects of videogames that distinguish them from these other art forms. In particular, he argues that there has been a tendency to underestimate the importance of videogames being *games*. Jurgensen then goes on to consider some ways in which game mechanics might have an important influence on our aesthetic evaluation of videogames and to argue that any fully developed aesthetics of videogames would need to give a central position to their ludic status.

In “The Beautiful Gamer? On the Aesthetics of Videogame Performances,” Jon Robson moves focus from the aesthetics of games themselves to the aesthetics of individual performances, or playings, of such games. After defending the aesthetic interest of videogame playings, Robson asks whether we can assimilate the aesthetics of performance in this area to performance in some already well-theorized domain. In particular, Robson considers comparisons between the playing of videogames and performance in three other areas: sports, film, and theatre. He highlights some important areas of commonality between videogames and each of these areas but, ultimately, concludes that none of them provides a successful model for understanding the aesthetics of videogame performances. Given this, Robson suggests, we are left with the important task of developing a new model for understanding the aesthetics of individual videogame playings.

Aaron Meskin’s chapter, “Videogames and Creativity,” considers various claims that might be, and sometimes have been, made concerning the relationship between videogames and creativity. There has, as Meskin notes, been a tendency in the popular press to criticize videogames as a distraction from more creative (or otherwise valuable) activities, alongside an opposing tendency amongst some defenders of videogames to argue that they enhance, rather than impede, creativity. However, both sides have sometimes been less than admirably clear in the claims they make and rather

lacking in empirical evidence to support their conjectures. In order to cast some light on these issues, Meskin largely focuses on two related questions. First, to what extent does videogame play promote or retard creativity? Second, to what extent does videogame play involve creativity? In response to the first question, Meskin surveys extant empirical work in the area and argues that it provides no clear evidence that videogames either promote or retard creativity. In response to the second, Meskin argues that playing videogames often (though by no means always) involves a significant degree of creativity.

Many, perhaps most, videogames are fictions. While this claim will, doubtless, strike many readers as too obvious to require any defense, it has proven surprisingly controversial, with various videogame theorists (such as Espen Aarseth [1997]) arguing that we should reject the claim that videogames (and their contents) are fictional. This has led to a vibrant controversy within game studies between various camps such as narratologists (who stress the fictional aspects of videogames) and ludologists (who stress their gamehood). Such debates have, however, proven rather less influential amongst philosophers who have tended to retain the view that (most) videogames are clearly fictions. This is likely because, as the discussions in this section will illustrate, philosophers typically regard fiction as a rather broader category than their colleagues within games studies (such that there is no tension in, to use Aarseth's [2007: 36] example, regarding a videogame dragon as both fictional and virtual). The authors of the next three chapters in the volume are all united in taking (many) videogames to be fictions. However, they do not focus on arguing for this claim (though for such arguments see Tavinor [2009: 34–60]) but, rather, on exploring some fundamental questions concerning the nature of videogame fictions.

In “Interactivity, Fictionality, and Incompleteness,” Nathan Wildman and Richard Woodward argue for a new account of interactivity in videogames. It seems obvious that videogames are typically interactive in some way (or ways) in which many other fictions—including standard films, novels, and plays—are not. What's less clear, though, is precisely what marks the relevant difference. After raising worries for some standard accounts, Wildman and Woodward propose their own view according to which videogame interactivity is a form of *incompleteness*. In particular, they argue that videogame interactivity arises from what they term “forced choice incompleteness.” A fiction is forced choice incomplete when it leaves it open to users of the fiction to choose for themselves which of various options become true within the fiction but forces them to make some choice. For example, a complete playing of *Persona 5* requires a player to either “rat” on some of her fellow Phantom Thieves or to keep their identities secret. However, the game itself leaves it open which of these options the player takes. While all (or almost all) fictions are incomplete in some respects (to use a famous example, *Macbeth* is incomplete with respect to the number of Lady Macbeth's children), most of these are not forced choice incomplete.

It is this difference that, Wildman and Woodward argue, will allow us to explain what differentiates videogame fictions (and other interactive fictions) from ordinary fictions.

Given the ways in which gamers contribute to the unfolding of narratives found in videogame fictions, it may seem natural to regard them as taking on the role of narrators. For example, as discussed above, it is up to the gamer to determine whether her playing of *Persona 5* is one in which she is loyal to her compatriots or one in which she sells them down the river. However, in his chapter “Why Gamers Are Not Narrators,” Andrew Kania argues that this tempting view is mistaken. Kania argues that, while (many) videogames are interactive narratives, gamers do not qualify as co-narrators of the videogames they play. To support this conclusion Kania appeals to Berys Gaut’s (2010: 232–233) account of narration according to which a narrator must intend to transmit story information. He then goes on to argue that there is good reason to think that typical game players do not meet this requirement.

Grant Tavinor’s chapter “Videogames and Virtual Media” investigates the effect that a new wave of virtual reality technology is having on the representational and interactive media of videogames. Finding that the concept of virtual worlds and media is itself quite vague in the literature, Tavinor initially argues against a metaphysically robust conception of the term recently advanced by David Chalmers. He suggests, contrary to Chalmers’ contention that virtual worlds cannot be fictions, that the theory of fiction is capable of accounting for virtual worlds if we take the designation “virtual” to refer to features of a representational medium rather than metaphysical aspects of a world represented by those media. In the context of videogames, virtual media embody a “structural and functional isomorphism” between their representations and the gameworlds thus represented. This isomorphism manifests most clearly in the sense of visual “situation” afforded by stereoscopic headsets and motion tracking technology, and the “gestural control” via which players can now interact with the virtual fictional worlds of videogames.

The final four chapters in our collection all consider the relationship between videogames and broader social issues, particularly regarding how people and their actions are represented within videogames. Anyone with even a passing familiarity with recent pop culture cannot help but have noticed some vociferous debates concerning the place of videogames in society—the seemingly unending controversy surrounding the ethics of violent videogames and the recent “Gamergate” furor being two prominent examples. However, the manner in which such debates are conducted often fails (to put things mildly) to live up to philosophical standards of clarity and rigor. The contributors in these chapters begin to address these shortcomings by employing philosophical techniques to clarify our understanding of such debates while also advocating for their own preferred views. In doing so, they consider issues such as violence in videogames, the treatment

of women in videogames, and the potential for videogames to enrich our emotional lives.

In her chapter “Videogames and Gendered Invisibility,” Stephanie Patridge investigates the representation of women in videogames. Patridge focuses on whether women are underrepresented in videogames (or in certain genres of videogames) and on whether they are disproportionately sexualized when they are present. Patridge argues that extant arguments for underrepresentation of women in videogames have sometimes been overly hasty and insufficiently attentive to the relevant empirical data. Further, the picture this data presents is, she argues, rather more nuanced than we might initially think. In particular, Patridge considers some data which seems to suggest that (despite a regrettable history in these matters) there is no longer a clear gender gap when it comes to overall numbers of player-characters available and that certain problematic aspects of the representation of women in videogames have also been lessening in recent years. However, the news here isn’t entirely good. Patridge also notes, for example, that the gender balance in videogames becomes much more problematic when we move away from “casual games” and that there are still various problems with the way women are represented in many videogames. Further, Patridge highlights a continuing widespread lack of representation of some groups of women (such as women of color) within videogames.

In his chapter “Games and the Moral Transformation of Violence,” C. Thi Nguyen focuses on videogame violence. Nguyen’s concern is not primarily with the kind of “ultra-violent” videogame (such as the notorious game *Manhunt*) that has tended to be the focus of popular attention but, rather, on our actions toward other players in typical multiplayer games such as *Team Fortress* and *Starcraft*. Nguyen argues that our actions in these games frequently qualify as genuine acts of violence toward our fellow players. However, Nguyen also argues that such actions need not be problematic and, indeed, that this kind of violence can sometimes add to the moral value of the games in question. Yet, he also notes that the conditions required for this kind of “moral transformation” are by no means easy to meet. Given this, Nguyen presents a detailed discussion of the way in which those in the gaming community (both players and game designers) can facilitate this valuable form of moral transformation.

While the association with aggression and violence has been an ever-present theoretical and empirical concern with videogames, the potential of videogames to represent romantic love is a rather less studied phenomenon. Mark Silcox’s chapter “Videogames and the ‘Theater of Love’ ” asks whether videogames can sit within the romance genre, but also more particularly, whether they can count as instances of true romances. Silcox is skeptical: while the videogames may adopt the thematic concerns of romance, for example by presenting dating simulators or romantic plots, “they will rarely, if ever, succeed in fulfilling certain rather specialized additional criteria that would make them be suitable for classification within the romance

genre.” What are these criteria? Silcox argues that in literary form, true romance involves appreciators thinking about *themselves* in a particular way, as though their identity was involved in the romantic events and that these events are understood in terms of their own desires and romantic yearnings. Videogames, according to Silcox, lack the potential for this kind of surrogate fantasy because of the “largely pointless and nugatory” aims one finds in characteristic gameplay.

In “Pornographic Videogames: A Feminist Examination,” Mari Mikkola examines the ethics of the sexualization of women in videogames, focusing the discussion on the Japanese genre of *ero*ge videogames. In *ero*ge, gameplay typically tasks the player with pursuing romantic and even sexual relationships with videogame characters, and the rewards and progression in such games are usually tied to success at these tasks. *Ero*ge has, understandably, been a subject of moral criticism, and a particularly notorious instance of the genre that involves depictions of simulated sexual violence, *RapeLay*, has been a frequent target of moral censure. Mikkola questions exactly what it is that is ethically worrisome about such games, initially drawing on previous ethical critiques of pornography. She finds that two common criticisms of pornography—that it *objectifies* and that it *infantilizes* women in a sexual manner—do not quite capture the precise worries with *ero*ge. Rather, it is the prominence of the sexualization of children that is the most intuitively powerful argument against *ero*ge. But even justifying these intuitions also turns out to require some subtle distinctions of precisely what kind of fantasies are depicted in such games, and the moral critique provided by such an argument may apply to only some *ero*ge games.

Note

1. The Suitsian definition of “game” plays a key role in a number of the chapters in this volume. For more complete explications, and defenses, of the Suitsian view, see Suits (1967, 2014).

References

- Aarseth, Espen. (1997). *Cybertext: Perspectives on Ergodic Literature*. Baltimore: JHU Press.
- . (2007). “Doors and Perception: Fiction vs. Simulation in Games.” *Intermediality: History and Theory of the Arts, Literature and Technologies* (9): 35–44.
- Cogburn, Jon, and Mark Silcox. (2008). *Philosophy Through Video Games*. Abingdon, UK: Routledge.
- Gaut, Berys. (2010). *A Philosophy of Cinematic Art*. New York: Cambridge University Press.
- Kivy, Peter. (1997). *Philosophies of Arts: An Essay in Differences*. Cambridge: Cambridge University Press.
- Suits, Bernard. (1967). “What Is a Game?” *Philosophy of Science* 34 (2): 148–156.
- . (2014). *The Grasshopper: Games, Life, and Utopia*, 3rd ed. Peterborough: Broadview Press.
- Tavinor, Grant. (2009). *The Art of Videogames*. Oxford: Wiley-Blackwell.

2 Ontology and Transmedial Games

Christopher Bartel

1. Introduction

Some theorists claim that games are “transmedial,” meaning that the same game can be played in different media. For instance, it matters not at all ontologically whether one plays chess on a tabletop board or on a computer; it remains the same game. The phenomenon of transmedial games appears to be widespread—think of the number of tabletop games, card games, and sports that all have videogame versions. The question is whether all games are in principle transmedial; or, if not, under what conditions are games transmedial? Since the early days of videogames, many have been based on already familiar real-world games. Indeed, one of the earliest videogames was *Tennis for Two*.¹ However, interest in transmedial games is not limited only to videogames, but rather the identity of transmedial games is a question that arises for all games.² There have been non-electronic instances of transmedial games. For instance, dice versions of poker, card versions of craps, and board game versions of football are all possible cases of transmedial games (at least so far). Cases like these lead to the obvious question, when are two games instances of the *same* game?

This question is part of an older and familiar ontological debate about the identity conditions of repeatable entities. This is a debate that has received much attention, for instance, in the philosophy of music, and some of the basic points about the ontology of musical works seem to be applicable to games. Each performance of a musical work is a genuine instance of that work, and the same can be said about games: each “playing” of a game may be a distinct event, but each of these events are instances of the same game. Roughly, the relationship between a *performance* and a *musical work* is similar to the relationship between the *playing of a game* and the *game itself*.³ Ontologically, games are *types* and individual playings are *tokens* of the type.⁴

Using the ontology of musical works as a model to talk about the ontology of games is helpful, but many of the problems that haunt the ontology of musical works arise for the ontology of games. For instance, we identify musical works by reference to their relevant identity conditions.

The question, of course, is: which properties are included in the relevant identity conditions for musical works? For instance, are tempo and dynamics essential properties of a musical work? What about key signature: if I transpose a song to another key, does it remain the same song? Or, what about instrumentation: if I perform on the guitar a piece of music that was written for the trumpet, am I performing a different piece?⁵ These ultimately are questions about the wider identity conditions of musical works.

A discussion of the ontology of games may begin in the same place, but ultimately a similar problem will arise. A game-type is an abstract set of rules, and a game-token is any playing that follows that—and only that—set of rules. But how broadly can we understand the application of rules? The phenomenon of transmedial games suggests that the game's medium is not an essential property of the game-type. But is this correct? Or, is this true of *all* games, or only some? Is soccer ultimately a game that is dependent on the medium of real-world physics, or do videogames like *FIFA 16* count as instances of soccer? When talking about musical works, some philosophers have argued that instrumentation is an identifying condition of musical works—because the appreciation of a performer's musicianship is dependent on specific instruments⁶—but does something similar also hold for games? Are games just abstract sets of rules *simpliciter*, or are they sets of rules that must be performed using only certain kinds of materials?

This may sound like a purely academic issue—mere metaphysical day-dreaming that carries no real-world implications. But questions of ontology underlie many assumptions that we make in our real-world dealings with games. For instance, the question of what counts as fair play in a game is partly an ontological question. Certain moves within a game may be allowed in some instances, but not in others. It may depend on whether you are playing *this* game or *that* game. Additionally, questions of ontology underlie our assumptions about the applicability of copyright law. If I clone a popular game and change nothing more than its appearance, I open myself up to a possible lawsuit. I might insist that my game is a different game because it looks different, but that is a shallow defense, one that is unlikely to protect me from accusations of copyright infringement.

Transmedial games offer an interesting focus for these ontological questions. Ultimately whether some game is transmedial or not comes down to whether the medium of the game is one of its identifying conditions. If a game is transmedial, then the game preserves its identity across changes in media. So, are all games transmedial, or just some? Intuitions are difficult to rely on here. It may be highly intuitive to think that chess is a transmedial game, but that intuition has little bearing on how we think of the transmedial potential of soccer. To my knowledge, little has been written about the ontology of transmedial games. By contrast, many scholars have examined the transmedial nature of *stories*, which includes discussion of the way that games can figure in transmedia storytelling. But this

scholarship does not touch on the possible transmedial nature of games themselves. In fact, Jesper Juul commented that the idea of transmedial games “has not . . . been explored in any systematic way” (2005: 48), and that has not changed since the publication of his book. Given this, looking at what Juul has to say gives us the best place to start. In this essay, I will first spell out Juul’s account of transmedial games as I understand it and argue that his account is too broad. Juul identifies games only as sets of rules, and this leads him to see the phenomenon of transmedial games as being broader than I think it is. In place of Juul’s account, I suggest that games are transmedial when two game-tokens employ the same sets of rules *and* when it takes the same set of skills to play those two tokens. This conception of transmedial games best explains our most common intuitions about games but is also able to explain some key phenomena in our critical engagement with games.

2. Proviso

Before moving on, I need to clarify a few points, specifically about the relationship between games and their media and about the demands of transmedial games. I will make three points. First, many of the examples of transmedial games that Juul talks about are cases where a non-electronic game is adapted as a videogame. I will follow Juul throughout this paper in talking mainly about adaptations between electronic and non-electronic media; but we should not understand that to suggest that these are the only two media for games. The media for games at least includes physics-based games (like sports), card games, board games, dice games, pen-and-paper games, and electronic games. Perhaps there are more media, but it is sufficient to say that there are more than two. So, to say that a game is “transmedial” is not always to say that it can be realized in both electronic and non-electronic media. Instead, a game is transmedial if it can move between any two media.

Second, we should keep in mind that a transmedial game need not be realizable in *all* media. Tabletop chess and videogame chess may be two instances of the same game, but it is likely impossible to create a dice version of chess. This should not lead us to think that chess is not a transmedial game, but instead we should just think that chess is not transmedial in that way. It can still be meaningful to describe a game as being “transmedial” even if it can only be translated into one other medium.

Finally, some games can be realized in a new setting using different hardware and yet these might not count as transmedial realizations. For instance, imagine playing *Simon* on a videogame console using the four directional buttons in place of the colored buttons of *Simon*—this does not require a change of medium; it simply requires a change of controller.⁷

Now the questions we can turn to are, which games can be transmedial and what are the limitations of game identity?

3. Juul's Account

Jesper Juul suggests that games are transmedial just if they possess the same rules (2005: 48–52), though he offers little in support of this suggestion. Games are transmedial, Juul claims, because the rules of a game may be realized in different media. This general point is uncontroversial, and it is easy to find examples that fit. What is more controversial, however, is that Juul seems to treat it as a general rule that *all* games are in principle transmedial. (Again, this is not argued for by Juul, but it can be inferred from his discussion.) The only apparent difficulty regarding the transference of some game to a new medium according to Juul is that some games translate better than others: “games can move between different media—sometimes with ease, sometimes with great difficulty” (48). To explain why, Juul distinguishes between “implementations” and “adaptations” (2005: 49, 51). When some games change media, “it is possible to unambiguously map one-to-one correspondences between all the possible game states in the computer version and the [physical game]” (49). These are cases of *implementation*. Such cases offer strong support for the idea of transmedial games due to the possibility of unambiguously mapping each game state across the two media. This would mean that there would be no loss of nuance in the gameplay, even though a game might be experienced differently in some new medium. For instance, Juul discusses the possibility of turning tic-tac-toe into a “math game”:

Two players take turns picking a number between 1 and 9. Each number can only be picked once. The first player to have 3 numbers that add up to 15 has won. If all numbers are picked without a winner, the game is drawn. . . . This mathematical game is *equivalent* to tic-tac-toe in the sense that there is an unambiguous mapping between every possible position in tic-tac-toe and every possible position of the mathematical game.

(2005: 51–52)

Despite this (supposed) equivalence, players would have very different experiences of each—tic-tac-toe is a spatial problem while the other is a math problem (2005: 52). However, on Juul's account this does not matter ontologically. The two games are formally equivalent because they essentially contain the same rules. The difference is merely a matter of how those rules are realized in the new medium. For Juul, the rules are the sole identifying condition of any game, while the experience of the game is not.

Alternatively, other transmedial realizations count as *adaptations*. These are characterized by a loss of detail. With adaptations, the physical game offers highly nuanced gameplay while the virtual game offers only a simplification of the gameplay. The loss of nuance comes from the fact

that it is not possible to map each game state unambiguously across the two media. This is generally true of sports games: “much detail is lost in the physics model of the computer program because it is a simplification of the real world. . . . Adapting soccer to computers is therefore a highly selective adaptation” (2005: 49). A videogame adaptation of any sport can only approximate the physics of the game, so the aspects of the game that are adapted must be selected for by the programmer. Of course, some adaptations may be better than others—*NHL 15* for the PS4 is a far better adaptation than *Ice Hockey* for the NES—but with adaptations, the prospect of mapping one-to-one correspondences between all the possible game states is lost.

How strictly should we interpret Juul’s claims about transmedial games? In the preceding discussion, I have been interpreting Juul as making a fairly strong claim. Specifically, when Juul speaks of adaptations, I interpret him as making the claim that adaptations are sufficient for the preservation of a game’s identity—that adaptations are instances of the same game-type. But perhaps this interpretation is too strong, and therefore uncharitable. Perhaps we should instead interpret him as making the weaker claim that adaptations are simply analogous to each other in a way that justifies using the same label (for example, “soccer”) to describe them.⁸ On this weaker interpretation, Juul should not be understood as making the claim that *FIFA 16* is an instance of the game-type soccer, though soccer is recognizable in *FIFA 16*.

Which interpretation can we attribute to Juul? I think there is good reason to think that Juul is aiming for the stronger interpretation. When Juul talks about adaptations, he does so in the context of a wider discussion of transmedial games where adaptations are offered as one example. Moreover, there is good reason to want to avoid the weaker interpretation. Chess is a paradigmatic example of a transmedial game because the relationship between tabletop chess and videogame chess is a strong one: they are not simply recognizably similar; rather, they are instances of the same game-type. We might think that two games are the same *in some respect*, and can therefore justifiably go by many of the same labels; but this isn’t saying much. Mere similarity is easy to come by. If mere similarity is all that Juul is after, then that would be a weak claim, one that is not very interesting. Think again of the case of music: two performances may be similar in some respect, but not in respect to the instantiation of a musical work. Two musical performances may have been performed by the same musician, or performed in the same key, or may contain the same motifs; but these are cases of mere similarity. When we say that two performances are instances of the *same* musical work, we are saying something stronger than mere similarity—we are saying something about their identity. The same is true of games. To say that some game is transmedial is to say that two game-tokens are instances of the same game-type despite any difference in their respective media.

4. Objections to Juul

Juul's account offers two important observations. First, there is no primary medium of games: "There is no set of equipment or material support common to all games. What is common, however, is a specific sort of immaterial support, namely the upholding of the rules" (2005: 48). Second, the rules of a game are essential to the game's identity. We can call this the *rule constraint*: if two games have different rules, then they are different games. This constraint seems to be both necessary and sufficient for Juul: it is necessary as the introduction of new rules would result in a different game, and it is sufficient as rules can be realized in different media in a way that is formally equivalent.

As stated earlier, Juul's general point—that the rules of some games can be realized in different media—is uncontroversial. Alternatively, Juul's tendency to treat this as a universal claim about games is highly suspect. Some games really do seem to be limited to a single medium and cannot be implemented or adapted to another. For instance, think of a game like Twister. Without the physical challenge of contorting your body in awkward positions, you are not playing Twister. It is not simply that Twister would be poorly realized in some other medium; rather, it would be impossible to realize it in some other medium, at least not without a significant alteration of the rules. This last point is conclusive: if a game is essentially an abstract set of rules as Juul argues, then a different set of rules would be a different game. The main problem is that, for Juul's account to work, we need to think of transmedial adaptations as somehow preserving the sameness of the rules across different media; but this clearly is not the case.

Consider adaptations of sports to videogames: it is difficult to say that the adapted rules are "formally equivalent" to the rules of the physical game. For instance, one of the rules of basketball is that the player must dribble the ball. In the physical game, this rule places a certain burden on the players—it requires effort on the player's part to avoid falling foul of the rule. But in a videogame, all the player needs to do is move their avatar and it will automatically dribble the ball. One cannot fail to dribble the ball. The rule simply becomes absorbed by the game's mechanics. This is a point that Juul is certainly aware of—that a videogame adaptation of any sport can only approximate the physics of the game—but then, if the rules can only be adapted approximately, why should we think of these (even approximately) as the same rules? Instead, it may be more accurate to say that the rules of basketball cannot be adapted to the medium of videogames; but we can create videogames that are thematically based on basketball that contain their own distinctive rules.

Sports-to-videogame adaptations are not the only suspicious cases. To take another example, consider videogame-to-board-game adaptations. The popularity of *Pac-Man* led to the development of a board game adaptation by Milton Bradley in 1982.⁹ The board game is a slow strategy game

for two to four players. All players move around the board simultaneously along with two ghosts. The player moves his own Pac-Man both to avoid the ghosts and to collect marbles while also moving the ghosts to capture the opponent player's Pac-Man. When caught, the player forfeits marbles to the opponent player. It would be wrong, in my view, to say that the board game and the videogame are instances of the same game-type. They clearly contain quite different rules. Again, we should say that the board game is thematically based on the videogame at best.

So, I suggest that Juul's distinction between implementation and adaptation is a false one. Only games that can be translated into a new medium through implementation deserve to be called transmedial games—that is, only games that contain the same set of rules in both media are transmedial games. Adaptations always require some change to the rules of the game, which conflicts with the rule constraint. To put the point another way, the essence of my objection to Juul's account concerns the medium-dependence of rules. I agree with Juul that there is no primary medium of games; but the fact that *games* are not medium-dependent does not show that *rules* are not medium-dependent. Some rules seem to be inherently dependent on certain media. Games are designed with an understanding of their medium, and rules arise out of the unique conditions and practical limitations of each medium. Consider a videogame like *Portal*, where the player navigates through a puzzle by opening dimensional gates that allow the player-character to teleport to different areas in the game space. *Portal* presents a spatial problem that can only be realized within the medium of videogames. The rules of *Portal* cannot be implemented in any other medium because they exploit the unique affordances of its medium.¹⁰ In the end, it may be correct to say that the medium of a game is *not* one of its identifying conditions, but instead we might say that various media limit the kind of rules that can be implemented within them. Either way, transmedial games are fewer than Juul would think.

5. The Skill Set Constraint

Despite my criticism, I still think that Juul is right to believe that some games are transmedial. But which ones? In this section, I want to offer one positive account of what it is that makes a game transmedial.

When we say that two game-tokens are instances of the same game-type across different media, we are saying something more than that the rules can be realized in these media. We are saying that it takes the same *skill set* to play each token. In addition to Juul's rule constraint, games are distinguished by the *skill set constraint*: when two game-tokens are instances of the same game-type, it requires the same skill set to play each. Part of the reason why we identify tabletop chess and videogame chess as instances of the same game is because it takes the same skill set to play each. The skills required to play chess have nothing to do with the physical activity

of moving pieces on a board, but rather have to do with the ability to plan attacks and anticipate your opponent's moves. A person who has mastered tabletop chess can play videogame chess with the same level of mastery. This is certainly not true of soccer and videogame soccer, and, I suggest, this is part of the reason why we should think of these as different games. Consider again Juul's example of tic-tac-toe and his hypothetical math game. Juul suggests that these are the same game because the rules are formally equivalent. I suspect that Juul thinks of the rule constraint as a necessary and sufficient one, and this is where we begin to disagree. *Pace* Juul, part of the reason why we should think of these as different games, despite their formal similarity, is because it requires different skill sets to play each. I hold that the rule constraint and the skill set constraint are individually both necessary conditions, but not individually sufficient ones. Whether the rule constraint and the skill set constraint are jointly necessary and sufficient is a matter that I will discuss later.

The basic point of the skill set constraint is to recognize that the ability to play some games can be carried over across different media, while the ability to play other games cannot. But the rough formulation that I offered above needs refinement. How strongly should we interpret the skill set constraint? What exactly does it entail? Surely the set of skills associated with each game can be fairly complex. Games can be played at different levels of skill; there can be numerous techniques, strategies, and tactics available to players; some players will favor individual techniques, strategies, and tactics over others; and some players might be masters of a single strategy and yet be utterly hopeless when gameplay forces them to adopt a different strategy. Despite this complexity, we would still want to insist that players who play at differing levels of skill or who adopt differing strategies are still playing the *same* game. There are numerous issues that need to be teased out and misunderstandings to avoid.

First, what *is* a skill set? Roughly, a *skill set* is all the available means to achieve some outcome.¹¹ For instance, consider the sport of high jumping. The outcome is to clear the bar, but there are many techniques available. The Fosbury Flop—also known as the Brill Bend—is a far better technique for clearing the bar than the scissor, the straddle, or the Western roll.¹² Yet we would not want to say that the player who employs the straddle is playing a different game from the player who employs the Fosbury Flop. The example of high jump shows that there may be multiple means available to achieve the outcome, and some means are better than others. What is crucial, however, is that the efficiency and success of all the available means are judged by the same metric: the achievement of that specific outcome.¹³ Importantly, if we recognize a skill set as a broad set of techniques, strategies, and tactics associated with playing some game still allows us to insist on the necessary role of the skill set constraint: the set of skills employed to achieve the outcome in high jump is clearly a different set of skills than those employed when playing videogame-high-jump.

Second, what does it mean to possess a skill set? Think of the obvious point that various players will play a game at different levels of skill: should we say that these players possess different skill sets, or should we instead say that the mastery of a skill set comes in degrees? Similar issues have been widely discussed in the literature on concept possession in epistemology and the philosophy of mind.¹⁴ I will not go into detail regarding those debates here. Instead, I will outline the approach that I favor, namely that mastery of a skill (or a concept) comes in degrees. Imagine that the Women's National Soccer Team charitably plays a training match against a local children's summer camp soccer team. While these two teams are playing at different levels, it would be very odd to think that they are playing different games during the same match. Rather, it would be natural to think that it takes a certain set of skills to play soccer, which the Women's National Team have mastered and the children's team are still learning.

Following on from the above two points, we should also recognize that some games—specifically team sports where individual team members play in distinctive, specialized positions—require players to develop specialized techniques to successfully play their position. To put the point another way, it would be a mistake to think that each individual player must develop the same set of skills that are associated with playing some game. For instance, Abby Wambach is the top-scoring striker in international soccer, but this does not mean that she would be an effective goalkeeper. If we thought that one skill set corresponded to one game-type, then the specialization of skill sets that is required in many team sports would seem to imply that Abby Wambach is playing one game while Hope Solo is playing another game, even when they are on the same team. However, notice that my formulation of the skill set constraint does not make this implication—that is, I do not hold that all of the skills required to play some game must be possessed by each individual player. In fact, my formulation would allow that, for some game-types, the skills required to play the game are such that they must be divided up by multiple specialized positions, so that playing the game requires the joint effort of many players. This point aside, it is still the case that the skills required to play soccer are not sufficient to prepare one to play videogame soccer and *vice versa*. Although Abby Wambach is a world-class striker, this does not mean that she thereby possesses the skills to play *FIFA 16*, even when playing her own avatar!

To sum up, I hold that the formal equivalence of rules is too broad of a basis to individuate games. Instead, we are talking about two different games if the skills required to play one does not prepare one to play the other. The set of skills associated with playing a game must be spelled out in reference to the game's intended outcome. There are many ways to achieve the outcome, the skills required to achieve the outcome can be possessed in varying degrees, and some games require individual players to specialize on a subset of the skills associated with the game. In the following section, I will address three possible objections.

6. Objections and Replies

First, it may be objected that the skill set constraint is not fine-grained enough to individuate some games from each other. There are many games that require the same skill sets (or near enough) to play, and yet we would still think that they are different games. For instance, think of the numerous match-three videogames, like *Bejeweled*, *Chuzzle*, and *Candy Crush Saga*. These very simple games all employ the same game mechanic—match three or more tiles of the same type—and differ from each other only minimally. The differences are likely not significant enough for us to think that it takes a different skill set to play each game. Yet we intuitively think of these as different games. So, does this mean that the skill set constraint is unable to distinguish between these games?¹⁵ An initial reply would be to point out that these games in fact contain different rules. So, by the rule constraint, these are already different games. But that reply simply sidesteps what this objection is trying to get at. Imagine that I create a game that clones *Candy Crush Saga*, which I call *Bubble Gum Story*. My game contains all the same rules, all the same levels, and it takes the same associated skills to play. The only difference between *Candy Crush Saga* and *Bubble Gum Story* is the game's appearance—my pieces look more like bubble gum than like hard candies. If these two games cannot be distinguished by the rule constraint or the skill set constraint, then are they the same game?

In reply, I would make two points. First, I accept that our two constraints are not able to distinguish between these games; but that is not a bad thing. Many players often criticize games for being too similar—indeed, many connect-three games are merely clones of each other. Players know when they are being ripped off, when a game developer merely repackages a clone. This criticism is consistent with my account: in an important respect, *Bubble Gum Story* really is the same game repackaged with a different skin. So, the objection that our two constraints may be unable to distinguish between such hypothetical cases in fact indicates what would be an accurate criticism of these games. Second, remember that the rule constraint and the skill set constraint are two necessary conditions for the individuation of games, but they may not be jointly sufficient conditions. Perhaps there are further conditions that should be added. For instance, videogames differ from many sports, dice games, and card games in an important respect: videogames typically also contain some representational content. Games like poker, craps, and soccer are not *about* anything—they do not tell a story, there are no characters, we are not meant to imagine that the ball and the lines on the court represent anything. For these reasons, it would be pointless to apply the techniques of literary criticism to such games. But videogames are different. Many of them do have some representational content. While the representational contents of some videogames are quite minimal (for example, *Pong*),

others are highly developed (for example, *Dragon Age: Inquisition*). So, perhaps representational content should be a third condition for the individuation of games.¹⁶ Possibly, many of the titles in the *Call of Duty* series are not very different from each other if we restrict our analysis to the rules and skills associated with playing them; but they do differ from each other in the stories that they tell. For my part, I am open to the addition of further constraints on the individuation of games.¹⁷

A second possible objection, which is related to the first, is the problem of variations. There are numerous variations on poker. Given my account, are each of these variations different games, or instances of the same game? Some differences in variation are very slight (for instance, when playing “deuces wild”), while other variations are considerable (for instance, compare seven-card stud to Omaha high-low). There may be some reason to think that these are all instances of the same game despite their differences—ultimately what is central to poker is the hierarchical ranking of the five-card hands. But against this, there is also good reason to think that these are all different games—specifically, the fact that a player is competent at one variation of poker offers little guarantee that she will be competent at some other variation. This is true even when the differences are seemingly minor—for instance, players of no-limit Texas hold’em may struggle to adapt to pot-limit games. Does the skill set constraint force us to define these variations too broadly, or too narrowly?

To address this issue, we should remember (again) that the skill set constraint is intended as a necessary but not sufficient condition alongside the rule constraint. Games are identified (at least) by rules *and* skills. While we might think that each variation on poker engages near enough the same set of skills, the rule constraint would suggest that each variation is a distinct game because each contains different rules. The same point would apply when we compare games like baseball and rounders—the skills involved might seem near enough the same, but the rules are sufficiently different to distinguish these two games. This response may seem dissatisfying for some readers. The rule constraint would suggest that any difference in rules amounts to an ontological difference; but perhaps this appears too strong when we think of minor differences, like playing poker with deuces wild. We should consider, however, that the difference between cheating and playing a game faithfully may come down to the matter of a minor rule. Cheating is the flouting of some rule; and as Suits has argued, to cheat at a game is to no longer play *that* game (2014: 35). For instance, consider Diego Maradona’s infamous “Hand of God” goal in the 1986 FIFA Quarter Final match between Argentina and England. Maradona scored the first goal of the match by punching the ball into the net—an obvious handball. In a 2006 interview with Gary Lineker, Maradona claimed that he has scored other goals with his hands in Argentina.¹⁸ Regardless of what one might think of that claim, we can easily imagine that handball is allowed in some

matches. The question is, would we refer to those matches as “soccer”? We should not if we are using FIFA rules. Perhaps we should refer to those matches as “Maradona-rules soccer” instead. In that case, FIFA-rules soccer and Maradona-rules soccer are two game-types that differ in respect of only one rule. The difference may be minor, but even a minor difference in the rules can make all the difference ontologically.

The final possible objection I will consider here is that the potential development of virtual reality games might blur the line between games and reality in such a way as to threaten the usefulness of my constraint. Imagine sometime in the future where virtual reality games are so richly detailed that we cannot tell the difference between the gameworld and the real world—that is, we have holodeck-like virtual reality games that would not be out of place on a *Star Trek* space station. In this case, the skills required to play real-world Twister would appear to be identical to the skills required to play virtual-reality Twister (and so would the rules). But would virtual-reality Twister be the same game as real-world Twister?¹⁹ I think it would. The fascinating thing about virtual reality is that we must interact with its simulations with our bodies. In effect, our bodies have taken the place of the traditional controller in these reality-blurring video-games. This would mean that all of the bodily skills that I have developed (or not) in order to play Twister are exactly the same skills that I use when I play virtual-reality Twister. Further, if we took the suggestion seriously that we might someday have holodeck-like virtual reality machines, then we should say that virtual-reality Twister is not an instance of a *transmedial* game, because the medium in fact has not changed. All that has changed is that the mat that I play on and the room that I play in are simulated projections of a room and a mat. But these things are not the medium of the game. Twister is a physics-based game, and that is its medium. What makes Twister the game that it is is the challenge of contorting my body in awkward positions without losing my balance; and that is true whether we are playing real-world Twister or virtual-world Twister. So, not only are these two tokens instances of the same type, but they are also instances within the same medium.

Surely other cases will arise that will require further thought. This is especially true as gaming technology continues to improve. And this is something that should be welcomed. It is my hope that improvements in technology will expand the range of transmedial games and offer new theoretical difficulties so challenging that we are forced to fundamentally rethink our understanding of games. For now at least, we can say this: some games are transmedial, but it is far fewer than one might think. Games are identified (at least) by their rules and by the skills that it takes to play them. When we are confronted with a transmedial game, it can offer us new ways of experiencing old challenges, but we need not worry because we already possess the skills to play them.²⁰

Notes

1. Egenfeldt-Nielsen, Smith, and Tosca (2013: 58).
2. Moreover, we need not assume that all things that are called “videogames” count as games. The account I will offer here is intended to extend to all *games*, but may not extend to all “videogames.” What makes something a *game* is a question that I will largely avoid. For discussion of these issues, see Brock Rough (this volume).
3. However, there are limitations to the similarity. For instance, musical works require a performer, but we would not say that a gamer is a performer, at least not in the same sense that a musician is a performer. (Thanks to Brock Rough for reminding me of this point.) On the claim that gamers are not performers, see Kania (forthcoming). On the relations between playing and performance, see also Gaut (2010) and Tavinor (2017).
4. The distinction between types and tokens was introduced to philosophy by Peirce (1931–1958). To my knowledge, Wollheim (1980) first drew attention to the application of the idea to musical works. For a representative sample of type-token accounts of musical works, see Dodd (2007); Kivy (1993); and Levinson (1990). For discussion of the type-token ontology regarding computer art, see Lopes (2001). For criticism of the type-token ontology for games, see D’Agostino (1981).
5. See Davies (2001); Dodd (2007); Kivy (1993); and Levinson (1990) for discussion.
6. Levinson (1990). However, for criticism, see Dodd (2007).
7. The ontology of videogames raises the possibility of a further difficulty that does not arise for non-electronic games: should we individuate videogames additionally by their hardware? Does it matter ontologically whether I play *Skyrim* on a PS3 or a PC? Looking at our actual critical practices, it is hard to say. There is some reason to think that players do not treat the hardware as a type-identifying property: gamers who play online do not think of themselves as playing different games when they are using different hardware. When gamers play *Grand Theft Auto Online*, the individual players may be using any number of gaming consoles. Suppose that Smith and Jones are playing a cooperative mission where Smith is playing on a PS4 and Jones is playing on an Xbox One. They are clearly not playing different games. However, there is also some reason to think that hardware does ontologically distinguish games. It is arguable that (for example) *Donkey Kong* as played on an original arcade cabinet is a different game from playing *Donkey Kong* on an NES. (Thanks to Grant Tavinor for this example.) Moreover, some gaming magazines and websites will often give different reviews and scores for games on different hardware. For instance, this is the practice of the aggregator website *Metacritic* (www.metacritic.com). To address this issue, I would follow Shelby Moser (this volume) in thinking that a videogame is the algorithm, not the hardware that it is implemented on; however, I do not have space to pursue this thought further.
8. Thanks to Stephanie Patridge for this suggestion.
9. Cf. Juul critically draws attention to the board game Pac-Man (2005: 50), however it is again unclear to me from the brief discussion whether Juul is saying that the board game fails to be an adaptation or was instead a genuine adaptation that happened to be quite poor. The difference is important: a *poor* adaptation would still count as an instance of the game, while a *failed* adaptation would not.
10. Indeed, the board game Portal: The Uncooperative Cake Acquisition Game makes no attempt to adapt the rules of the videogame to a board game setting. Instead the board game offers a thematic interpretation of the setting of the videogame.

11. I am thinking of the “outcome” here in the same way that Bernard Suits thinks of the “lusory goal” (2014).
12. Thanks to William Morgan for suggesting this example.
13. However, which “available means” are acceptable is somewhat nuanced. Bernard Suits (2014) argued that one of the conditions for being a game is that players attempt to achieve a specific goal by adopting “inefficient means.” In high jump, the goal is not simply to clear the bar. The most efficient way of doing so would be to lower the bar, or to bring a ladder. Rather, the goal is to clear the bar by jumping over it without assistance and without tampering with the bar. Thus, it becomes a game (partly) by willingly adopting an inefficient means to achieve the goal.
14. See, for instance, Bermúdez (2003) and Gauker (2011).
15. Thanks to Stephanie Patridge for suggesting this problem.
16. Cf. fn. 7.
17. However, individuating games by their representational content will not save *Bubble Gum Story* from a copyright lawsuit.
18. *When Lineker Met Maradona*, BBC. Available online at <http://documentaryvine.com/video/lineker-met-maradona/> (accessed January 22, 2018).
19. Thanks to Andrew Kania for suggesting this problem.
20. I am grateful to numerous people for reading and commenting on various drafts of this paper. A version of this paper was delivered to the Philosophy of Games Workshop held in Utah in October 2016. Many thanks to the audience of that session for their very helpful comments, especially to Andrew Kania, William Morgan, Thi Nguyen, and Miriam Thalos. Thank you to Shelby Moser, Jon Robson, Brock Rough, and Grant Tavinor for their comments on earlier drafts. Finally, a special thank you to Stephanie Patridge for reading, commenting, and discussing various drafts of this paper with me, and for giving me the opportunity to discuss this material with her class.

References

- Bermúdez, Jose Luis. (2003). *Thinking without Words*. Oxford: Oxford University Press.
- D’Agostino, Fred. (1981). “The Ethos of Games.” *Journal of the Philosophy of Sports* 8: 7–18.
- Davies, Stephen. (2001). *Musical Works and Performances*. Oxford: Oxford University Press.
- Dodd, Julian. (2007). *Works of Music*. Oxford: Oxford University Press.
- Egenfeldt-Nielsen, Simon, Jonas H. Smith, and Susana P. Tosca. (2013). *Understanding Video Games*, 2nd ed. New York: Routledge.
- Gauker, Christopher. (2011). *Words and Images*. Oxford: Oxford University Press.
- Gaut, Berys. (2010). *A Philosophy of Cinematic Art*. Cambridge: Cambridge University Press.
- Juul, Jesper. (2005). *Half-Real Video Games between Real Rules and Fictional Worlds*. Cambridge, MA: MIT Press.
- Kania, Andrew. (forthcoming). “Why Gamers Are Not Performers.” *Journal of Aesthetics and Art Criticism*.
- Kivy, Peter. (1993). *The Fine Art of Repetition*. Cambridge: Cambridge University Press.
- Levinson, Jerrold. (1990). *Music, Art, and Metaphysics*. Ithaca, NY: Cornell University Press.
- Lopes, Dominic McIver. (2001). “The Ontology of Interactive Art.” *Journal of Aesthetic Education* 35: 65–81.

- Moser, Shelby. "Videogame Ontology, Constitutive Rules, and Algorithms.", Chapter 4, this volume.
- Peirce, Charles Sanders. (1931–58). *Collected Papers of Charles Sanders Peirce*, edited by Charles Hartshorne and Paul Weiss. Cambridge, MA: Harvard University Press.
- Rough, Brock. "Videogames as Neither Video Nor Games: A Negative Ontology.", Chapter 3, this volume.
- Suits, Bernard. (2014). *The Grasshopper: Games, Life, and Utopia*, 3rd ed. Peterborough: Broadview Press.
- Tavinor, Grant. (2017). "What's My Motivation? Video Games and Interpretative Performance." *Journal of Aesthetics and Art Criticism* 75: 23–33.
- Wollheim, Richard. (1980). *Art and Its Objects*, 2nd ed. Cambridge: Cambridge University Press.

3 Videogames as Neither Video nor Games

A Negative Ontology

Brock Rough

1. Introduction

Videogames are often assumed to have certain properties like being games and using video displays, as well as others like having narratives and being fictions. My primary position here is that despite appearances, and the apparent implication of the term “videogame,” videogames are not necessarily any of these things. This position runs contrary to several views in the literature, including those that assume this point without argument, as well as the many that offer a positive argument in their defense. Making the claim that there are non-ludic videogames opens the door to considering what other supposed criteria of videogames may not be necessary. This includes the view that videogames are necessarily video or, for that matter, necessarily narratives or necessarily fictions. The argument offered here is largely negative, but I do offer a suggestion of a defense of “videogame” as an historically conditioned concept, one that began, roughly, with an extension of games that were also video, but has evolved to include things outside the categories of both video and games (and narrative and fiction).¹

This ground-clearing project is useful against the background of early efforts at making sense of videogames. As the field of philosophical studies of videogames progresses, so does the range of issues that can be attended to, as where we had to begin with broad strokes we can now make finer distinctions. In the case of ontology, this requires consideration of those elements that go beyond an object’s intrinsic properties and include candidates like social construction, history, and intentions. The hope is that clearing away inaccurate notions of what videogames are can make way for a new understanding that better includes all the challenging and difficult ways videogames can be and the things they can do.

I begin with a short extensional survey of the objects that are generally supposed to be included in the category of videogames. I then consider several positions that hold that videogames are video, games, narrative, and fiction. In the following sections I defend an account of games that excludes some videogames and then do the same for a technical notion of video, as well as narrative and fiction. If my negative arguments are correct, they

entail that a videogame need not be a game, video, narrative, or fiction. In fact, I also defend the stronger position that these criteria are not even disjunctively necessary, and that something could be a videogame even were it to have none of the disjuncts. Finally, I offer some brief remarks for the hope of historical and intentional definitions of artifacts and their application for defining videogames.

2. The Extension of “Videogames”

To say what videogames are, or in the present case what they are not, we have to begin with at least a rough idea of the objects under consideration. The category of things that are videogames includes things like the classic platformer *Super Mario Bros.* (1985), the massively multiplayer online role-playing game *World of Warcraft* (2004), the *FIFA* series (1993–present), and the arcade classic *Ms. Pac-Man* (1981). It does not include things like *Microsoft Word*, an on-screen DVD menu, or the SMS app on my phone.

It includes recently created things like *That Dragon, Cancer* (2016) and *Everything* (2017). It also includes older things, like *Asteroids* (1979), and *Spacewar!* (1962), Steve Russell’s creation originating in the MIT Model Railroad Club.

The first videogame should also be included, though which entity bears this designation is debatable. The first videogame is certainly not the relatively late, though oft-mistakenly cited, 1972 entry *Pong*, the classic two-player ping-pong arcade game. Nor is the first game likely to be William Higinbotham’s 1958 *Tennis for Two*, a *Pong* precursor emulating a side view of a game of tennis, and displayed on an oscilloscope.

Perhaps the first videogame is 1952’s *OXO* (or *Noughts and Crosses*), developed for the EDSAC mainframe by Alexander Douglas at Cambridge. It uses a dot-matrix cathode display to render a game of tic-tac-toe. There are earlier instances of computerized games, including a late 1940s chess program written by Alan Turing, but none of these earlier attempts utilized a visual display of any kind, and thus are, at best, borderline cases.

More recent examples of videogames include blockbuster videogames like the *Madden* series and the *Grand Theft Auto* collection. The current state of videogames, however, is not only the stereotypical big studio production. There are exemplary instances of indie productions like *The Stanley Parable* (2013), a first-person videogame that explores the conflict of narrative and interactivity that features a prodding narrator who reacts quite negatively when you don’t follow his instructions.

The extension should also include mobile games, like the incredibly popular *Angry Birds* (2009), the physics-based bird-slinging puzzle game, and *Candy Crush Saga* (2012), the candy-themed match-three puzzle game.

The extension of “videogame” is large, and I trust that the examples I’ve given are uncontroversial members of the group. As evidence for their membership I do not employ a particular definition or theory, other than the

methodology of descriptivism. Descriptivism restricts the available theories and definitions to those that capture actual practice, where actual practice is the creative and critical practice surrounding what competent users of the relevant terms, like “videogame,” take it to be. It rejects any definition or theory that would be so revisionist that we must deny a significant portion of what these persons consider videogames.² It seems that actual practice designates the above-listed objects as videogames.

How do we know what actual practice is? An obvious starting point is popular mainstream platforms and distribution channels. This includes arcades, which though declining in popularity as of late have had a rich history; the home console industry, from early entries like Atari to the latest PS4, Xbox One, and Nintendo Switch; gaming sections on mobile app stores; and the home computer tradition, including both the hardware required to run programs and digital distribution on platforms like Steam.

A main task, then, when trying to say what videogames are, is to say what makes things like those listed above *videogames* and what separates them from *non*-videogame objects. The reasons for this distinction are many, but they include fitting videogames into more general theories of objects, artworks, actions, ethics, and so on. Often what is required is to argue for, or make assumptions about, the nature of these objects so that our other commitments can make use of videogames for other theoretical purposes. The positions taken by those who do discuss videogames for these reasons have usually taken videogames to be some combination of games, video elements, fiction, and/or narrative.³ In the following sections I want to challenge all of these assumptions.

3. The Term “Videogame”

First, a lexical note. Scholarship on videogames is rife with terminological confusion, and while I do not intend my usage to be prescriptive, I do hope to be clear in my stipulative use of it. I employ the locution “videogame” over other terms, especially “video game” and “computer game.” Not a terrible lot hinges on this, but I think what does is important for reasons of clarity. This is because the term “video game” would seem to make it analytic that videogames are both games and video, two notions that I will argue we should be suspicious of. This is also why I avoid the colloquial shorthand “game” to reference videogames and “gamer” or “player” to describe a user of videogames. I will prefer the terms “videogame” and “user.” Use of the ubiquitous “game” and “player” may be unavoidable, especially when speaking with the vulgar, and I have no desire to be a terminological referee, so long as what is really meant by these terms is kept clear. The multiple uses in the common vernacular means that there is not a univocal meaning behind terms like “game” and “play,” but rather various meanings. My terminological choice is valuable at least to offer some small resistance to the practice of referring to videogames with the abbreviated “games,” which can lead to

odd locutions about whether games are really games. This can necessitate otherwise unnecessary clarifications like game_1 and game_2 , and play_1 and play_2 . Rather than do this, a rigid use of the different terms “videogame” and “game,” and “player” and “user,” at least while in the philosophy room, helps ease this confusion. Even if the term “video game” does not necessitate anything analytically untoward, calling videogames “games” has proven a temptation to some to assume without question that they are games, or to pursue a misguided universal defence of videogames as games, despite the theoretical difficulties such assumptions present.

4. Videogames Are Not (Always) Games

Many contemporary accounts of videogames take them to be games. Some accounts are not explicitly defended, merely assuming that videogames are games. Recent arguments by Jon Robson and Aaron Meskin take it as a given that videogames are games. They take videogames to have the feature of “being ludic” (Robson and Meskin, 2016: 166), and they engage in a debate about the fictional element of videogames and defend their view as compatible with a “focus on the ludic features of those games” (Robson and Meskin, 2017: 186).⁴ Again, their view is not argued for, as their assumption of the ludic nature of videogames is mentioned in passing and it is not clear that, if pressed, they would not, or could not, alter it.

Stephanie Patridge makes a stronger remark, though it also is given without argument. Speaking of both videogames and childhood games of make-believe, she writes that, “They are both games” (Patridge, 2017: 182). Again, her broader claims do not depend on the universality of the ludic nature of videogames, so it is not clear how strongly she must defend this position.

Grant Tavinor’s definition, on the other hand, explicitly defines (some) videogames as games:

X is a videogame iff it is an artefact in a digital visual medium, is intended primarily as an object of entertainment, and is intended to provide such entertainment through the employment of one or both of the following modes of engagement: rule-bound gameplay or interactive fiction.

(Tavinor, 2008)⁵

Tavinor’s definition is a disjunctive one, so it is already amenable to the possibility that something might be a videogame without being a game. He in fact says as much in a later paper:

Surely there are connections between traditional games and videogames—the designation of game to these new digital artefacts is not accidental and depends on real points of similarity. But surely it is also a possibility that the designation may be unprincipled, being clearly appropriate in

some cases—most evidently, in “transmedial” cases where traditional games might become videogames through media transposition (Juil, 2005: 48)—but in other cases amounting to little more than an unreflective supposition. Indeed, I think there is evidence to suggest this, as Juil himself discovers when he is forced to conclude that under the classic game model, such a seminal videogame as *Simcity* counts as a “borderline” case of a game (2005: 43). This may be the case, but *Simcity* is surely a clear and non-borderline instance of a videogame. Perhaps it is time to address the definition of videogames and computer games directly?

(Tavinor, 2009c: 3)

I agree with much of what Tavinor says here. Juil’s own model of games (2005) does indeed exclude paradigm cases of videogames, straining the connection between the two if not severing it completely. I also agree with Tavinor that the incorrect assumption that videogames are (always and everywhere) games demands a different definition of videogames that avoids this problem. It is outside of the scope of the present project to present a fully fleshed-out positive account, but it is a result of concerns like the above and the subsequent arguments I will offer that a new definition is needed.

Despite Tavinor’s acceptance of the possibility of non-game videogames, his account makes other claims that should be argued against. His definition requires that videogames have a visual component, a claim that will be addressed in section 7. His definition also claims that where a videogame is not a game, it is an interactive fiction, a claim that will be addressed in section 9. Before addressing those concerns, let us continue the investigation into the claim that videogames are games.

Dominic Lopes makes a stronger claim about videogames as games than does Tavinor. His book on computer art addresses the possibility of videogames as artworks. He makes a compelling argument for a definition of interactivity and applies it to computer art, arguing for computer art as a new appreciative art kind deserving of its own critical practice. As part of this project, he considers videogames and offers the following theory of videogames:

an item is a video game just in case (1) it’s a game, (2) it’s interactive, (3) it’s run on a computer, and (4) it’s interactive because it’s run on a computer.

(Lopes, 2010: 107)

Lopes’ account assumes that videogames are games, and in fact he finds it surprising that “game-based theories of video games are controversial” (2010: 107). He also remarks on the legitimacy and helpfulness of studying the cinematic elements of videogames despite the fact that not all videogames

have such elements. It is here that he doubles down on the universal claim of videogames as games:

All video games are games, and can be studied as such, but some video games are also moving images and some are also narratives, and they can be studied as moving images and narratives. In short, nobody should resist defining video games as games just because they're interested in the filmic or narrative elements in some video games.

(2010: 108)

I agree with Lopes that those are not concerns that should prevent one from defining videogames as games. We shall see, however, that not all videogames are games, and thus those videogames are not helpfully appreciated as games, just as videogames without filmic or narrative elements are not helpfully appreciated for their (nonexistent) cinematic elements.

Berys Gaut, on the other hand, emphasizes consideration of the cinematic aspect of videogames in his account of cinematic art (2010). His account is the converse of Lopes'; where Lopes thinks all videogames are games, but not all are cinema, Gaut thinks that all videogames are cinema, but not all are games. Gaut writes, "There are many kinds of interactive cinema that are not videogames on the narrow construal of 'game'," (2010: 12) adding, "Surprising as it may seem, videogames and other interactive works fall within the domain of digital cinema" (2010: 13). On whether all videogames are games, my view is that Gaut gets things right, where Lopes does not. However, as Gaut defines cinema as "the medium of the moving image" (2010: 1), Lopes is correct and Gaut wrong, for reasons made clear in section 7.

There are reasons, both philosophical and critical, to reject the notion that all videogames are games. In fact, we find that a good amount of contemporary reporting and criticism of videogames is concerned with videogames that appear not to be games, yet seem to be within the category of "videogame." What are they and how should we talk about them? The industry has taken to calling them non-games, which in combination with the nearly ubiquitous practice of colloquially shortening "videogames" to "games," leads to odd talk about "non-game games." There were hand-wringing articles of this nature concerning the so-called "non-game" videogame when *Proteus* (2013) was released.⁶ *Proteus* is a member of the class of videogames that have come to be called "walking simulators," where the focus is not on an objective or winning, but is rather an environment in which one explores in an open-ended way.⁷ The earlier remarks I made about preferring "videogame" to "video game" go some way to resolving this linguistic conundrum. The case being made that not all videogames are games should settle it entirely.

To answer the question of whether all videogames are games, however, requires a definition of games.⁸

5. Suitsian Games

Bernard Suits, *pace* Wittgenstein, offers a definition of game-playing that can be used here to distinguish between videogames that are games and those that are not. I cannot here give it a full defense, but a brief overview of its parts should be sufficient to show its use to our present purpose.

Suits limits his analysis to the kind of play-activity we call games, and while he appreciates the *prima facie* understanding of game-playing as a subset of play, he is careful to keep them conceptually distinct.

Suits defines game-playing as follows:

To play a game is to attempt to achieve a specific state of affairs [prelusory goal], using only means permitted by rules [lusory means], where the rules prohibit use of more efficient in favour of less efficient means [constitutive rules], and where the rules are accepted just because they make possible such activity [lusory attitude].

(Suits, 2014: 43)

He also offers a briefer, more “portable” version: “playing a game is the voluntary attempt to overcome unnecessary obstacles” (Suits, 2014: 43).⁹

A game must have a prelusory goal. This is the goal or end state that a player aims at. A prelusory goal is one that is in principle achievable independently of the playing of the game, hence it existing outside the lusory activity of playing a game. In the simple example of a footrace, the prelusory goal is the crossing of the finish line before one’s opponents.

Achieving the prelusory goal on its own is not sufficient for winning. To win, one must also meet other conditions; in the plainest language, one must also follow the rules. Achieving the prelusory goal without also following all the rules does not result in a win.

It is in this way that rules are not separable from the ends, where the end, given the right attitude, is playing the game and trying to win. Because the activity of playing is constituted in part by the rules, the only way to engage in the activity of playing that game is to obey the rules. Thus there is no sense in which one can win, or even play, a game while also disobeying its rules. To attempt to do so would be, at best, to participate in a different activity.

More can be said about the rules of a Suitsian game, in particular that they have two features: they are constitutive of the game and they restrict the means allowed within the activity we call playing that game.

Crucially, the constitutive rules determine the lusory means by restricting the use of efficient means in favor of less efficient means. In effect, the rules determine which things you cannot do and still be playing that game. This is largely what separates games from what we call work and other technical activities. Technical activities are those for which the means are *merely* what

we do to bring about the end. If it turns out that more efficient means are available, we have no reason not to use those means. When we dig a ditch, we are interested in having the ditch, not the activity of digging the ditch. This is why we use shovels or backhoes, when available, to dig ditches, not spoons or hands.

Games, on the other hand, have arbitrarily restricted ends and means, selected not only for what we hope to accomplish in the end, but because of the activity they make possible. In the game of basketball, it is almost certainly the case that no players care about the ball going through the hoop *per se*, otherwise they would simply get a ladder, climb up next to the hoop, and move the ball back and forth through the hoop as often as they could. Rather, what basketball players care about is *playing* basketball. This of course involves them aiming to make as many baskets as possible, but it only becomes the interesting activity that they care about when there are restrictions, such as how one can move (dribbling), when one can perform actions (only for a limited amount of time), and opposition to achieving the goal (a team of five opponents who are trying to stop you from scoring goals). None of these requirements are efficient in making baskets; in fact, they are designed to intentionally be inefficient. What makes the game of basketball what it is, and why it has persisted, is that we take on these arbitrarily inefficient restrictions because of the activity they allow (that is, the game of basketball) rather than that they are the most efficient way of getting a ball through a hoop.

It is only within all of these inefficient constraints that a game of basketball is ontologically possible. And it is because the constitutive rules prohibit efficient means in favor of less efficient means that the activity can count as a game and not a technical activity.

The final component of Suits' definition of a game is not a formal one, like goals, rules, and means. It is instead the *attitude* that players take while playing a game that completes the account of game-playing as an activity distinct from other activities. This attitude is that players accept the rules, means, and goals of a game because they make that activity possible. To play chess as a game is to play it, roughly, because one wants to play chess rather than perform some other action. One needs no special relationship to the formations that determine checkmate; in fact, it might be odd if one did. What one wants is the kind of activity that *these* particular rules, restricting one's actions to *these* particular means, in pursuit of *that* particular end, make possible. In other words, one plays a game for its own sake or because one likes that activity or wants to do it, but these are rough formulations. Suits builds no explicit reasons for why someone plays a game into the lusory attitude other than to say that it is the attitude in which players accept the rules because they make that activity possible. To do otherwise, to take a different attitude toward the activity, turns the activity into a different one, namely not game-playing.

6. Non-Ludic Videogames

Given Suits' definition, a fairly straightforward case can be made that there are videogames that are not games. Take Tavinor and Juul's example of *SimCity*. It does not have a goal, operating more as a toy or sandbox with which to play as one desires rather than as a goal-directed activity. This is the feature that caused Juul to move it to a borderline case and Tavinor to give up the requirement of being a game for videogames. It also generates a large number of counterexamples to Lopes' definition, ones that, by his own argument (2010: 107), we should want to keep as part of the relevant comparison class of videogames. Such an analysis relieves the tension about the game status of videogames like *Proteus* and *Dear Esther*. It also provides a better interpretive stance for videogames that don't fit well under the category of games, even from a common understanding of games.

For example, consider *That Dragon, Cancer* (2016). It is an interactive narrative that follows a family's ordeal facing their young son's terminal brain cancer. It is told through a series of connected vignettes that are point-and-click style. The user navigates the space by selecting nodes and is given a small set of options of things to observe or interact with, mostly consisting of ways of listening to audio recordings, voice mails, and voice-overs.

While it is an interactive narrative, it is not so in the sense that one can impact the narrative events, but rather one can, to some degree, control the way and the pace in which one passes through the narrative. Some elements can be lingered over, or returned to, or skipped, but there is no sense in which one controls the outcome. There are a handful of "mini-game" like portions, but they are not meant to be played as a game for their own sake (as a game can be), but "played" through with an understanding of videogame vernacular. In this way, *That Dragon, Cancer* uses the videogame medium to tell a story in an interactive way that leverages common videogame tropes by presenting the work as a videogame and, in some ways, subverts them.

That Dragon, Cancer is an emotionally difficult work to engage with. The difficult experiences of parenthood and loss are its focus and are the appropriate target of critical attention. An inappropriate response would be to approach it as if one could *win* it, as one does a game of chess. *That Dragon, Cancer* uses game-like features to convey a difficult subject in a novel manner and perhaps to a different and unsuspecting audience. But these attempts require a non-ludic approach to the work. It is, however, still a videogame, at least by the lights of actual practice. It has been the subject of much videogame criticism, and it is distributed on videogame platforms. It also tasks the user with comparing it against other videogames, drawing comparisons and distinctions with other videogame works.

If Suits is right about the nature of games, it becomes apparent that many things we take to be videogames are not also games, but something else, be they interactive fictions, toys, social platforms, educational toys, artworks,

or other things not obviously or easily categorized as games. Videogames very likely had their origin as games, but they have expanded beyond that to include things that are not, strictly speaking, games.

7. Videogames Are Not (Always) Video

Videogames need not be games. Nor must they be video. The term “video,” when applied to videogames, is a misnomer for two reasons. First, not all videogames use what is technically *video* technology, some employing vector or other kinds of visual technology. Video is an analogue raster scan technology, distinct from vector displays and contemporary digital displays. More importantly, perhaps, is the fact that not all videogames have visual components: for example, videogames for the visually impaired. One might insist on a terminological distinction here, reserving the term “videogame” for those with a visual component and using “computer game” as a broader catchall. Interesting debates can be had on the different names we have for videogames and closely related media, but if we are interested in the dominant cultural phenomenon videogames have become, we should try to capture the broadest practice. In this spirit I mean to include under the title “videogame” everything usually included under “computer games” and related terms, noting that some of these terms have been used with more vagueness and ambiguity than others, especially as one aim of our categorization is to make fruitful critical and appreciative connections between works that we largely take to be in the same category.

Depending on how strict and historical a definition of “video” we insist upon, it would turn out that many things uncontroversially categorized as videogames fail to be included. This is true even of seminal works in the tradition, as Ralph Baer, the oft-credited creator of the videogame home console, explains of one of the first videogames, *Spacewar!*:

In the first place, in the sixties the term “video” was reserved for displays featuring a raster scan system. By definition, a video signal was comprised of an analog representation of the brightness levels along a raster line¹⁰ and was always associated with horizontal and vertical synchronization signals. It also may have had color components, usually present in the form of another analog signal, the color subcarrier signal.

Now, did the display of the PDP-1 have any of these characteristics? No, it didn't. Its display was of the vector type, which generated images by moving the electron beam around inside the CRT¹¹ much as one might move a pencil over a piece of paper to draw the outlines of a figure. There was no raster.

(Baer, 2001: x)

Many early videogames failed to meet the strict *video* condition, the famous *Asteroids* being another videogame that utilized a vector display. An even

earlier example is 1952's *OXO* (or *Noughts and Crosses*), developed for the EDSAC mainframe by Alexander Douglas at Cambridge. It uses a dot-matrix cathode display to visually render a game of tic-tac-toe. *OXO* took a previously existing game and utilized the computing power available to make a playable version against the primitive artificial intelligence.¹² Players made their moves by rotary-dialing in the number corresponding to the square they wanted, and then the computer would respond.

OXO has all the hallmarks of a videogame: it is straightforwardly a game, being simply a computerized version of an originally non-computerized game. However, it does not use a video display, it uses a digital visual display, being dot-matrix rather than raster.

We need not fret unnecessarily over either the *video* or the *game* implication of “videogame,” nor need we welcome confusion with such a locution. Surely the term “video” has expanded in use to capture different kinds of visual displays, but that is just to the point. As the extension of natural language’s use of “video” has expanded to capture things that are not technically video, so “game” has grown to include things that are not technically games, such as entries in the *SimCity* series or videogames more properly categorized as toys.

Even if this historical evolution is taken to make sense of current, strictly non-video displays as video, it would still fail to capture the non-video nature of the visual displays used by many of the earliest videogames that were created before this lexical expansion.

Videogames are also certainly not *merely* visual. They also include other elements like sound and haptic feedback. It is not inconceivable that a videogame could also include other sense modalities, of which the current land rush of VR technologies is suggestive. At best the argument that videogames are visual is that they are *primarily* visual, but even this is not right. To hold that videogames must have a visual component, let alone be primarily visual, excludes a small but important section of videogames, and this has ontological and critical as well as ableist ramifications. Some videogames are primarily or exclusively auditory, whether for appreciative or accessibility reasons. For example, *Swamp* is a first-person shooter (FPS) designed for blind users, one of many such videogames that can be found at www.audiogames.net/. This collection has replaced “video” with “audio” to highlight the differences from prototypical videogames, but they also take the relevant comparison class of objects to be other videogames, situating themselves critically amongst them and not other kinds of works.

As videogames perhaps began as games and grew beyond that distinction, so videogames perhaps began with visual displays (though not necessarily *video* visual displays) and grew to include works that are not primarily visual, or do not have a visual component at all. Thus we can see that videogames need not necessarily be video or games, as a non-visual videogame could also fail to be a game in just the ways other videogames could be. Thus videogames, despite their name, need be neither video nor game.

This means that whatever our theory of videogames is, it must be capable of including such possibilities or remain merely, and likely unhelpfully, technical and stipulative.

In keeping with the negative spirit of this project, the question arises as to what else videogames might need not necessarily be. Two commonly discussed features are that videogames are, or at least can be fruitfully understood as, narratives or fictions.

8. Videogames Are Not (Always) Narrative

Ludology is the study of games, sometimes characterized more specifically as the study of game mechanics, which are roughly the structure of the rules of games and how players are intended to interact with them. Narratology, on the other hand, is the practice of interpreting games as narratives or texts, using interpretive tools from literary and film criticism.¹³ Both approaches have met with the criticism that each ignores something important that the other captures.

Gonzalo Frasca has helpfully clarified, and possibly deflated, this debate, arguing that while radical positions on either side are obviously at odds with each other, there is no need to ignore the tools from either approach.¹⁴ I agree with Frasca on this point, but I would hasten to add that the debate itself is murky. Frasca is careful to say that he defines ludology as the “study of games, particularly computer games,” but not as “the study of game structure (or gameplay) as opposed to the study of games as narratives or games as a visual medium” (Frasca, 2003: 2). This stance has already assumed that videogames are games of the sort that are properly investigated as part of a study of games in general, whether emphasis is placed on mechanics or narrative. As we saw above, videogames need not be games, and thus may not always be fruitfully studied as such. The same can be said for studying videogames as narratives.

Lopes, though sanguine about videogames as games, is skeptical about the universal possession of narrative by videogames. Lopes writes:

The trouble is that not all video games use cinematic devices, or narrative, or even representation. *Colossal Cave Adventure* has no moving images. . . . Video baseball is pretty short on narrative. *Tetris* represents nothing. . . . Of course, counter examples are never decisive. Someone who defines video games as moving images may bite the bullet and insist that *Colossal Cave Adventure* isn't a video game. That's fine, but then we miss some interesting affinities between games like *Colossal Cave Adventure*, *Tetris*, and *Warcraft*.

(Lopes, 2010: 107)

The claim that all videogames are narratives is a strong one. Narrative is not easy to define, but Tavinor provides a useful rough account: “A

representation of sets of events chosen for their contribution to an unfolding plot with a beginning, middle, and an end, often but not necessarily involving a narrator” (Tavinor, 2009a: 204). This seems right as far as it goes, and it seems equally right that not all videogames will have narratives, unless we stretch the concept to meaninglessness. Clearly many videogames *do* have a narrative, and are centrally appreciated because of it, but *Tetris* has no narrative, nor does *Pong*.

9. Videogames Are Not (Always) Fictions

More plausible, however, is the claim that all videogames are fictions, in particular, interactive ones. Tavinor gives an account of fiction that claims to follow Kendall Walton’s seminal account of fiction wherein fictions serve as props in games of make-believe (Walton, 1990). Tavinor’s account, however, is not precisely Walton’s, and it reconstructs it with varying adherence. At times it countenances videogames as fictions because “they seek to depict situations with an imaginary existence only” (Tavinor, 2009a: 60). This differs from the earlier claim that he intends “a robust meaning for the term, where fiction is something more than this symbolic activity; it is where representations are used as props for envisaging a world with an imagined existence only” (Tavinor, 2009a: 24).

Perhaps Tavinor intends a weak notion of “world” that would include any imaginative practice. This is undermined, however, by his claim that the representational symbols of *Tetris* do not count as fictions. Yet this is a bit of a false dichotomy, as Tetris blocks are not merely abstract representational symbols, but are shaped so as to give the impression of having dimension, being physical blocks in space, when this is, strictly speaking, false; they are only shapes of light being displayed on a screen. We are being asked to *make believe* that they are physical blocks that extend into space. The account Tavinor gives is not Walton’s account of fiction, wherein anything that serves as a prop for make-believe counts as a fiction.

A thinner notion of fiction than Tavinor’s is closer to Walton’s account, as Walton counts as fiction Malevich’s *Suprematist Painting*, in which

we “see,” in the upper part of the canvas, a diagonally positioned yellow rectangular shape in front of a horizontal green line (or elongated rectangle), and that in turn in front of a large black trapezoid oriented on the opposite diagonal. This is how we see the painting, not how it is. Actually the yellow, green, and black are all on (virtually) the same plane; there are not one but two horizontal green shapes, separated by a corner of the yellow rectangle; and the black is not a trapezoid but a complex shape surrounding an assortment of rectangular areas. To see the painting this way is, in part, to imagine (nondeliberately) a yellow rectangle in front of an elongated green one, and so on. And this is how

the painting is supposed to be seen; imagining the yellow in front of the green is prescribed by virtue of actual features of the canvas.

(Walton, 1990: 54–55)

Robson and Meskin also argue for what they call a Waltonian understanding of videogames, developing the idea that videogames are self-involving interactive fictions (SIIFs) (Robson and Meskin, 2016). They concede, however, that not all videogames are SIIFs, though I would disagree with where they draw the line. They claim, similarly to Tavinor, that videogames like *Tetris* and *Chessmaster* are not fictions. They employ a more robust notion of fiction than does Walton and as a result believe a proper Waltonian account should not include *Tetris* and *Chessmaster*. They seem to confuse the issues of fiction and representation, as does Tavinor, and while I agree with their point that a chess piece itself need not be a fiction, the abstracted two-dimensional representation of a three-dimensional chessboard *is* fictional.¹⁵

While these accounts give a more exclusive account of fiction than Walton does, even under the most inclusive interpretation of Walton's account there could be videogames that fall outside of it. Consider *Super Hexagon*, a borderline case of make-believe in a Waltonian sense. *Super Hexagon* is a fast-paced rhythm action game where the user navigates a small triangle out of pulsating, constricting sets of concentric shapes. It's possible that no imagination is prescribed at all when engaging *Super Hexagon*. We do, however, imagine the player-controlled triangle to be in the foreground, floating above the background, make-believing a depth of space that is not really there. This is a fiction, even if it is a fiction of the sparest sort. It is easy, however, to imagine a videogame that does not have even this thin element of fiction to it, one where the user is engaging only with, for example, shapes displayed on a screen, neither suggesting nor prescribing any imaginative act of make-believe.¹⁶ Such a videogame could also fail to meet the requirements of a game.

The original *Pong* is a possible case of a non-fictive videogame. All that is on screen are two solid rectangles, a square, a dotted line, and a couple numbers for the score. There is of course the potential trouble of the representation involved. We are to imagine that the rectangles are paddles, the small square the ball, and the dotted line a net, or at least some indicator of the two halves of the screen. The numbers I think are not problematic, and the representations in this case do not require that we imagine anything further about the paddle and the ball than that they serve those functions. I think so far nothing requires a fictive element; one is not prescribed to make believe anything that elevates it to the status of fiction. However, one *is* probably prescribed to make believe that the "ball" travels *over* the dotted line, and that the paddles and the ball are in the foreground with the unlit portions of the screen as a background behind them. This is certainly fictional, as there is no foreground and background, no passing in front of capable in what we see, only portions of a screen lit up in different ways.

Thus a case of a videogame with *no* fictional content may be rare—in fact, it *is* rare, if it even exists—but such definitional exceptions have never been a barrier to artists in the past; indeed, they have been incitement, and an account of videogames ought to capture such cases, both actual and possible.

What would a videogame that requires no fiction look like? Imagine an abstract shape and sound videogame, one that lets you play with different shapes and sounds with an objective to accomplish. Non-objective videogames aimed primarily at generating a visual and sonic experience like Tale of Tales' *Luxuria Superbia* (2013) or *Lumines* (2004) get close to this; one would only need to remove the minimal Waltonian fictive elements and make them about shapes on the screen, without any fiction about their spatial arrangement.

A possible concern arises here as to whether we will always be prescribed to imagine something, as in the case of *Pong* that, for example, the paddle is hitting the ball. But this clearly need not be the case. We need not imagine *of* anything that it is doing something, like a paddle hitting a ball. Rather, we would actually see that one shape moves toward another shape and then changes direction.

10. Conclusion

If the above arguments are correct, there is very little that videogames *must* be intrinsically. They do not need to be video or game or narrative or fiction, as there are examples of videogames that do not meet each of these characteristics. The preceding discussion has served to clear the ground for further investigation into the nature of videogames. Where might these considerations lead?

One place to look for inspiration for where to steer future debate about the nature of videogames is a similar debate about defining art. Largely following Wittgenstein, some have argued against essentialism in defining art, and even against the possibility that art can be defined at all.

In contrast with, and in some cases in response to, the anti-definitional project, several theories of art have been proposed. Notably, theories of art of the last century have had to contend with increasingly boundary-stretching art that defied easy categorization, much as we are now considering increasingly experimental videogames. Attempts to define art by any common intrinsic feature became more and more difficult. What has seemed necessary, instead, is to emphasize the role of intentions in making or recognizing something as art. Intentions feature prominently in institutional theories of art (Danto, 1974; Dickie, 1984) and the intentional historical definition of art (Levinson, 2011).

A similar avenue may be available for videogames. Art has evolved, in some ways radically, and definitions of art have altered to capture new and challenging works. Videogames have also evolved, and in many ways

matured, as a medium. Our theories and definitions of videogames must alter with the medium as it alters. While I offer no positive account here, I suspect the success of future accounts of videogames will place further emphasis on intentions and less on intrinsic features. This is especially the case when, as I hope to have shown above, the traditionally accepted features of videogames become demonstrably less necessary.

Whatever the case may be for a promising path forward for an account of what videogames are, I hope to have made the case against some of the most popular candidates for necessary intrinsic features. With these common qualities dispelled as necessary components of videogames, we may look beyond these obvious surface features to what is common to all videogames and to how far we can stretch the boundaries of what videogames can be.

Notes

1. I believe it is also arguable that videogames are not necessarily interactive, though that argument requires more space than can be given here. An example, however, may be helpful in indicating the direction that argument would go. David O'Reilly's *Mountain* is a work intended by its creator to be a member of the category of videogames. If we take such intentions, perhaps among other things, as sufficiently determinative, then it is a videogame. It also minimizes its interactivity, making explicit in its explanation of its controls that the mouse and keyboard do "nothing." Whether *Mountain* completely removes interactivity is beside the point; it serves as an example of how such a seemingly central attribute can be removed.
2. Descriptivism allows for some amount of revision; for example, David Davies' pragmatic constraint does not make philosophy a mere reiteration of actual practice, but a critical eye upon it, working out "those norms governing that practice that would survive 'rational reflection' " (Davies, 2004a: 20). I thank the editors for stressing this point.
3. See, for example, Tavinor (2005, 2008, 2009a); Robson and Meskin (2016); Aarseth (1997); Lopes (2010); and Frasca (2003).
4. I will return to Robson and Meskin's views on fiction in §9.
5. See also Tavinor (2009a, 2009b, 2009c).
6. See Good (2013) for an example concerning this supposed "non-game." It should be noted that the creator of *Proteus* has vigorously defended his work as a game. Whether his declarations are sincere is another matter.
7. Another salient example is *Dear Esther*.
8. I suspect that resistance to the necessity of such a definition arises from an underestimation of our ability to discern definitions, an overestimation of our ability to do without definitions, or a misunderstanding about what a definition is. I don't pretend to settle, or even fully understand, the debate about definitions, along with their nature and roles, but I employ what I take to be a rather standard, if rough, approach that takes a definition to be something like a set of criteria that at least aims at being necessary and sufficient. What those conditions amount to has been a matter of great debate both inside and outside the philosophy of art, but all aim to give some kind of criteria by which something is or is not a member of some kind (see Gupta, 1988, for a general discussion of definitions). Those who have been skeptical of definitions, like Wittgenstein and his followers in aesthetics, have been challenged by others for being premature in their conclusions about the hopelessness of defining art, or other things. See

- Wittgenstein (1953); Weitz (1956); Kennick (1958); and Mandelbaum (1965) for the beginnings of the debate and, for later examples, Stecker (2003); Davies (2004b); and Meskin (2007), among many others.
9. Suits' account presented here is developed from his earlier work on games (Suits, 1967, 1969).
 10. Raster lines are the pattern that video displays use to generate images by generating individual pixels, one at a time, in a single horizontal line across a screen, usually left to right, then returning to the original side of the screen to then generate the next line below, and so on, until the whole screen's image has been generated.
 11. CRTs are cathode-ray tubes, glass vacuums that contain an electron gun that shoots at a phosphor layer on the screen, causing it to illuminate.
 12. Primitive only in the sense of its inability to perfectly mimic human error, a way in which, I suppose, all artificial intelligences remain primitive to some degree. Douglas' OXO was programmed to play the game perfectly, thus always resulting in either a draw or a loss for the player, depending on the player's skill. This makes it not a very good game, but that is partly the result of tic-tac-toe itself being not a very good game, in the sense that it is reasonably easily solved.
 13. See, for example, Aarseth (1997); Murray (1998); and Jenkins (2004).
 14. For more on this debate, see Frasca (2001, 2003).
 15. In fact, a two-dimensional representation of a chessboard without any attempts to make it appear three-dimensional, as is common in chess instruction books, is also plausibly a fiction, as we are to make believe that the chess piece is in the foreground in front of the chessboard that is in the background, something that is not true of the ink on the page, or pixels on a screen.
 16. For those whose imaginations do not provide such a case with ease, consider such a thing merely a possibility.

References

- Aarseth, Espen. (1997). "Doors and Perception: Fiction vs. Simulation in Games." *Intermediality: History and Theory of the Arts, Literature and Technologies, Playing 9* (Spring): 35–44.
- Baer, Ralph. (2001). "Foreword." In *The Medium of the Video Game*, edited by Mark J. P. Wolf, ix–xvi. Austin: University of Texas Press.
- Danto, Arthur C. (1974). "The Transfiguration of the Commonplace." *Journal of Aesthetics and Art Criticism* 33 (2): 139–148.
- Davies, David. (2004a). *Art as Performance*. Oxford: Blackwell.
- Davies, Stephen. (2004b). "The Cluster Theory of Art." *British Journal of Aesthetics* 44 (3): 297–300.
- Dickie, George. (1984). *The Art Circle: A Theory of Art*. New York: Haven.
- Frasca, Gonzalo. (2001). *Videogames of the Oppressed: Videogames as a Means for Critical Thinking and Debate*. Masters Thesis. Atlanta, GA: Georgia Institute of Technology.
- . (2003). "Ludologists Love Stories, Too: Notes from a Debate That Never Took Place." In *Level Up: Digital Games Research Conference Proceedings*, edited by Marinka Copier and Ioost Raessens, 92–99. Utrecht: DiGRA and University of Utrecht.
- Gaut, Berys. (2010). *A Philosophy of Cinematic Art*. Cambridge: Cambridge University Press.
- Good, Owen. (2013). "'Proteus' Creator Defends His Game—as a Game," <http://kotaku.com/5981097/proteus-creator-defends-his-game-as-a-game> (accessed September 23, 2015).

- Gupta, Anil. (1988). "Remarks on Definitions and the Concept of Truth." *Proceedings of the Aristotelian Society* 89 (n/a): 227–246.
- Jenkins, Henry. (2004). "Game Design as Narrative Architecture." In *First Person*, edited by Noah Wardrip-Fruin and Pat Harrigan, 118–130. Cambridge, MA: MIT Press.
- Juul, Jesper. (2005). *Half-Real Video Games between Real Rules and Fictional Worlds*. Cambridge, MA: MIT Press.
- Kennick, William E. (1958). "Does Traditional Aesthetics Rest on a Mistake?" *Mind* 67 (267): 317–334.
- Levinson, Jerrold. (2011). "Defining Art Historically." In *Music, Art, & Metaphysics*, 3–25. Oxford: Oxford University Press.
- Lopes, Dominic McIver. (2010). *A Philosophy of Computer Art*. Abingdon, UK: Routledge.
- Mandelbaum, Maurice. (1965). "Family Resemblances and Generalization Concerning the Arts." *American Philosophical Quarterly* 2 (3): 219–228.
- Meskin, Aaron. (2007). "The Cluster Account of Art Reconsidered." *British Journal of Aesthetics* 47 (4): 388–400.
- Murray, Janet H. (1998). *Hamlet on the Holodeck*. Cambridge, MA: MIT Press.
- Patridge, Stephanie. (2017). "Video Games and Imaginative Identification." *Journal of Aesthetics and Art Criticism* 75 (2): 181–184.
- Robson, Jon, and Aaron Meskin. (2016). "Video Games as Self-Involving Interactive Fictions." *Journal of Aesthetics and Art Criticism* 74 (2): 165–177.
- . (2017). "Still Self-Involved: A Reply to Patridge." *Journal of Aesthetics and Art Criticism* 75 (2): 184–187.
- Stecker, Robert. (2003). "Definition of Art." In *The Oxford Handbook of Aesthetics*, edited by Jerrold Levinson, 136–154. Oxford: Oxford University Press.
- Suits, Bernard. (1967). "What Is a Game?" *Philosophy of Science* 34 (2): 148–156.
- . (1969). "Games and Paradox." *Philosophy of Science* 36 (3): 316–321.
- . (2014). *The Grasshopper: Games, Life, and Utopia*, 3rd ed. (1978). Peterborough: Broadview Press.
- Tavinor, Grant. (2005). "Videogames and Interactive Fiction." *Philosophy and Literature* 29 (1): 24–40.
- . (2008). "Definition of Videogames." *Contemporary Aesthetics* 6.
- . (2009a). *The Art of Videogames*. Oxford: Wiley-Blackwell.
- . (2009b). "Bioshock and the Art of Rapture." *Philosophy and Literature* 33 (1): 91–106.
- . (2009c). *The Definition of Videogames Revisited*. Oslo: The Philosophy of Computer Games Conference.
- Walton, Kendall L. (1990). *Mimesis as Make-Believe*. Cambridge: Harvard University Press.
- Weitz, Morris. (1956). "The Role of Theory in Aesthetics." *Journal of Aesthetics and Art Criticism* 15 (1): 27–35.
- Wittgenstein, Ludwig. (1953). *Philosophical Investigations*, 4th ed. (2009). Oxford: Wiley-Blackwell.

4 Videogame Ontology, Constitutive Rules, and Algorithms

Shelby Moser

1. Introduction

The study of games has generated many theoretical approaches, both within analytic aesthetics and games studies. These theories often deal the same basic issues, but it is not always clear how or if these approaches might fit together and be mutually informative within a unified theory, or indeed, whether they are even consistent. One such case is the relationship between Bernard Suits' theory of the constitutive rules of games, and the theory that videogames ontologically depend on algorithms, a view found in several different accounts within the philosophy of art (Juil, 2005; Lopes, 2010; Tavinor, 2011). Both theories converge on the issue of game identity and individuation, both being at least partially designed to account for why a game is the game that it is, but there are reasons to think there might be inconsistencies between these accounts.

One such problem is that Suits' account of constitutive rules and game identity, which grows out of his definition of gameplay, may not tolerate the variation in gameplay found in videogames. For example, a single game of basketball ends with a win or a loss for one side, but neither outcome has any real effect on the identity of the game as basketball because each outcome is produced by the performance of a single set of constitutive rules. Videogames, however, seem very different because alternative playings of a single game have the potential to shape or modify the constitutive rules of the game as it is played. When I play *Undertale* my choosing to kill or spare another character will have lasting consequences and shape the kind of game I play. More specifically, I can choose to play this game in a violent or pacifist manner. If I do the former, then I will engage with the game by attacking the monsters as aggressively as I can; if the latter, then I must try and convince the monsters not to attack me. Each of these roles consists of different constraints and, therefore, different constitutive rules. The problem then is that different playings of a single videogame, unlike basketball, may have very different constitutive rules; and one may then wonder whether Suits' theory of games really is applicable in such cases.

Here I will argue that an algorithmic view of videogame ontology has the resources to solve the above issue. I will explain that, although the game

rules of different videogame *displays* may vary (and these might have their own identity conditions) the identity of the *work* that allows for these varied displays remains the same because they are generated from a “complete game algorithm” (henceforth, a *CGA*). The *CGA* specifies this degree of variance of the rules, the perceptual properties, and potentially the artistic properties of a videogame, and is an ontological idea that I aim to make more intelligible within this chapter.

Both games studies and analytic aesthetics have important contributions to make to the study of videogame ontology. My task here is to present a detailed account of the *CGA* and describe how it individuates one videogame from another. To this end, in section 2 I begin by presenting Suits’ account of rules and how it explains game identity; in section 3, I discuss the algorithmic ontology that I adopt in this chapter and the role it plays in videogame identity; in section 4, I outline a few problems between games and artworks, which is followed by some solutions to those worries in section 5; finally, section 6 addresses the *CGA* in more detail as it relates to the properties it bears and the games they entail.

2. Games and Rules

What, exactly, is a game? According to Wittgenstein, defining a game is an impossible task because disparate things like dice games, card games, board games, or those played on a field lack any single common feature (Wittgenstein, 1953). However, Bernard Suits, in his seminal book, *The Grasshopper: Games, Life, and Utopia*, came very close to a defining that which Wittgenstein deemed impossible (Suits, 2014). Although Suits’ account stops short of providing a definition for a *game*, it defines the conditions for the act of playing a game, or *gameplay*, from which we can extend to games as objects. Initially, Suits summarizes gameplay as “the voluntary attempt to overcome unnecessary obstacles” (2014: 43). Such a definition is appealing to philosophers because it captures something important about those who enjoy playing games: players do not take up games for the sole purpose of winning, but for experiencing the process (even the failures) of the game.¹ Thus far, Suits’ notion of gameplay seems to accommodate videogames because they encourage a similar kind of behavior.

Suits provides a more detailed account of gameplay, which he defines in this manner:

To play a game is to attempt to achieve a specific state of affairs [preludory goal], using only means permitted by rules [lusory means], where the rules prohibit use of more efficient in favour of less efficient means [constitutive rules], and where the rules are accepted just because they make possible such activity [lusory attitude].

(Suits, 2014: 43)

Let us briefly take each component in turn. The prelusory goal is the overall goal of any game, and it separates gameplay from other things like make-believe and pure play, which do not normally have explicit goals. For example, the prelusory goal of tic-tac-toe is to get three Xs (or Os) in a row before your opponent does; in running a race, the prelusory goal is to cross the finish line first. Of course, one cannot achieve these goals by using any means necessary, and so to race properly, you must run in your designated lane or path. This is what Suits calls the *lusory means*, which are determined by the *constitutive rules*. The constitutive rules require less efficient actions toward the overall goal, thus creating the obstacles mentioned in his general characterization of gameplay. More efficient means would, for example, allow me to drive a car to the finish line, but the constitutive rules make further constraints that prohibit me from using a car. Instead, the rules of the game define the exact place where I must begin, when the race will start, what designates the finish line, and so on. All kinds of rules are important components of a game (including strategic rules), but for Suits' concept of gameplay it is important that they be of a specific kind.

That gameplay lacks a more efficient means of achieving a goal is a significant factor for something to be a game for two reasons. Firstly, the constitutive rules are what individuate one game from another. If, for example, runners jump and clear hurdles as they run toward a finish line, we now have an example of hurdling (assuming this extra constraint is a shared decision). Differences in style or technique do not individuate games, however. For example, when I play a game of chess I might choose to "castle," a play I make by moving my king two squares and my rook to the square the king crossed, but whether I castle or not has no bearing on my playing a game of chess. Similarly, for hurdling, as long as I clear my hip and other such rules, it makes no difference which leg I lead with because this technique is not part of the constitutive rules. Secondly, the constituent rules are important because the inefficient means of games prevent (most) non-game activities from counting as gameplay. For this reason, a financial analyst who creates a spreadsheet according to her employer's rules is not playing a game since the set of rules she follows will be, in principle, the most efficient set possible.

Finally, ignoring the lusory means would make it impossible to adopt the lusory attitude that Suits describes at the end of his gameplay definition. A consenting attitude prevents unwanted behavior by others from constituting gameplay (for example, bullying, torture, and so on), and excludes any motivations other than willingness to play the game from qualifying as such. To that point, Suits goes so far as to say that a professional athlete paid to play a game is unable to adopt the lusory attitude and, therefore, might engage with the institution of a game without playing a game.² For Suits, it is important to distinguish gameplay from the act of pure play because, although there are many things we do in the spirit of play, those things in and of themselves do not constitute a game if there are no rules to follow. An animal chasing its tail, a child jumping off a step, and the person who twiddles her thumbs

might participate in a kind of play, but these do not represent Suitsian gameplay because the participants are not following a rule set (Suits, 2014: 155).³ This places rules at the forefront of his analysis of gameplay.

Suits' conception leaves room for counterexamples, but it captures an important consistency across a broad range of games. Instead of looking at similarities (or dissimilarities) as Wittgenstein did, Suits focuses on the endeavors and challenges entailed by all games. That being the case, it is important to note that the above describes gameplay as an *activity* and not games as *objects*. When considering the ontology of games, rather than gameplay, a definition of games needs to be more precise. I will borrow a definition from Brock Rough, who extends Suits' definition of gameplay to that of games (Rough, 2016).

To change the definition from that of an activity to that of an object requires only that the lusory attitude requirement be turned into a prescription. The game as an object contains *inter alia* a prescription to engage with it with the lusory attitude. This frees it from necessitating any actual correct response—namely game-playing—for the activity to exist. The game itself is then an abstract collection of rules, ends, means, and prescriptions.
(Rough 2016: 144).

We now have a concept of game individuation in place, but this may leave us wondering about the nature and compatibility of Suits' analysis with videogames more specifically.

3. An Algorithmic Ontology

In addition to theories within game studies, the philosophy of the arts provides a valuable viewpoint on these issues. Indeed, there is a deep and productive tradition of ontological theory in the philosophy of the arts, and drawing on this theory might allow a valuable perspective on the analysis of videogames, especially since recent literature has allowed for the possibility that videogames may be art. Here, I will defend an *algorithmic ontology*, or the claim that a videogame's algorithm is ontologically essential. Defending the algorithm's ontological import in the case of videogames is not a radical move, and, in fact, this puts me in good company, following Dominic Lopes (2001, 2010); Grant Tavinor (2011); and Jesper Juul (2005). For his account of interactive art (of which videogames might be a subset), Lopes defines an algorithm as the work's set of rules.⁴ Further on, he clarifies that "the algorithm just is the function that maps any one state of an interaction-instance onto the next state, given an interactor's gesture and the sequence of previous states" (2001: 76). Lopes suggests that the algorithm relates to an ontology in a direct way because, like the constitutive rules, it helps us to individuate one work from another. More specifically, Lopes says "two interaction-instances are correct instances of one work provided that they are correctly generated by the same algorithm" (2001: 76). He stipulates,

however, that the algorithm is not sufficient for an ontology of computer art because the provenance of a work matters, too. For example, imagine a scenario in which one game developer in New Zealand coincidentally creates an algorithm at the same time that a developer in Ireland creates an identical algorithm. Although the works consisting of identical algorithms may be perceptually indiscernible from each other, their provenances are different and so they are different works.

Some further initial clarification about the nature of algorithms is needed. For a videogame to function properly, both the code and algorithm (among other things) are required, but the algorithm should not be confused with the code. While the properties of the program and its code are integral for the display of a videogame, it does not necessarily factor into an ontological discussion. Imagine for a moment that you want to play a videogame. Whether you access it in disc format or download it from sites like Steam or via a web browser, you access the game via a compiled file. The file is compiled from the program and exists in a machine readable, binary format, which allows it to be run on the computer's hardware. The program consists of human-readable code, which can be written in various coding languages (for example, C#, C++, and so on) depending on the type of device the work is intended for. To make a finer point, with a game like *Undertale*, the code used to create the program might look different if played on a PC versus on a Mac, and the file will certainly be different if accessed from different operating systems.⁵ For instance, when using the game engine Unity on a PC, here is what a simple code might look like to check if the space bar is pressed:

```
using UnityEngine;
using System.Collections;
public class ExampleClass: MonoBehaviour {
void Update() {
if (Input.GetKeyDown("space"))
print("space key was pressed");
}
}
```

Compare the above with code implementing the same function (checking if the space bar is pressed) using Swift, Apple's programming language:⁶

```
import Cocoa
import SpriteKit
class ExampleClass: SKScene {
override func keyDown(with event: NSEvent) {
```



```

if event.keyCode == 49 {
  print("space key was pressed")
}
|
}

```

The two codes look different, but the different programs entail the same work (or action in this case) if they implement the same algorithm. Prescriptions for relevant operating systems and computer architecture are important for adequate appreciation of a videogame, but we can see parallel cases in the arts where appreciative features are important for experiencing the work, but have little bearing on the work's ontology. With music, the type of instrument (for example, an oboe) might be prescribed by the work, but the particular instrument (that particular oboe) is not crucial for a performance to count as a performance of that work. Likewise, the programming code of a videogame is necessary for gameplay because it translates the algorithm into a format that is readable and executable by the hardware, but the programming code's changeability from one device to another means that the specific code does not contribute toward the ontology of videogames. To echo Lopes, the properties of the program (the code) "have no more aesthetic relevance than properties of a videotape have to watching a movie recorded on videotape" (2001: 77). Instead, we can relate the algorithm to works like fashion designs, for example, where the design is conceived as the work and the garment is the realization of that work. Thus, we must separate the program from any ontological import.

Although the code is not relevant for an algorithmic account of videogame ontology, this should by no means suggest that the code is altogether unimportant or uninteresting from an aesthetic point of view. Not only is a functioning string of code potentially elegant, there is something creative about the coding process itself (not to mention the programmer will often contribute to the creative elements of the work).⁷ While we should view the algorithm independently of the code, we would also do well to note the value of source code since it oftentimes is the only implementation of the algorithm before it is programmed into a playable videogame. The value of source code and programs for gameplay aside, the significance of the algorithm supplants that of the programs in an ontological framework and, as Lopes says, "the programs are the work's templates; the algorithm they implement is the work" (2001: 77). Therefore, let us return our focus to the algorithm.

Tavinor has a similar view to Lopes in that the algorithm of a game at least partially composes the game's "work" (Tavinor, 2011). He points

out that an algorithm can sometimes be characterized as a “game loop.” He says,

[a] broadly functional use of the term “algorithm” does not seem to be typical of the use of the term in game design. Games designers might speak of an algorithm involved in a graphical shader, for example, but in this use they would be referring quite specifically to the transformations that allow the shader to perform its particular task in rendering the graphics, such as adding volumetric detail to a texture. Thus conceived, algorithms solve computational problems. Furthermore, algorithms are typically defined as having terminations, but the objects being invoked here can often be run indefinitely because there is no set problem that they are meant to solve. Rather their function is to generate an ongoing display drawing on the inputs of an interactor (or even without the player’s input).

(Tavinor, 2011)

Alternatively to the game loop, Tavinor says we can characterize an algorithm as a “game mechanic,” a phrase used by game designers for the functions or rules that allow gameplay. For example, a developer who wants to give a character a jump ability will integrate a jumping mechanic within the algorithm at specific places so that a player’s choices are recognized during gameplay. However, there is a problem with relating the term game mechanic to the algorithm, as Tavinor aptly notes, because a single game might comprise many game mechanics and so the phrase minimizes the real scope of a videogame algorithm; partly, the notion of a CGA—which is a collection of algorithms or game mechanics—is designed to acknowledge the real scope of algorithms involved in videogame ontology.

Nevertheless, even given this acknowledgment of the scope or complexity of videogame algorithms, the idea might still seem too insubstantial to really explain the ontology of videogames, especially when we acknowledge their inherent artistic qualities or their potential to be art. This is something that worries Marcus Rossberg, who, to the contrary, claims that if algorithms relate to the ontology of artworks, they do so only in an indirect way. He says,

[r]ules or instructions do not appear to be the right ontological category for artworks. Pretending for a moment we have even the slightest idea what the ontology of rules might be, it just seems wrong, or even incomprehensible, to describe, say, Plessas’s *Towers and Powers* as a rule, akin to *modus ponens*, or to an instruction, such as, “Pick up the red ball.”

(Rossberg, 2012: 71)

Rossberg’s words highlight how minimally the algorithm is characterized. Indeed, he is partially skeptical of the algorithm (or any rules for that matter) having any direct relationship to the ontology of computer art because

current literature on computer art offers only vague accounts of what the algorithm consists of.⁸ Furthermore, the algorithmic ontology gives little of the guidance on appreciation that we might expect of a successful ontology of art.

Considering the functions of algorithms in simple games, one could easily be sympathetic to the argument that algorithms are too simple (or vague) to count toward an ontology of videogames that informs our appreciative practices with such things. It is true that mere game rules rarely factor as the object of appreciation. For example, we can note the banality of rules when we consider a relatively simple game like tic-tac-toe:

The object of Tic Tac Toe is to get three in a row. You play on a three by three game board. The first player is known as X and the second is O. Players alternate placing Xs and Os on the game board until either opponent has three in a row or all nine squares are filled.⁹

Similarly, a basic algorithm operates like a set of instructions. Figure 4.1 illustrates what an algorithm might look like for the rules presented above.

Figure 4.1 illustrates that an algorithm, unlike game rules, includes commands a computer will respond to, the rules of the game, and it specifies states related to a given input. That said, the ontological structure of algorithms for videogames must be more comprehensive than the basic structure

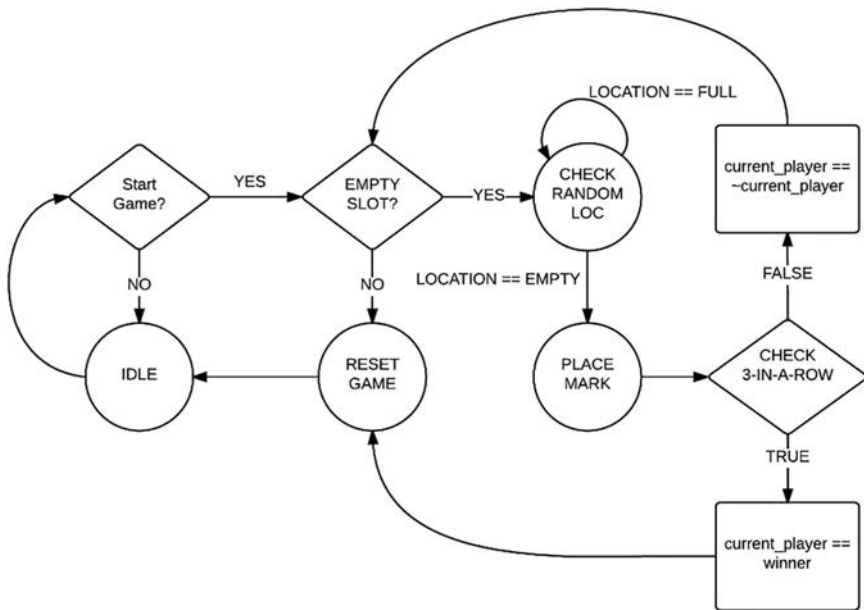


Figure 4.1 Tic-Tac-Toe Algorithm for the Computer¹⁰

illustrated in Figure 4.1. If we leave an algorithmic concept only to mean a videogame's rule set then, at best, we are left with a notion that recapitulates Rossberg's worry: that an algorithm is understood as nothing more than "pick up the red ball" or a set of instructions of how to instantiate the game. But the CGA surely comprises much more than this.

One should keep in mind, then, that an algorithm is an abstract (and somewhat theoretical) entity. That being the case, the crucial thing to emphasize here is that the algorithm is the focus of design because it is the specific *property-bearing* component of a videogame. That is, the CGA contains information that extends beyond the rules and states of play seen in the tic-tac-toe algorithm in Figure 4.1, to include prescriptions for things such as features of the sprites and characters, expressions, colors, background textures, music, text, animations, lighting, narrative, and other art assets. For example, consider a game like *Amnesia: The Dark Descent*, a horror survival game where I search through a monster-ridden castle to regain my avatar's memories. The perceptual features of this game add to any aesthetic experiences I might have during gameplay—features including dark, dingy rooms, eerie lighting, shadows, and sinister noises, all of which build to the monster's reveal. This game is, at least for me, intense and scary, and it evokes an overall feeling of creepiness. *Amnesia* is able to do this because the CGA encompasses everything about the specifications of the videogame, like the representational features and expressive features (for example, properties of the story and characters), the tones, and other artistic content.¹¹ Therefore, if we adopt Lopes' definition of an algorithm (from near the beginning of this section), I propose that we can assume an algorithm satisfies a videogame's ontological concerns when a complete game algorithm defines the relevant properties that are required for all the possible display types (and their displays) for a videogame to be realized.

"Display types" is not a common phrase within the philosophy of traditional arts, so I will return to these features in the final section. Of course, the above definition says nothing of a successful algorithm in any evaluative sense, nor does it make a work like *Amnesia* playable. CGAs define what particular tasks should be performed, but CGAs do not render those specific tasks; that is the job of the program. In this respect, the CGA serves as the entire structure of the videogame, which will in turn help the videogame's programmer to solve the task specifications and realize the perceptual features into an instance.

4. Some Initial Problems

At this point, the preceding sections should make us wonder what results from combining Suits' view of games with an algorithmic ontology of art. Do videogames really involve this combination of game rules and algorithmic art? Indeed, are they even consistent: can an artwork have rules? There

are preceding examples within the history of art that suggest art can have rules. Sherri Irvin proposes that installation art, conceptual art, and in fact many contemporary works rely on the “expression of parameters for the constitution of a display” (Irvin, 2012: 243).¹² *Work No. 200: Half the Air in a Given Space* (1998) by Martin Creed is one such work. Although the rules are relatively simple, this installation requires an enclosed room filled with air contained in balloons half its cubic space. Another example is Félix González-Torres’ *Portrait of Ross*, which consists of 175 pounds of candies piled high in a corner, the exact weight of his late partner who died from AIDS. Both examples require the curator to follow the rules to generate an authentic display, without which, no such display can be realized. If these sorts of parameters are important for ontology then there should be little reason to exclude the algorithms of videogames. Neither does Lopes see any reason to exclude videogames as art candidates, because he views videogames as potential works of computer art (Lopes, 2010). Following Berys Gaut’s cluster theory account of art (2005), Tavinor also allows for the possibility that videogames can be art for the reason he views videogames as consisting of gaming mechanisms *and* imaginative components that are made possible by the interactivity. As such, he proposes this disjunctive definition of videogames:

X is a videogame iff it is an artefact in a digital visual medium, is intended primarily as an object of entertainment, and is intended to provide such entertainment through the employment of one or both of the following modes of engagement: rule-bound gameplay or interactive fiction.

(Tavinor, 2008)

Likewise, Juul says videogames are comprised of rules and fictions and that our view of art (and games) should not be so limited as to exclude things like videogames (Juul, 2005). Juul goes on to say that “it turns out that the fiction in video games plays an important role in making the player understand the rules of a game” (2005: 163).¹³ Juul discusses a videogame’s art status like this:

While games are regularly considered lowbrow, this is often due to some very naive notions of what is highbrow or what is art. In a very simple view of art, art is what is ambiguous, whereas most games tend to have clear rules and goals. As Immanuel Kant would have it, art is without interest, whereas game players clearly play with much interest and probably send the wrong signals simply because they look completely unlike visitors to an art gallery. We cannot reasonably use such claims as checklists, and we should avoid thinking about art, and games, in a limited and unimaginative way.

(Juul, 2005: 20–21)

If we are amenable to the fact that videogames can be art, then one might wonder if they can be games.

Not everyone agrees that games can be art or that art can be games, however. For example, Rough, following Suits' analysis, argues that games cannot be works of art because we regard the two differently (Rough, 2017). I should make it clear that Suits never addresses the art-game compatibility issue in his analysis of games. However, Rough adopts Suits' view of gameplay and highlights three points of incompatibility between the prescriptions of artworks and games. Very briefly, Rough says that, first, unlike games, artworks do not prescribe prelusory goals; second, artworks do not prescribe inefficient means; third, there is a logical incompatibility between the prescriptions of the attitudes (because art adds a condition of appreciation, whereas the lusory attitude is sufficient for games). This incompatibility means, for Rough, that a videogame can be a work of art, or it might be a game, but it cannot be both.

If one adopts Rough's viewpoint, then using Lopes' definition that includes an art condition is problematic for an account of games, but not necessarily for videogames (given they need not be artworks or games). For the sake of the argument at hand, I do not commit myself to the idea that all videogames can be art (nor that all videogames are games). For those who see videogames and art as incompatible, then what follows here is not all lost if you relate a Suitsian view to only those videogames you *do* view as games. The above stipulation is important because I do not want to suggest to the reader that when I use the term "videogame" that I imply that each is a game *de facto*.

Let us suppose that the rule-bound gameplay and/or interactive fictions we are talking about fit within a similar framework as games, given, if nothing else, their algorithms. One question remains, are these ontological theories compatible?

5. In Search of a Unified Theory

So far, algorithmic rules do not seem in contest with Suitsian rules but, although this is the view I ultimately take, we would be too hasty to leave it here without considering, as Rough says, the "collection of rules" of games in more detail. Unlike games, videogames do not seem to have determinate sets of constitutive rules known by the player prior to playing a videogame. It should now also be clear that algorithms are more expansive than Suitsian constitutive rules when we consider things like art assets and expressive elements that videogames usually consist of. As with all games, the rules of videogames are signature features, but remember that for Suits a change in the constitutive rules means a change in game identity. Videogames have several mechanics that allow players to change the constitutive rules of a particular game, which would mean some videogame works do not always present players with a single game, but with many.

Let us consider at least two ways in which a single videogame might constitute different games before I elaborate on how this is consistent with an algorithmic ontology. The first example in mind is a videogame mod (modified game) where a player can change certain features of a game by changing the code. For example, imagine I rewrite the code to mod the videogame *Civilization*, a mod that allows me to add new military units that were not previous options of the game. Mods are likely to consist of varying constitutive rules from one mod to another, and so each mod would constitute a different Suitsian game, although the modded games bear the same title. Before taking this example further, I want to consider a second way in which players might change the constitutive rules by changing the difficulty settings of a game. If, for example, I wanted to make a playthrough more challenging, then I could change the play mode from easy to difficult. *Terraria*, for example, has, in addition to other play modes, an option to play two different world modes (normal and expert). The normal world is the default setting, which presents players with enemies and obstacles that have a “normal” level of difficulty. The expert world does not change what the player encounters, but the challenges and enemy stats will increase, making them more difficult opponents than in the default world. The difficulty level, not to mention numerous other changes in the world, entails consequences and rewards that are not available in the normal world. There are also games that allow players to extensively configure the parameters of the game: fighting games allow players to determine the number of rounds it takes to win, the size of the ring, the time limits, and so on. In these cases, the constitutive rules change between the settings and, like the mod, present us with different Suitsian games.

An algorithmic ontology states that a work’s identity is determined by its algorithm and provenance, so let us take a more thorough look at the above examples to tease out a clearer picture of how this relates to the Suitsian position that games are individuated by their constitutive rules. My position is this: the CGA comprises a single videogame work, which can afford many different potential games (appreciated from the displays). I will first discuss how the two examples above are single works before explaining how a single work consists of different games. Two things occur with modified games that might seem at tension with classifying them as a single works under an algorithmic ontology: (i) the modded game will appear different from the original game (for example, the properties that the extra military units bear versus the properties before the game is modded), and (ii) hypothetically, this mod was created by me, not by the developers of *Civilization*.

First, we should take a clearer look at how a mod works. Imagine the CGA is like a sealed black box with inputs and outputs that look like sockets.¹⁴ These ports, which are designated by the creators, are what allow for certain modifications, or the mods; let’s analogize a mod to an electrical plug. Just as a plug can only work in an appropriate outlet that can grip its prongs, a mod can only interact with the algorithm through the designated

inputs. In other words, the mod will not affect the identity of a game if it is permitted by the CGA. Let us return to point (i) from the paragraph above. The modded game appears different than the pre-modded game because code has been accepted, via the hypothetical ports. For clarity, let's call the pre-modded game *Civ* and my modded version *Civ**. Under an algorithmic ontology, the mod does not constitute a different work because, although the code changes when I add a new military unit, the set of rules allow for this change and accepts the given modification. Many more mods might be permitted by the game, but this does not mean a CGA will allow all modifications. Imagine instead that I wanted to play the same game, but rather than playing with the built-in civilizations of *Civ*, I wanted the ability to colonize the moon (let's call this *Civ***). The mod for *Civ** works because the developers made certain provisions for modifying the default civilizations, whereas they did not make such accommodations for the algorithm to tolerate *Civ***. If I forced the implementation of code so that I can play *Civ***, then I have hacked the game similarly to breaking the black box open to access the inside. Although this occurrence is an interesting one for other discussions, the forced mod is not a genuine instance of the work. Also, recall from earlier that code is not necessary for a work's identity because code changes all the time between different operating systems. That means sanctioned mods should be of little consequence to the *work* identity.

Regarding point (ii), the change from *Civ* to *Civ** might tempt some to say the work identity changes, not because of the code, but because the additions are made after the videogame's publication and, therefore, the provenance is different. A skeptic could argue something like this: works like paintings, plays, and films are assessed as complete works at some given time *t*. After all, an artist like Picasso does not create *incomplete-Guernica* just in case someone else wants to add to it later! That would indeed inspire odd art ontologies, but I do not think authorship of videogames need be absurd. Instead, we can draw upon a precedent in the history of art. The surrealist "exquisite corpse" is one such example of a method used by visual and literary artists to create a work in an ongoing collaborative manner. It works by an artist contributing a drawing or string of words (for example, following a rule set such as "adjective-noun-adverb-verb"), which is then handed off to a different artist to contribute, and so on. Although each collaboration represents a modification to the work by a different individual, none of the additions, if sanctioned, change the identity of the work. Additionally, consider works from the Dadaists, who also allowed their audiences to add and progress their works on an ongoing basis. Similarly, the CGA can allow for certain mods, but this does not make the released videogames unfinished works, nor do the mods authored by different people change the identity of a work.¹⁵ Having said all this, given the force of an algorithmic ontology for videogames, a game like *Civilization 5* is individuated from *Civilization 6* because each implements a different algorithm.

Let us return to a videogame's difficulty settings. With the following pseudo-code, consider what a difficulty setting might look like within a work if an enemy has an initial hit point value of n hit points (HP):

```

if mode == easy then
{
enemyHitPoints =  $n$ ;
}
elseif mode == hard then
{
enemyHitPoints =  $n+10$ ;
}

```

Hard mode assigns the character additional HP so the character becomes stronger and, therefore, harder to beat. As I understand it, Suitsian rules cannot survive the change from " n " to " $n+10$ " without becoming a different game, in the same way Suits might view the modded games as distinct from each other.¹⁶ This would be detrimental to my ontology of a videogame work if I continue to consider myself a Suitsian. In order to unify these theories, an algorithmic account of videogames must show that the algorithm can preserve the identity of the work even when various playings (displays) of the work constitute different games.

6. Work and Game Individuation

I have a solution that fits both an algorithmic ontology and a Suitsian account of games, but first it is worth bringing in Lopes' (perhaps) less strict viewpoint regarding game identity. Lopes says,

The rules of a game may change from one time period to another or from one context to another. . . . It is fair to say that this changes the game, but playings of the game under new rules remain playings of the same game.¹⁷
(Lopes, 2001: 76)

One could say Lopes' interpretation of games disagrees with Suits' analysis, but perhaps a more flexible view does not absolutely individuate games just in case their rules change over time. For example, if we have a case where *game* evolves into *game**, then only one set of rules exists at one time, opposed to the two sets of rules that exist for *game a* and *game b*. For example, consider a longstanding game like chess. "Castling" did not take its present form within the rules of the game until the seventeenth century, yet we do not typically consider it a different game from its predecessor (and I presume neither would Suits).

In my view both the mod examples and the difficulty modes presented above are of the same work *and* different games. Notice with the above " n "

and “ $n+10$ ” difficulty settings that we are looking at two different conditional statements, but each statement is merely a component of the same CGA, and the CGA allows for both conditions. Therefore, the switch from easy mode to hard mode does not change the algorithm or identity of the work, but the switch does say something about constituting different rules and games. The algorithm consists of all the potential constitutive rules that a work can have, but when we change the game settings, the constitutive rules of that particular display will differ from the other display(s). This concept is not so different from accepting that different playings of the same videogame might drastically differ from each other; as Tavinor and others have claimed, videogames are best appreciated if played multiple times to display the scope of their contingent rule sets (Tavinor, 2017).

Suppose that I play *Kingdom* twice; in the first playthrough the queen (my character) spends her coins wisely, fights off the monsters, and successfully expands the kingdom, but in the second playing, she fails and loses everything including her kingdom. One might say that all games allow for the same variability, because when I play a game of chess it will sometimes end with me winning and at other times with me losing. Videogame variability is more complex than this implies, however. Following Lopes, Dominic Preston clarifies that many interactive games (and art) will have multiple displays, but some works are more unique because they have multiple *differing* displays (Preston, 2014). This means certain videogame works might consist of a tragic display (if, for example, my character dies) *and* a not-tragic display (if my character lives), which is fundamentally different from the win-or-lose scenario when we play chess. When I lose a chess match it might be tragic to me, but any feelings I have regarding such a loss are external to the game; when my character dies in a videogame the genre of the work changes due to the different set of properties it bears compared to the display with the protagonist who succeeds. Although a piece of music might have sombre parts and joyous parts, it cannot be both fully sombre *or* fully joyous. This requires explanation because we normally do not view works as capable of being either a tragedy or a comedy (in Shakespearean terms) depending on user input.

There are, of course, works whose performances vary from the work. The many retellings of *Romeo and Juliet*, for example, can differ depending on the particular adaptation we attend to in the same way we can appreciate different performances of Vivaldi’s *The Four Seasons*. With these cases, when we watch a play or hear a piece of music it is possible to appreciate the properties belonging to the work, transcriptions, adaptations, and performances. Furthermore, it is Stephen Davies’ view that some edits to a musical score do not necessarily constitute a new musical work, even if it constitutes a different version (Davies, 2007: 86). Songs, especially non-classical, with constitutively “thin” musical structures will sometimes vary to a significant degree (for example, *All Along the Watchtower* by Hendrix compared to the version by Dylan), but versions of performance works do not usually vary in the manner that interactive works do.¹⁸*Spring* can be performed

faster or slower, but those variations are not incompatible with Vivaldi's score. A piece of music performed atonally when it is supposed to be tonal is, however, incompatible; two such drastic displays must be accounted for within the work, or we must individuate them as two different works. Non-interactive works should not vary to the degree of incompatibility, but there are many videogames that seemingly can, a point that Preston raises.

According to Preston, a Lopesian account offers a less than adequate explanation for the variability that some interactive works entail. In short, Lopes states that interactive works consist of multiple displays that are brought about by the user (2010: 59); but, argues Preston, it is unclear which relevant properties the work bears when the displays of the same work seem incompatible with each other. Preston clarifies and says, "for any given artwork, each possible set of structural and aesthetic properties *F* is a *display type* of that artwork" (2014: 271, emphasis in original). Videogames might consist of many display types (for example, tragic and not-tragic), which consist of many displays players might realize during gameplay. If this is true, and I take it to be, we can be sure that the CGA allows for all the differing display types (and displays) without it becoming a new work. Each possible display is part of the work (algorithm), and the work holds all the properties of the variable displays (different games).¹⁹ Here, it would seem videogames are more closely related to constitutively *thin* work structures due to the variability we can expect from displays. However, setting aside differing displays and types, videogames are perhaps not so different from classical music's constitutively *thick* properties, because the algorithm specifies in detail what the player can do; there are just many more differing properties to be shared among the displays within videogames than with (non-interactive) performance works. The thick-thin relationship of videogames is noteworthy.

To briefly conclude, if we can play many different games from a single work then, by the above account of videogame works, I am happy to agree with Suits that any change in the constitutive rules constitutes different games while at the same time preserving an algorithmic ontology for videogames. Since each display derives from the work, a videogame will consist of all properties of those varying displays. Therefore, if the display types and displays contain properties of the work, then I view each type as belonging to the same work even if the constitutive rules allow for varying possibilities, and different games within that work. It would seem, then, in this particular case, game studies and aesthetics can function in concert to individuate works and games. For videogames, this is the strength of an algorithmic ontology.²⁰

Notes

1. Games theorist Jesper Juul has a similar concept (although he differs from Suits on other points) that we play videogames because there is a paradoxical enjoyment of gameplay, although they entail failure. See Juul (2013).

2. In addition to Suits (2014), see Suits (2006).
3. This also differentiates gameplay as a different activity from Waltonian make-believe, or concepts of pure free play as Miguel Sicart espouses. See Sicart (2014).
4. For more on computer art, see Lopes (2010); regarding the algorithm, see Lopes (2001: 76).
5. I qualify that it “may” be different because there are some engines (for example, Unity) that can compile a single program for various hardware platforms.
6. Thanks to Harrison Ferrone for writing the Swift code.
7. The player is also involved in something creative, but this kind of creativity generates the displays of an existing work. See Meskin, this volume.
8. See his footnote, Rossberg (2012: 71).
9. “Tic-Tac-Toe Rules,” Cyber Oculus, 1998–2000 <http://web.cecs.pdx.edu/~bart/cs541-fall2001/homework/tictactoe-rules.html> (accessed September 2, 2016).
10. Diagram drawn by Steven and Shelby Moser.
11. Shaders (software separate from the algorithm programmed from the GPU) can also be used to determine these features. This is not in discord with an algorithmic ontology, because algorithms accommodate the specifications of the shader.
12. Irvin also makes the point that the degree of a work’s parameters will vary.
13. See also his introduction and Chapter 5 (2005).
14. Thank you to Steven Moser for helping with the black box analogy.
15. When we consider the ontology of the mods, their provenance would be different than the work’s provenance. The point I make here is not to ignore authorship of the mods, but to show the algorithms can allow for them.
16. Thanks to Brock Rough for pushing me on this point.
17. Lopes clarifies that this is due to a genetic component of games. See Lopes (2001). I would say the same is true for videogames.
18. For a discussion on thick and thin properties, see Kania (2006); Gracyk (1996); and Davies (2001).
19. For more, see Preston (2014: 267).
20. Thanks go first to the editors of this volume, Grant Tavinor and Jonathan Robson, for helpful feedback. I also wish to thank Brock Rough, Mark Windsor, and Hans Maes for their insights on earlier drafts. For their discussion that helped shape earlier ideas of this chapter, I’d like to thank the organizers and the delegates at the Workshop on the Philosophy of Games held in Utah in 2016.

References

- Davies, Stephen. (2001). *Musical Works and Performances: A Philosophical Exploration*. Oxford: Clarendon Press.
- . (2007). “Versions of musical works and literary translations.” In *Philosophers on Music: Experience, Meaning, and Work*, edited by Kathleen Stock. Oxford: Oxford University Press.
- Gaut, Berys. (2005). “The Cluster Account of Art Defended.” *The British Journal of Aesthetics* 45 (3): 273–288.
- Gracyk, Theodore. (1996). *Rhythm and Noise: An Aesthetics of Rock*. Durham, NC: Duke University Press.
- Irvin, Sherri. (2012). “Installation Art and Performance: A Shared Ontology.” In *Art and Abstract Objects*, edited by Christy Mag Uidhir, 242–262. Oxford: Oxford University Press.
- Juul, Jesper. (2005). *Half-Real: Video Games between Real Rules and Fictional Worlds*. Cambridge, MA: MIT Press.
- . (2013). *The Art of Failure: An Essay on the Pain of Playing Videogames*. Cambridge, MA: MIT Press.

- Kania, Andrew. (2006). "Making Tracks: The Ontology of Rock Music." *The Journal of Aesthetics and Art Criticism* 64 (4): 401–414.
- Lopes, Dominic McIver. (2001). "The Ontology of Interactive Art." *Journal of Aesthetic Education* 35 (4): 65–81.
- . (2010). *A Philosophy of Computer Art*. Abingdon, UK: Routledge.
- Preston, Dominic. (2014). "Some Ontology of Interactive Art." *Philosophy & Technology* 27 (2): 267–278.
- Rossberg, Marcus. (2012). "Destroying Artworks." In *Art and Abstract Objects*, edited by Christy Mag Uidhir, 62–83. Oxford: Oxford University Press.
- Rough, Brock. (2016). "Are Videogames Art?" Ph.D. dissertation, Graduate School of the University of Maryland, College Park. DRUM DOI doi:10.13016/M2Q518.
- . (2017). "The Incompatibility of Videogames and Art." *Journal of the Philosophy of Games*, inaugural issue. www.journals.uio.no/index.php/JPG/article/view/2736 (accessed January 22, 2018).
- Sicart, Miguel. (2014). *Play Matters*. Cambridge, MA: MIT Press.
- Suits, Bernard. (2006). "Games and Their Institutions in the Grasshopper." *Journal of the Philosophy of Sport* 33 (1): 1–8.
- . (2014). *The Grasshopper: Games, Life, and Utopia*, 3rd ed. Peterborough: Broadview Press.
- Tavinor, Grant. (2008). "Definition of Videogames." *Contemporary Aesthetics* 6.
- . (2011). "Videogames as Mass Art." *Contemporary Aesthetics* 9.
- . (2017). "What's My Motivation: Interpretative Performance in Videogames." *The Journal of Aesthetics and Art Criticism* 75 (1), Winter: 23–33.
- Wittgenstein, Ludwig. (1953). *Philosophical Investigations*, 4th ed. (2009). Oxford: Wiley-Blackwell.

5 Appreciating Videogames

Zach Jurgensen

1. Introduction

Videogames are distinctive as a form of art precisely because they *are games*. A comprehensive understanding of the aesthetic of videogames requires an explanation of how videogames *qua* games affect aesthetic experience of videogames *qua* works of art. The problem of ignoring how the gamehood of videogames affects our appreciative understanding has its roots in the way that scholars often argue that videogames are a legitimate form of art: videogames are compared with other widely accepted art forms, similarities are noted, and the conclusion is that videogames have enough in common with other art forms that they should be considered art. While this strategy can be convincing, it does a disservice to the videogame medium itself by inviting people to consider videogames works of art *despite* their gamehood; yet what makes studying videogames as works of art worthwhile is grounded partly in our understanding of them as games.

In this chapter, I lay out what I take to be the root of this problem: namely, that the answers to distinct questions regarding what makes an object art and how that object is to be appreciated once identified as art are often conflated. I first offer a brief discussion of the way in which scholars often argue that videogames are legitimate works of art, noting the lack of reference to game mechanics. I then make the case that specificity of art form plays a central role in the appreciative understanding of works of art; in the case of videogames, part of their distinctness as works of art is that they are games. Thus, I offer an account of game mechanics that explains the impact that the gamehood of videogames has on our aesthetic attitudes toward the medium. Lastly, I offer a few examples of how game mechanics affect the aesthetic experience of playing videogames.

2. The Comparative Approach

To begin, let's look at a common way videogames are often categorized as works of art. A strong case can be made for categorizing videogames as works of art by comparing them to other works and noting the features they

share. This strategy has roots in contemporary theories of art: most notably, theories proposed by Jerrold Levinson and Berys Gaut both lend themselves to the comparative approach.

In a series of well-known papers, Levinson presents what is referred to as an intentional-historical definition of art.¹ Levinson first formulates his theory of art in “Defining Art Historically,” where he writes:

X is an artwork at *t*=df

X is an object of which it is true at *t* that some person or persons, having the appropriate propriety right over *X*, nonpassingly intends (or intended) *X* for regard-as-a-work-of-art—i.e. regard in any way (or ways) in which objects in the extension of ‘artwork’ prior to *t* are or were correctly (or standardly) regarded.

(2011: 240)

In unpacking Levinson’s definition of art, there are two key points of which to take note. First, and most obvious, is Levinson’s reliance on the artist’s intention when determining whether or not something is an artwork. More specifically, a person who creates the work must have intended for it be regarded in a way in which previous artworks have been correctly regarded. Levinson explicitly mentions that the artist need not be *aware* that her intention for *X* to be regarded in a certain way is one that falls in line with the way previous works have been correctly regarded. Even if the way the artist intends for her work to be regarded is, just by chance and unbeknownst to her, the same as other works have been correctly regarded, Levinson is willing to define such a work as art.

Second, it is clear what makes artifacts art is contingent upon what modes of regard have been correctly applied to previous works of art. Here is where the importance of the history of the art world comes in to play. In order to be art, *X* must be appropriately connected with the modes of regard that have been correctly applied to other artworks throughout history. Although Levinson is hesitant to give a full account of what modes of regard count as correct or standard, he does offer a list of examples. As a response to the potential objection that Levinson’s theory is too broad and includes obvious non-art as art, he notes that the notion of modes of regard needs to be interpreted comprehensively, and something sharing just one aspect of a mode of regard with previous artworks may not necessarily be art:

Something closer to a comprehensive way of regard properly brought to bear on, say, almost any easel painting, would be this constellation: {with attention to color, with attention to painterly detail, with awareness of stylistic features, with awareness of art-historical background, with sensitivity to formal structure and expressive effect, with an eye to representational seeing, with willingness to view patiently and sustainedly, . . . }.

(1989: 24)

At this point we can set aside the question of whether or not Levinson's reply is adequate to the objection he is responding to, and simply use his example of a comprehensive mode of regard of easel paintings as way of understanding how videogames are compared to traditional works of art. In order to determine whether an object shares a mode of regard with other commonly accepted works of art, you compare it with other works' intended mode of regard.

Just as Levinson's theory necessitates that a videogame's status as a work of art will rely on comparisons to other works of art, Gaut's does the same, albeit through different theoretical means. Dissatisfied with theories of art that propose a set of necessary and sufficient conditions for something to be art, Gaut argues that art is best understood as a cluster concept.² Starting from the view that definitions of art often fall prey to counterexamples, he follows a Wittgensteinian path, believing that "there are multiple criteria for the application of the concept, none of which is a necessary condition for something's being art" (2005: 273). Here, Gaut understands criteria as properties that count toward an object's inclusion under a concept. He goes on to explain what it means to "count toward" an object belonging to a concept:

First, if all of the properties that are criteria are instantiated, this suffices for an object to fall under the concept; and more strongly, if fewer than all of these properties are instantiated, this also suffices for the application of the concept. So there are jointly sufficient conditions for the application of the concept. Second, there are no properties that are individually necessary conditions for the object to fall under the concept (that is, there is no property that all objects falling under the concept must possess). Third, there are disjunctively necessary conditions for application of the concept: some of the properties must be instantiated if the object is to fall under the concept.

(2005: 274)

In adopting this strategy, Gaut successfully avoids criticisms levied against definitions such as Levinson's intentional-historical account. With no individually necessary conditions, the cluster account has an easier time dealing with counterexamples that challenge the exclusiveness of traditional definitions of art.

Still, Gaut owes us a set of possible criteria we might include in our cluster; the formulation of which is inevitably based on the properties of other objects that are already widely considered works of art. Gaut offers the following as relevant criteria:

- (1) possessing positive aesthetic qualities, such as being beautiful, graceful, or elegant (properties which ground a capacity to give sensuous pleasure);
- (2) being expressive of emotion;
- (3) being intellectually

challenging (i.e., questioning received views and modes of thought); (4) being formally complex and coherent; (5) having a capacity to convey complex meanings; (6) exhibiting an individual point of view; (7) being an exercise of creative imagination (being original); (8) being an artifact or performance which is the product of a high degree of skill; (9) belonging to an established artistic form (music, painting, film, etc.); and (10) being the product of an intention to make a work of art.

(2000: 28)

A proper understanding of Gaut's proposed criteria requires elucidation on two points. First, Gaut is quick to note that his set of criteria is amenable to change, should a plausible counterexample arise. He aims not to defend a particular version of the cluster account, but to offer it as a more palatable alternative to traditional definitions. Second, Gaut differentiates the cluster theory from a similar family resemblance theory that he calls resemblance-to-paradigm. "[The resemblance-to-paradigm] view holds that something is art by virtue of resembling paradigm artworks" (2005: 275). In doing so, Gaut avoids problems of vacuity and incompleteness with respect to finding appropriate paradigm artworks. However, his view still calls for a comparative analysis of commonly accepted works of art in order to establish a set of criteria. It is unclear what other means would be available in arguing for one set of criteria over another. The set must be established by taking inventory of the properties typically associated with commonly accepted works of art, and noting the similarities, varied as they might be. In fact, Gaut understands this implication as a strength of the cluster theory, noting that we often appeal to a variety of criteria when arguing about whether something is art (2005: 278). In doing so, we inevitably appeal to comparisons with other works of art.

Ultimately, Levinson and Gaut come to different conclusions on what makes an artifact a work of art, but both theories nicely represent the approach that some leading theories of art encourage: determining what makes an artifact a work of art often involves comparisons to other accepted works of art. This is particularly true in relation to revolutionary artworks or works in new art forms: the art status of such works may be assessed by considering which features, intrinsic or relational, they share with established works. And the literature on videogames seems to reflect this.

In his article "Are Video Games Art?" Aaron Smuts uses the comparative approach to argue that, according to most definitions of art, videogames can in fact be categorized as artworks. He relies heavily on comparisons to film. As Smuts notes, "game designers often try to make their games look more like film by including cut scenes and imitating other cinematic features. Most narrative-driven games are heavily interspersed with full-motion video sequences called cut-scenes" (2005: 9). By deliberately including small cinematic scenes, game designers seem to have clear intentions of having games recognized as similar to works of cinema. Further, one could

easily see this effort as being associated with criteria from Gaut's cluster account. After all, cinematic scenes in videogames can be formally complex, convey complex meanings, be expressive of emotion, be a product of a high degree of skill, and so on, all in a manner similar to what might be seen in a film. Smuts goes on to discuss ways in which games often try to emulate the look of a film, for example, through various lighting techniques. He notes that in the first-person shooter game *Halo*, when the player looks at the sun it appears as if the player is looking through a cinematic camera (2005: 9). It is no secret that videogames share many of the properties of other artworks in the medium of the moving image. As such, one would be hard pressed to argue that game designers do not intend their products to be regarded in at least some of the ways other artworks have been historically and standardly regarded, which is what Levinson requires for arthood. Again, Smuts succinctly puts it, "Through repeated allusions and attempts at emulating the moving image, game designers intend that we appreciate their games as we do digital animation and video art" (2005: 9). Hence, there are certain correct modes of regard with respect to the moving image that are also applicable to videogames. Likewise, if we consider videogames in relation to Gaut's cluster theory, many games seem to instantiate clusters of art-relevant criteria that, in other artworks, are sufficient for arthood.³

Similarities can be found between videogames and works in many other art forms. Many videogames are largely narrative driven, leading the player through an immersive story, much in the same way novels, plays, and epic poetry do. "Beyond the goals of verisimilitude, games share narrative themes and expressive goals with the history of Western literature and theater" (2005: 11). Narrative-driven videogames address sociological, ideological, and political issues in a way also done in literature. For instance, the first-person shooter *BioShock* examines the notion of a dystopian society founded on objectivist morals featured in Ayn Rand's famous *Atlas Shrugged*. The entire story of *BioShock* is driven by themes widely considered in other artworks. Although it is obvious *BioShock* was not intended to be regarded as a novel, the underlying narrative motifs are still present in both works. As such, a strong case could be made that the designers of *BioShock* intended for their game to be regarded in a manner similar to the way *Atlas Shrugged* was standardly regarded: as a reflection on the relationships between individual freedom, self-interest, and power. Here, we again find correct modes of regard with respect to a widely accepted art form that are intended to be applied to videogames.

Though there are several similarities between videogames and other recognized art forms, for the sake of brevity I'll discuss only one more. Specifically, videogames have the ability to evoke emotional responses much in the same way other art forms do. Grant Tavinor takes note of this similarity videogames share with other art forms when he discusses the case for videogames being art. In doing so, he explicitly takes the classification of videogames as an art from the cluster theory approach (Tavinor, 2009: 177).

He also spends a chapter in *The Art of Videogames* arguing that we respond emotionally to videogames in a way comparable to the way we respond to other fictional artworks (2009: 131–149).⁴ Often, game designers use various mediums employed in other artworks to create fictions to which we have genuine emotional responses. As Dominic Lopes notes, “Video games present narratives and moving images. By doing so, they evoke the same kinds of emotional responses as we see in the classic fiction and film genres” (2010: 114). For example, the survival horror game *Resident Evil 4* uses various lighting and audio techniques to create a suspenseful, and at some points fearsome, fictional world, eliciting the corresponding emotional responses from the player. In creating dark, eerie environments that the player must traverse all the while fighting undead zombies, it seems clear the game designers wanted audiences to regard *Resident Evil 4* much in same way we might regard other frightening fictional works. Again, we see reason to believe that some videogames are specifically created to be regarded in a way other fictional artworks are sometimes standardly regarded, and that they instantiate many of the criteria from Gaut’s cluster account in doing so.

Given that videogames seem to engage the audience similarly to the way in which other art forms do, we have reason to believe that many game designers intend for their product to be regarded in ways other works of art have also been regarded. Videogames incorporate elements from a variety of different artistic mediums to create experiences like those we might have with other artworks, thus instantiating many of the properties that count toward an object being a work of art. Overall, there is a myriad of similar modes of regard and cluster criteria that videogames share with other widely accepted forms of art.

3. The Problem with the Comparative Approach and a Possible Solution

Although the comparative approach is an effective strategy for convincing doubters that videogames are a legitimate art form, it often comes with an undesirable cost. Since games are not typically considered to be works of art, most of the comparisons made to other works of art either neglect or deliberately ignore essential elements of videogames that have a direct effect on our aesthetic and artistic appreciation of them. This can lead to a fundamental misunderstanding of the unique appreciative value videogames offer *qua* games. Exploring the root of the problem with the comparative approach will help set the stage for explaining the importance of gamehood of videogames and potential value it affords.

The problem with the comparative approach is that it leaves us susceptible to conflating two closely related, but distinct questions: (1) What is it that makes something an artwork? and (2) How are we to appreciate that thing once it is identified as art? At times, the answer to (1) is presented as answer to (2) as well. In fact, a number of theories of art conflate

the two questions in their attempt to provide both an accurate descriptive *and* normative account of the concept of art. That is, a good theory of art will explain both how the concept is used, and how it *ought* to be used.⁵ The comparative approach may successfully establish a work's arthood by way of characteristics it shares with other works, but it would be a mistake to assume that these characteristics should be our primary focus when we appreciate or evaluate the works. Appreciation and evaluation rightly focus on features that make a work distinctive.

It is important to recognize that using the comparative approach for a new classification of an artifact may be unavoidable; if the goal is to expand the extension of a category, then a comparison of the old members with the potential new members seems at least strongly intuitive, if not necessary.⁶ If true, then all revolutionary forms of art are potentially subject to the conflation problem. In fact, it could be that it is the conflation problem itself that contributes to the resistance some revolutionary artworks initially face by critics and audiences alike; they try to answer question (1) about a revolutionary work by appealing to accepted answers to question (2) about an already well-established work, where the well-established work seems to be the closest related object to the revolutionary work with respect to question (1). Film critic Roger Ebert's now infamous argument that videogames cannot be art rested in part on an assumption like this. Ebert (2005) argued:

Video games by their nature require player choices, which is the opposite of the strategy of serious film and literature, which requires authorial control. . . . I believe the nature of the medium prevents it from moving beyond craftsmanship to the stature of art.

His statement seems to imply that because videogames relinquish authorial control, which is part of what we appreciate/evaluate in film, they necessarily cannot be appreciated as art. Both defenders and objectors of the art status of videogames are prone to a conflation misstep.

The framework for a possible solution to the conflation problem can be built on the works of Kendall Walton. In his well-known article "Categories of Art," Walton argues for a contextualist understanding of aesthetic properties. Specifically, he says that a work's aesthetic properties are contingent not only upon the work's perceptible, non-aesthetic properties, but also on which of those non-aesthetic properties we see as standard, variable, and contra-standard relative to a category of art (Walton, 1970: 338–339).

How, then, does Walton's contextualist position help solve the conflation problem with the comparative approach to art categorization? By understanding features of a work as standard, variable, and contra-standard relative to a specific category of art, we have a way of distinguishing what features help answer question (2). What makes something a specific kind of work is the fact that it shares standard features associated with other works of that kind. But what we *appreciate* in any work is dependent primarily on

what features are variable relative to its category. Thus, we can adequately answer (2) by appealing to the variable features of a work. A Waltonian framework offers a promising starting point for solving the problem; it succeeds in explaining why a work of art falls into a particular category of art, but presupposes that the work is already considered art. As such, it cannot be used to fully answer question (1). However, it highlights that the features that warrant our attention during appreciation can, and indeed should, be separated from those that motivate us to categorize it in a particular way.

4. Videogames as Games

Having established the need for both understanding and appreciating works of art in relation to an appropriate art kind, an examination of videogames as an art kind is in order. Such a task requires understanding how videogames operate as games. What makes videogames distinct from other art kinds is that, as games, they are meant to be played. Since Wittgenstein famously challenged the ability to define “game” with a set of necessary and sufficient conditions in his *Philosophical Investigations* (1953), scholars have wrestled with questions of both what it means to be a game, and what it means to play a game. Without diving too deep into those waters, we can look to a general theory of games provided by Bernard Suits in order to see how the appreciative nature of videogames is shaped by their essential gamehood. In *The Grasshopper: Games, Life, and Utopia*, Suits takes direct aim at Wittgenstein’s position, offering what he takes to be a definition of gameplay:

My conclusion is that to play a game is to engage in activity directed towards bringing about a specific state of affairs, using only means permitted by rules, where the rules prohibit more efficient in favour of less efficient means, and where such rules are accepted just because they make possible such activity.

(2014: 48–49)

From this general definition of what it means to play a game, Suits goes on to identify four elements that together constitute the necessary and sufficient conditions of gameplay. He states, “the elements of game are 1/ the goal, 2/ the means of achieving the goal, 3/ the rules, and 4/ the lusory attitude [of the player(s)]” (2014: 50). We can use elements that Suits mentions as a foundation for understanding how specific gameplay mechanics, as opposed to pure cinematic or narrative elements, shape the distinct value of videogames.

Applying Suits’ general theory of gameplay to videogames highlights a key difference between them and their traditional counterparts.⁷ Videogames are special kind of game in terms of how players engage with them. Part of what distinguishes videogames from other kinds of games is

the way in which the constitutive rules of the game are set up and enforced. Because videogames are run on computers, the constitutive rules of the game are part of the computer code itself, and cannot be broken by the player without direct manipulation of the code.⁸ This restriction doesn't apply to more traditional games. For instance, if you're playing chess on a physical board with real pieces, you can easily break the constitutive rules: you could simply move your rook diagonally across the board. However, if you're playing chess on a computer, it is impossible for you move your rook in any way other than horizontally or vertically on the board; the constitutive rules of chess are part of the computer program itself, and restrict players' movements to legal moves without exception. Thus, in videogames the lusory means that are both afforded and restricted by the constitutive rules cannot be easily modified.⁹ However, the end result of breaking or changing the constitutive rules of a videogame is the same as it is with traditional games. If a player directly changes the computer program in a way that affects the constitutive rules of chess, then the resulting game would no longer be chess.

At this point, we can use Suits' theory of gameplay to examine how the potential aesthetically appreciative nature of videogames is shaped by their gamehood. The rules, the lusory means prescribed by the rules, and the lusory attitude of the player(s) all have the potential to shape the aesthetics of videogame play. To illustrate this point, I turn attention to the concept of failure in videogames and how it relates to Suits' elements of gameplay.

5. Failure as a Function of Game Mechanics

Suits' framework provides the tools needed to see how gameplay in videogames affects the aesthetically appreciable feature of the game itself. More often than not, videogames are played with the intention of completing a prescribed prelusory goal. And like most games, attempts at completing the prelusory goal within the prescribed lusory means often fail. Analyzing the concept of failure and its relationship to videogame mechanics helps illustrate the importance of gameplay in our aesthetic appreciation of the game. In this section, I briefly explain the importance of failure and its connection to videogame mechanics. I then argue that the variety of ways in which a player may fail in a videogame are best understood in relation to important Suitsian game concepts. Failure made possible by players interacting with the formal features of a game (that is, the lusory means prescribed by the constitutive rules used to accomplish prelusory goals) is desirable. However, failure induced by poorly conceived and executed mechanics that disrupt these formal features comprise the wrong *kind* of failure—that is, a failure that hinders or eliminates the possibility of experiencing aesthetically appreciable elements of the game. Ultimately, this argument strengthens my overall position that proper understanding and evaluation of videogames as an art kind demands accounting for gameplay and player performance; and

that the value of the videogame *qua* game directly affects the value of game *qua* work of art.

Regardless of how objectives are presented to a player, simply setting up goals opens up the door to potential failure. Most often, players engaging in a game expect a certain level of failure when exploring in-game environments for solutions to gameworld problems. In fact, to a certain extent failure is welcomed when playing a videogame. Part of adopting the lusory attitude that Suits sees as an essential part of gameplay involves tacitly accepting the idea that the less than efficient means by which you choose to accomplish the prelusory goal can lead to failure. By adopting the lusory attitude, players knowingly accept that following the constitutive rules of the game may cause failure to achieve the prelusory goal. As Jesper Juul notes in *The Art of Failure*, “if you pick up a single-player video game, you expect the designer to have spent considerable effort preventing you from easily reaching your goal, all but guaranteeing that you will at least temporarily fail” (2013: 11). The expectation of failure plays a key role in keeping the player in the proper epistemic relationship with the game that is needed to retain at least some level of interactivity for the player as she progresses through the game and becomes more proficient at navigating the in-game environment. If a player is guaranteed success without the threat of failure, then engagement with the game turns into manipulation as opposed to interaction. The limited unpredictability required for interaction is no longer a feature of the game if success is a foregone conclusion.¹⁰

Furthermore, if the prelusory goals are too easy to achieve within the prescribed lusory means, then the game becomes less enjoyable.¹¹ Juul (2013: 33–45) discusses this phenomenon at length, drawing comparisons to the paradox of tragedy. He argues that gamers purposely seek out games in which they expect to fail even though failure is generally regarded as a negative experience, much in the same way audiences seek out tragic cinema and theatre even though such works are meant to elicit negative emotional reactions. Juul ran an online experiment to test if failure is correlated with enjoyment when playing a simple game he designed. He asked the players, after playing, to rate how much they enjoyed their experience. “As it turned out, the most positive players were the ones who failed some, and then completed the game. Players who completed the game without failing gave it a *lower* rating than those who failed at least once” (2013: 36).

No matter how the paradox of failure is resolved, the mere fact that it exists illustrates how important the prospect of failure is in videogames. Establishing what constitutes an acceptable level of difficulty is a key in gameplay design, and requires meticulous construction of the constitutive rules.

With the relationship between failure and game mechanics in mind, I turn my attention to the impact it has on how videogames are appreciated. When successful, game mechanics relating to the constitutive rules and lusory means that help determine difficulty share two important features.

First, they ensure a player will remain challenged and inevitably fail at some point during play. Second, successful employment of one or more of the mechanics ensures that a player fails due to her *own choices*, erroneous or otherwise, and not because of poor gameplay design. Each of these features can have a significant impact on the aesthetically appreciable elements of a game. Regarding the first, Juul noted that the expectation of failure plays an important role in a player's overall enjoyment of a videogame. From this point it's no challenge to see how a game that is too easy suffers aesthetically as well. Oftentimes when a game is too easy players become disengaged, and the potential for a unique aesthetic experience found through interactivity and immersion is lost. Games that are too easy, or require little attention to rules of skill, fail to take full advantage of what it is that sets videogames apart from other artistic mediums: the potential for a highly immersive, interactive experience. A player who is challenged is more likely to feel that her input actually matters in her gaming experience, thus deepening the level of immersion into the gameworld. This in turn opens the door for a more meaningful and appreciative experience. Games that don't challenge a player come across as dull and boring and lose their distinguishing features as an artistic medium. They fail to take full advantage of the unique way games can get a player personally invested in the overall experience she is helping create. In doing so, easy games negate the value of working within the videogame medium itself.

Moreover, it's important to note that failure adds to the value of the game and a player's overall enjoyment only if her input plays a crucial role in bringing about failure. As Juul notes, this type of failure, caused by user choice (where the choice is best understood as failing to follow the prescribed rules of skill), is welcomed when playing a game. However, when failure is a product of poorly constructed constitutive rules and other faulty game mechanics as opposed to user choice, it detracts from the overall appreciative value of the game. Perhaps the most obvious way is when a player is unable to advance the narrative due to a game glitch or design error. Further, when failure is at least in part a product of badly designed game mechanics, the actual play of the game is a detriment to the entire experience. Games that contain numerous glitches, are unbalanced, or have poor or unnecessarily complex control schemes often lead to failure in the wrong sort of way.

For instance, when the fourth installment of the popular action role-playing *Fallout* series, *Fallout: New Vegas*, was first released it was littered with numerous bugs and glitches that severely affected a player's ability to progress through the game. One of the more serious bugs involved losing saved game files in their entirety if the player entered a certain area of the gameworld. Throughout the game, there are numerous underground areas, or vaults, to explore. After completing the missions in Vault 3, upon trying to exit the vault and return to the main world players reported not being able to save their game anymore, and that all other saved files they had

were corrupt and could not load. With the potential for over 100 hours of gameplay, *New Vegas* requires multiple sittings in order complete; the ability to save your progress is a necessity. Less severe glitches and bugs were also reported that contributed to failure in the wrong sort of way; there are other instances where enemy NPCs glitch and “melt” into the environment, rendering them invisible to the player, yet they can still inflict damage on the player’s character. Thus, the player is left facing unbeatable enemies and unavoidable failure. These bugs contribute to failure regardless of user input, and lead to frustrating gaming experiences, with no chance of player success. In turn, what was intended to be an aesthetically immersive experience where players feel as if they are engaging firsthand in an intense and mysterious world becomes a display of inept world-making.

Playing *New Vegas* with all its bugs and glitches that lead to the wrong kind of failure severs the connection between player and game otherwise found in a game without such problems. The sense of control needed for an interactive experience is lost and the player is alienated from the game-world, no longer feeling as if her choices actually matter in producing what she is experiencing. In addition to rendering the game unresponsive to user input, glitches like those found in *New Vegas* serve as the wrong sort of reminder that the player is engaging in a work of fiction. NPCs suddenly disappearing without explanation is similar to an actress breaking character in a play or movie; it damages the cohesiveness of the fictional world and leaves the audience confused.

The relationship between failure and game mechanics represents just one of the ways in which the gamehood of videogames affects their aesthetic appreciation. When it comes to narrative-driven games, striking a balance between gameplay, specifically player choice, and telling a worthwhile story is not an easy task. In section 6, I examine how constitutive rules work in conjunction with storytelling, further establishing the importance of including gamehood in our aesthetic understanding of videogames.

6. Constitutive Rules and Narrative

I mentioned in the opening section that when establishing the art status of videogames, scholars often deliberately ignore gamehood and focus on other artistic elements of the medium. Moreover, this strategy leads to a fundamental misunderstanding of what makes videogames a unique artistic medium. Thus far I have addressed the problem only from a theoretical standpoint by highlighting the need for establishing a videogame aesthetic (or theory of videogames as an art kind) that includes features of gamehood for a more accurate understanding of the medium. However, the disjointed approach to understanding the aesthetics of videogames is, in part, a product of how game designers and producers sometimes approach their craft: when it comes to balancing gamehood with narrative, the divide between the two elements is rarely addressed. Yet even this practice helps galvanize

the idea that gamehood is essential to developing an adequate understanding of videogame aesthetics. To illustrate, let's look at how the videogames *Braid* (2008) and *The Last of Us* (2013) incorporate the constitutive rules of their respective gameplay into their narratives.

Developed by independent game designer Jonathon Blow, *Braid* is a side-scrolling puzzle platformer, where the player controls the protagonist, Tim, who is trying to rescue a princess from an unknown enemy.¹² Each level of *Braid* invites the player to solve various in-game puzzles in an effort to collect jigsaw puzzle pieces that must be put together to advance to the next level. For the most part, *Braid* plays like any other puzzle platformer: players must traverse in-game obstacles by jumping across pits and onto platforms, disposing of enemies by jumping their heads, or simply running away from them. Anyone familiar with *Super Mario Bros.* will recognize most of the game mechanics. However, *Braid's* signature game mechanic, set up by its constitutive rules, allows the player to manipulate time in various ways to progress through the game. Rather than giving the player a set number of lives to complete levels like *Super Mario Bros.*, *Braid* allows the player to rewind time whenever an error is made and try a different approach. And each level adds a wrinkle to the basic time manipulation mechanic that is key to solving the central puzzle of that particular level. For instance, in world 4, in addition to the player being able to rewind at the press of a button, time is manipulated when Tim moves across the screen: as Tim moves toward the right, time goes forward, and when he moves left, time rewinds. As the player progresses, the twists to time manipulation from previous levels are often incorporated into the next level, building on puzzles already solved.

Although other games have utilized time manipulation as a game mechanic, *Braid* sets itself apart by synthesizing the mechanic with its narrative.¹³ When the player is first introduced to Tim, it is unclear what has happened to his Princess, or why she's in need of rescue; but what is clear is that Tim has made some sort of mistake, and is stricken with guilt and regret. Before the first level starts, the player is presented with a brief paragraph explaining Tim's melancholia:

Tim is off on a search to rescue the Princess. She has been snatched by a horrible and evil monster. This happened because Tim made a mistake. Not just one. He made many mistakes during the time they spent together, all those years ago. . . . Our world, with its rules of causality, has trained us to be miserly with forgiveness. . . . But if we've learned from a mistake and become better for it, shouldn't we be rewarded for the learning, rather than punished for the mistake?

Thus, almost immediately, *Braid's* storyline invites the player to consider what it would be like to go back in time and make up for past mistakes. Tim is clearly regretful of past wrongdoing, and will go to great lengths to make up for it. The narrative focuses on a character yearning to erase the past,

and the central game mechanic maps seamlessly onto this idea. By allowing the player to rewind time, *Braid* successfully connects its gamehood with the narrative, taking full advantage of the interactivity videogames offer. Doing so creates a cohesive object of aesthetic appreciation, where the artistic value of the narrative and gamehood are intimately intertwined.

In the last level, *Braid* solidifies the connection between its central game mechanic and the story. Curiously labeled “1,” the final level tasks the player with rescuing the Princess from her captor. The player can still manipulate time, only in this level, time already flows in reverse; so when the player presses the corresponding button, time then flows forward. As the level opens up, Tim is underground, separated from the Princess, who is on the surface and being held by a large figure wearing a knight’s armor. Tim watches as the Princess escapes the Knight’s grasp, crying out for help, with the Knight calling for her to come back. She then runs across the stage; all the while Tim, still underground, races to catch up with her, avoiding various obstacles and traps along the way. At the end of the stage, Tim finally reaches the Princess. However, when he gets close to her, time suddenly reverses flow, and the player watches as the actions she took to rescue the Princess are reversed.¹⁴ Now, the Princess is running *away* from Tim as he gives pursuit. Again, she cries out for help, and this time the Knight is calling for her to join him, as she jumps into his arms, avoiding the reach of Tim. As the level ends, the player realizes Tim is the monster that the Princess is hiding from, and the Knight comes to her rescue. Again, *Braid* invites the player to see the central game mechanic as a crucial part of the narrative itself. Tim desperately wants to right the wrongs he committed in the past, and the game mechanic reflects his desire before helping reveal the twist ending: no matter what Tim does, his past mistakes are irreversible. Incorporating the game mechanic with the narrative in the way that *Braid* does makes the narrative more impactful to the player, and helps *tell* the story, rather than diminish it.

Where *Braid* succeeds in taking full advantage of the opportunity videogames provide for telling an immersive story, *The Last of Us* represents a case where the gamehood detracts from the potential aesthetic impact narrative videogames can offer. Set in a modern-day dystopian society, *The Last of Us* is a survival horror action adventure played from the third-person perspective. Most of the game takes place twenty years after an airborne fungal outbreak turns humans into zombie-like monsters. The player controls Joel, weathered survivor of the original outbreak, who reluctantly takes on the task of escorting Ellie, a teenage girl, from Pittsburgh to one of the last medical centers standing in Salt Lake City. Ellie represents humanity’s last chance of curing the outbreak, as she is somehow immune to the effects of the fungus. The hope is that the doctors in Salt Lake City will be able to create a vaccine based off of Ellie’s immunity.

Throughout the journey to Salt Lake City, the player must navigate her way through infected zombies, hostile groups of survivors, and environmental

obstacles impeding progress. As far as the central game mechanics go, *The Last of Us* keeps with the tradition of most survival horror games. The player can choose to directly confront enemies using a variety of weapons to dispatch them, use a stealthier approach by sneaking around enemies and avoiding conflict altogether, or a mixture of both strategies. Resources like weapons, ammunitions, and first aid are scarce, so the player must plan her strategy accordingly.

Although the gameplay of *The Last of Us* is standard when it comes to games of its genre, the story and character development has been praised almost universally by critics and gamers alike. The game received an overall rating of 95 on the review aggregator metacritic.com, with several reviewers commenting on the unusual success of a compelling story being told through a game. The story primarily revolves around Joel and Ellie's relationship. Throughout the game, the player learns about both Joel's and Ellie's past, and how it affects their relationship. Told mostly through cut-scenes and scripted dialogue, it is revealed that Joel had a daughter close to Ellie's age when the outbreak first occurred and was unable to save her. This sets up his future relationship with Ellie, as he slowly accepts his role as Ellie's protector and surrogate father figure. Moreover, Ellie, who was born after the initial outbreak, only knows a world post-apocalypse. Joel often serves as a historian for Ellie, explaining how life was before the outbreak. As the story progresses, Joel and Ellie's father/daughter-like relationship is cemented as the player navigates the gameworld. Solving various puzzles in order to progress often requires help from Ellie, further strengthening the relationship between the Joel (the player) and Ellie. Joel and Ellie work together throughout the game, establishing a dynamic bond where they become mutually dependent on one another; as many times as the player is asked to save Ellie by controlling Joel, Ellie saves Joel an equal amount.

By the time the game and story reaches the climax, Joel and Ellie have formed a fiercely loyal connection with one another; a connection that the player cannot help but feel obligated to protect. So when they finally reach the hospital, there is an unnerving sense that the player will be faced with a difficult choice. Again, through a series of cut-scenes and contextual dialogue, it is revealed that extracting the tissue necessary to create the vaccine and save humanity will kill Ellie. At this point, Ellie has been knocked unconscious in a previous fight, so it is up to Joel to make the decision: leave Ellie with the doctors, essentially killing her but saving humanity, or violently break her out, dooming humanity but saving her life.

The entire game and storyline sets up the player to confront this unavoidable, anxiety-ridden choice. As I was playing the game, anticipating the moment when I would have to decide whether to save Ellie or save humanity came with a sense of agony. Although I knew it was building to this point, I still didn't know what choice I would make. And then, as the moment approached, the game did something that, as a highly interactive medium, came as an unwanted surprise: the choice was made for me. In a cut-scene

lasting roughly ten minutes, Joel breaks Ellie out, killing any doctors stopping him from escaping with a still unconscious Ellie in his arms. As they drive away in the following shot, Joel lies to Ellie, knowing full well that she would have wanted to stay and sacrifice her life for the good of humanity. He tells her that there were others like her and that the doctors were unsuccessful in creating a vaccine, ultimately giving up on the project. In the final scene, as Joel and Ellie are walking through the wilderness back to a community they discovered earlier, Ellie again confronts Joel, asking him to swear that he told her the truth about the hospital. For the second time, Joel's response is left out of the hands of the player, as he lies once more to Ellie, knowing she would never forgive him if she knew the truth.

Although telling the final chapter of the story through non-interactive cut-scenes and scripted dialogue gives the narrative a cohesive and lasting impression, it makes for a less interesting overall work of art *qua* videogame. In this case, the rules of the game prohibited the player from making any choice about how *she* would respond, given the choice that the entire story was building toward. By taking the pivotal moment of choice out of the player's hands, the player is left with a disjointed final product. Nothing about *The Last of Us qua* game relates to or reinforces *The Last of Us qua* narrative. The relationship built up between the player (playing as Joel) and Ellie is cast aside, as the player is forced to passively watch the ending unfold, rather than being a part of it. By restricting the player's actions in this way, *The Last of Us* fails to take advantage of the special opportunity videogames can provide to their audience as an interactive medium. What's left is a distinct story *and* a distinct game rather than a story told *through* a game.

At this point it is clear that there are important non-aesthetic features of videogames *as games* that affect the aesthetic experience of playing. If we are to have a complete understanding and proper evaluation of the aesthetically appreciable nature of videogames, then we must include these features in the discussion. Understood as a product of the constitutive rules, game mechanics are a perfect example of one such feature, affecting the appreciable nature through failure and storytelling. We cannot simply focus on the obvious similarities videogames may share with other artistic mediums. A framework that both recognizes and helps explain what it is that sets videogames apart as an artistic medium needs to include an evaluation of gameplay, including game mechanics.

Notes

1. See Levinson (2011, 1989).
2. See Gaut (2000, 2005).
3. Gaut himself considers the art status of videogames as directly related to the connections they have with cinema. See Chapter of 5 of his *A Philosophy of Cinematic Art* (2010).
4. Tavinor ultimately concludes that part of what makes videogames distinct as potential works of art is their ability to elicit "self-directed" emotional responses.

5. The idea of normative and descriptive adequacy with respect to a theory of art plays an important role in Lopes' argument in *Beyond Art* (2014).
6. Thanks to Grant Tavinor for this helpful insight.
7. Brock Rough (this volume) argues that not all videogames are games. If this is the case, then those videogames may require a form of appreciation that is distinctive from what I advocate here. The details will depend on the specifics of these artworks and how they function.
8. There are cases where socially constructed rules may be considered constitutive and exist outside of the game algorithm. In competitive gaming communities, for example, certain character abilities and/or playstyles may be banned for a particular event.
9. Admittedly, some games allow for opportunities to modify constitutive rules: changing the difficulty settings among easy, medium, or hard in any videogame may be understood as changing the constitutive rules. Even in such cases, there are restrictions on how much players can modify the rules, so there is always a core set of constitutive rules that players must abide. My thanks to Jon Robson for pointing this out.
10. There may be videogames where the unpredictability of possible outcomes remains without the possibility of failure if there are multiple ways a player can succeed. In cases with multiple win conditions, the idea of temporary failure at achieving one of those conditions is still importantly connected with unpredictability. Thanks to Jon Robson for pointing this out.
11. Conversely, if a videogame is *too difficult*, players' enjoyment suffers as well. So it is important that the potential for failure is created through appropriate, balanced game rules.
12. *Braid's* general story pays homage to the classic "hero saves the princess" trope seen in games like *Super Mario Bros.* and *Legend of Zelda*.
13. For example, *The Legend of Zelda: Ocarina of Time* (1998) and *Prince of Persia: The Sands of Time* (2003) both use time manipulation as a game mechanic.
14. Recall that in the final level time is already reversed, so once Tim reaches the Princess, time starts moving forward again.

References

- Ebert, Roger. (2005). "Why Did the Chicken Cross Genders?" *Movie Answer Man*, November 27, 2005, www.rogerebert.com/answer-man/why-did-the-chicken-cross-the-genders (accessed August 22, 2017).
- Gaut, Berys. (2000). "Art as a Cluster Concept." In *Theories of Art Today*, edited by Noël Carroll, 25–44. Madison, WI: University of Wisconsin Press.
- . (2005). "The Cluster Account of Art Defended." *British Journal of Aesthetics* 45 (3): 273–288.
- . (2010). *A Philosophy of Cinematic Art*. New York: Cambridge University Press.
- Juul, Jesper. (2013). *The Art of Failure*. Cambridge, MA: MIT Press.
- Levinson, Jerrold. (1989). "Refining Art Historically." *Journal of Aesthetics and Art Criticism* 47 (1): 21–33.
- . (2011). "Defining Art Historically." *British Journal of Aesthetics* 19 (3): 232–250.
- Lopes, Dominic McIver. (2010). *A Philosophy of Computer Art*. New York: Routledge.
- . (2014). *Beyond Art*. Oxford, UK: Oxford University Press.
- Smuts, Aaron. (2005). "Are Video Games Art?" *Contemporary Aesthetics* 2: 1–16.
- Suits, Bernard. (2014). *The Grasshopper: Games, Life, and Utopia*, 3rd ed. Peterborough: Broadview Press.

- Tavinor, Grant. (2009). *The Art of Videogames*. Oxford: Wiley-Blackwell.
- Walton, Kendall L. (1970). "Categories of Art." *The Philosophical Review* 79 (3): 334–367.
- Wittgenstein, Ludwig. (1953). *Philosophical Investigations*, 4th ed. Oxford: Wiley-Blackwell.

6 The Beautiful Gamer?

On the Aesthetics of Videogame Performances

Jon Robson

1. Introduction

It should be abundantly clear by now that videogames are capable of instantiating a range of complex and valuable aesthetic properties. The haunting beauty of *Ico*'s minimalist storytelling, the frantic vibrancy of combat in the *Smash Bros.* games, and the complex yet elegant level design in the *Dark Souls* series (amongst so many other examples) show that the time for debating whether videogames are proper objects of aesthetic appreciation, if there ever was such, has long since passed. As such, I will take this issue as settled and move beyond discussion of the aesthetic status of videogames themselves to consider instead the aesthetics of individual performances (or playings) of videogames. I will argue that videogame performances are frequently fitting objects of aesthetic appraisal and that we can learn a lot about the aesthetics of such performances—and about videogames more generally—from comparing individual playings of videogames to other kinds of performance. However, I will also argue that the aesthetics of videogame performance is importantly distinct from the aesthetics of performance in these other areas.

In section 2 I briefly deal with some background issues and clear up some possible sources of confusion. In section 3 I consider, and respond to, some reasons for claiming that there is nothing aesthetically interesting about individual videogame performances. In sections 4–6 I consider some analogies between videogame performances and other kinds of performance.¹ I argue that while videogame performances share important features—aesthetic and otherwise—with performances in sports, film, and theatre, they are also disanalogous in some fundamental respects. As such, we cannot account for the aesthetics of videogame performance merely by extending extant accounts of performance in these other domains. This, I suggest, provides a strong impetus to develop a new account of how to best understand, and appreciate, the aesthetics of videogame performance. Finally, in section 7, I offer some concluding remarks.

2. Videogames and Aesthetics

There are various different issues that we might be considering when we ask about the aesthetic properties of videogames. First, we might be interested in considering the aesthetic properties of particular physical tokens used to generate videogame playings; cartridges, arcade cabinets, CD-ROMs, and the like. There are, doubtless, some interesting issues here, but they mostly seem to belong more to the philosophy of design than to the philosophy of videogames. Second, we might ask about the aesthetic properties of the videogame code itself. We may, for example, focus on putatively aesthetic properties of various algorithms and so forth in the same way that various philosophers (such as Breitenbach [2015] and McAllister [2005]) have investigated claims concerning the aesthetics of mathematics more generally. Finally, and most commonly, people are interested in the aesthetics of videogames considered as works of art. My investigation in this paper will fall broadly within this category. I will, however, depart from most earlier discussions (such as Smuts [2005]; Lopes [2010: 103–120]; and Tavinor [2009]) by moving from a focus on the aesthetics of the videogame itself to a focus on the aesthetics of individual playings, or performances, of videogames. That is, rather than focusing on the aesthetics of a type such as the videogame *X-COM: Enemy Unknown*, I will focus on token playings such as *Jon's playing of X-COM yesterday*. This distinction is already familiar from philosophical work on various “performing arts,” but I will argue that it has been unfairly neglected when it comes to the aesthetics of videogames.²

Before I begin, though, it is important to introduce a few points of clarification. First, I am only interested in aesthetic properties of playings that arise, so to speak, *qua playing*. Consider, for example, a playing of *Dark Souls* in which the player first arrives in Anor Londo. This experience is one that many players find to be aesthetically rewarding as they step into the hauntingly beautiful, desolate landscape of the once great city.³ These experiences are not, however, ones that will be of particular interest for my purposes, since they primarily belong to the game itself rather than to individual playings of it. The wonderfully intricate design of Anor Londo is not (with a few notable exceptions) something that is affected by the player's actions. While the sequence described above is not one that all players will necessarily encounter during their playings—many will, no doubt, give up in despair owing to the various fiendish traps found in the previous location: Sen's Fortress—anyone who progresses that far in the game will encounter substantially the same vistas regardless of their own gaming choices. The relevant aesthetic features for my purposes, by contrast, are those that result from those very choices.

Second, I am only concerned here with the aesthetics of videogame playings considered as *videogame* playings. This will exclude, for example, works of videogame performance art such as *Super Mario Clouds*, in which the game (or game mod) is intended to be viewed as, for example, a

piece of installation art rather than as a videogame. Similarly, I will not be concerned with videogame performances in games such as *Minecraft* and *Dragon Quest Builders*, which involve *creating* various aesthetically evaluable objects, or those such as *Super Mario Maker* and *Little Big Planet*, which focus heavily on allowing players to design their own levels via level editors. Finally, I will not be considering games in which the player's performance might plausibly qualify as a straightforward artistic or aesthetic performance of another kind (dance performances in *Dance Dance Revolution*, musical performances in *SingStar*, and so forth).

As a final point of clarification, it is important to understand the sense in which I will be using "performance" throughout this chapter. Various philosophers have recently attempted to offer detailed accounts of precisely what makes something an instance of artistic performance in a sense that is relevant to marking the distinction between performing and non-performing arts. David Davies, for example, claims:

Performances, in general, can be thought of as events that share the following general features: they involve intentional action aimed at achieving some result; they are open, at least in principle, to public scrutiny and assessment; and they are standardly presented to a relevantly informed public with the intention that they be appreciated and evaluated. Something counts as an "artistic performance" of the sort that is central to the performing arts if it makes perceptually manifest to receivers qualities that bear upon the appreciation of a work of art.

(Davies, 2009: 744)

Accounts of this kind are, however, tangential to my purposes, and I take no stance here on whether videogames are a performing art in this sense.⁴ Rather, I intend to use "performance" in a much broader sense so as to encompass (*inter alia*) (i) performances within the performing arts, (ii) individual token showings of films, playings of musical recordings, and so forth, and (iii) various activities within areas not typically classified as artistic, such as an individual's (or team's) actions during a football game or a debating competition. This sense of "performance" is, of course, rather loose, and it is important to stress that this usage is intended to be a partially stipulative one rather than an attempt to capture anything about ordinary concepts of *performance* as used either by the folk or within various art world institutions. I am merely using the term as a placeholder since it strikes me as the closest extant general term for describing the various phenomena I will address below.

3. The Aesthetics of Videogame Performance

So, can videogame performances so described be evaluated aesthetically? Yes, they can. I can think of no *prima facie* plausible reason for denying that we can attribute *some* aesthetic properties to individual videogame

performances of the kind I have described. However, this is not an especially interesting result since mere aesthetic evaluability comes very cheaply. Various aestheticians—such as Irvin (2008) and Saito (2001)—have argued that there is very little (if anything) that we encounter that is not amenable to some form of aesthetic evaluation. And I am inclined to agree with these proponents of so-called “everyday aesthetics” that “it is appropriate and worthwhile to think of even the simplest moments of everyday life in aesthetic terms” (Irvin, 2008: 25). Once we accept such a broad notion of the aesthetic, though, it should be clear that even something as simple as moving your player’s avatar from point *a* to point *b* can fittingly be susceptible to aesthetic evaluation. Of course, this expansive notion of the aesthetic is—for reasons highlighted in, for example, Soucek (2009)—an extremely controversial one. I will not, however, argue for it here, since merely establishing that videogame performances are aesthetically evaluable in this broad sense—a distinction shared by (virtually) everything we encounter in our everyday lives—would do little to demonstrate that they should be of pressing theoretical interest to aestheticians.

As such, my concern will be with investigating whether there is anything of philosophical interest to be said that is specific to the aesthetics of videogame performance. And there certainly seems to be some skepticism when it comes to the aesthetic significance of individual videogame performances. Aaron Smuts (2005), for example, claims that the “performance of a video game is not normally evaluated aesthetically,” and Tavinor (2011b) that we “do not typically pick out individual playings for aesthetic praise.” In the remainder of this chapter, I aim to demonstrate that such skepticism is unwarranted by arguing for two key claims. First, that the aesthetics of videogame performance is substantive and theoretically significant. Second, that the aesthetics of videogame performance is importantly distinct from the aesthetics of performance in other areas that have previously been the subject of in-depth philosophical focus.

So, why might someone deny that there is anything aesthetically significant about videogame performance? Three *prima facie* plausible reasons suggest themselves. Most straightforwardly, we might claim that there is no established practice of applying aesthetic evaluations to videogame performance. We often describe videogames themselves—as I have in the introduction—as hauntingly beautiful or frantically vibrant, but we would not typically direct such praise toward token performances of videogames. This serves as a marked contrast to the wide range of aesthetic predicates applied to performances in dance, theatre, and other domains where such performances are widely accepted as aesthetic objects in their own right. Second, we might suggest that there is no established practice of spectating with respect to videogame performance. People are often interested in viewing particular performances of musical or theatrical works, but we have no corresponding interest in viewing individual performances of videogames. Finally, it could be objected that there is no established practice of reviewing

videogame performances—something that, again, differs significantly from our practice when it comes to the performing arts. A typical review of a play would, for example, likely tell us not only the critic's view of the play itself but also her opinion of various aspects of the performance she attended. By contrast, game reviewers only tend to focus on aspects of their own playings insofar as they shed some general light on the value (aesthetic or otherwise) of the game as a whole. I will argue, however, that each of these reasons for doubting the aesthetic interest of videogame performance is ultimately unpersuasive.

The first two reasons are the easiest to address since I believe that they rest on factually mistaken claims concerning practices of engagement with videogames. There are in fact already various well-established practices that involve applying aesthetic terminology to videogame performance as well as practices that involve spectators viewing such performances. To see this, consider some of the practices that have arisen surrounding competitive videogame tournaments. Such tournaments are becoming increasingly popular not only among videogame players but among spectators as well. For example, over thirty million viewers watched last year's *League of Legends* final.⁵ Further, such tournaments, as with similar competitions in other domains, are often accompanied by expert commentary, commentary that often features a varied range of aesthetic terminology (describing play as "beautiful," "elegant," "graceful," and so on). This shows, then, that there are indeed extant practices of spectating and applying aesthetic terminology when it comes to videogame performances.⁶ It is certainly true that such practices are not as well established or as developed as parallel practices concerning, for example, dance or theatrical performances. However, this is easily explicable given how recent a development videogames (and the various practices associated with them) are.

When it comes to the third reason, things are a little more complicated. It is certainly true that videogame critics don't typically focus on aspects of their own videogame performances, but an explanation of this can be offered that doesn't require denying the genuine aesthetic evaluability of videogame performance. To see how, consider Peter Kivy's discussion of our silently reading novels to ourselves. According to Kivy (2008: 1), such activities and performances in the performing arts "have more in common than common sense suspects." In particular, Kivy argues that such performances are aesthetically evaluable (2008: 59–72) and that they can qualify as artistic performances in their own right (2008: 74–83). Yet, it seems clear that, whatever aesthetic properties such performances have, these are typically not the subject of critical focus. As with the case of videogames, we would not expect to see reviewers mention anything about the aesthetics of their own silent performance of a novel unless they took this to highlight some relevant feature of the novel itself.⁷ Their reason for not doing so is, however, a fairly straightforward one. The aesthetic properties of a theatrical or musical performance are in an important sense *shared*. That is, any

suitably informed and sensitive spectator of the same performance would have access to the same aesthetic properties as the critic and there is good (albeit defeasible) reason to judge that the aesthetic properties of the performance the critic witnessed would be somewhat similar to those of subsequent performances in the same run. Given this, information about the aesthetic properties of the performance that the critic witnessed would likely be very useful to her readers in considering whether to engage with the works in question and in guiding their appreciation if they choose to do so. By contrast, the critic's readers would have no access to her own private performance of a novel and no reason to think that their performances would be anything like hers (just as an excellent performance of *Hamlet* by one theatre company would not justify our concluding that a performance by a different group will also be excellent). As such, a critic's review of her own silent reading would not be able to guide her readers when it comes to understanding or evaluating their own performances of the novel in question and, more generally, it would fail to achieve many (if not all) of the aims of criticism discussed in, for example, Carroll (2009). As such, we have a clear explanation for why the aesthetics of such private performances are rarely the focus of critical attention.

Of course, Kivy's claims here are controversial in a number of respects. Most obviously, many will be inclined to reject Kivy's claim that silent readings are—or are even analogous to—artistic performances. My aim here is not, however, to endorse Kivy's view of silent reading nor (as I've already stressed above) to claim that videogame playings are performances in anything like the demanding sense that Kivy has in mind here. Rather, I merely aim to show that there are extant reasons for denying that we should expect all performances (in my more inclusive sense) that are aesthetically evaluable to be subject to widespread critical evaluation. Returning to videogames, we can see that performances here fall between the other two cases. While it is open to the critic to make her own videogame performance available to readers (indeed, many reviewers for games websites do just that), there is no good reason to judge that the performances of the reader will be anything like those of the critic in the relevant aesthetic respects. As such, it is once again easy to see why a critic's drawing attention to aesthetic features of her own performance would be of little use to her target audience.

Given this, this third argument also fails to motivate the claim that videogame performances aren't a proper target for detailed aesthetic evaluation. However, merely demonstrating that these arguments are unsuccessful doesn't itself show that videogame performances *do* have any aesthetically interesting features nor tell us anything positive about the form that such aesthetic features might take. In order to make some progress concerning these further tasks, then, I will turn to my second central claim and spend the next few sections highlighting some important elements of comparison and contrast between videogame performance and performances of other kinds.

4. Videogames and Sport

It has hardly escaped notice (see, for example, Bartel [this volume] and Holt [2016]) that there are many important similarities between videogames and sports. As such, sporting performance might seem a natural place to look when searching for an extant analogue to videogame performance. The most obvious point of comparison concerns certain kinds of videogame that are themselves adaptations of particular sports (see Juul [2005: 23–54] and Bartel [this volume]).⁸ There are numerous comparisons between real-life football and the virtual football featured in the *FIFA* series (or the *Madden* series for readers in the United States)—similarities that include a great many shared aesthetic features. Consider, for example, two sequences of events. In the first, a player deftly takes control of the ball and skillfully weaves between opposing players before performing a perfectly timed strike into the opponent's net. Whereas, in the second, a player awkwardly fumbles with the ball before quickly relinquishing control to the first opposing player to challenge him. Importantly, I have not mentioned anything about whether such sequences occur in a “real-life” game or a merely virtual one, and such information doesn't seem necessary to assessing many aesthetic aspects of the two sequences. In both cases, we can truly claim (barring very special circumstances) that the first player's performance was aesthetically superior to the second's, since the former will likely exhibit a high degree of various aesthetically relevant properties—gracefulness, elegance, and so forth—while the latter, to put things bluntly, will not.

It is important, however, not to overstate the similarities here, and there are also important aesthetic disanalogies between real-life sports and their videogame equivalents. Consider, for example, that various actions that can be exceedingly difficult to perform in real life may be very easy to pull off within a videogame. In *FIFA 17*, for example, players are able to execute impressive-looking moves such as scissor kicks or Rabona fakes merely by pressing a single button. In the real world, though, similar feats would typically require a high degree of skill and coordination from the relevant player. This difference may initially seem inconsequential (at least from an aesthetic point of view), but it becomes more relevant when we recall that it is commonplace to link the difficulty of producing certain objects with their aesthetic quality. When it comes to artworks, for example, Denis Dutton (1979: 309) famously maintained that the fundamental question when evaluating artworks is “What has the artist done, what has he achieved?” And, of course, what the artist achieves is intricately linked to the difficulty of the task the artist was facing. Similarly, Anne Eaton (2012: 288) suggests that artworks are often “the result of a design process that addresses and aims to solve a set of problems” and that we often assess such works by considering the difficulty of the problem they (attempt to) solve and whether the solution is “original or hackneyed, elegant or clumsy, clever or obvious, handily achieved or labored.” And, of course, such claims can easily be extended

beyond the artistic realm. We would, for example, evaluate the aesthetic properties of a quotidian artifact very differently if we found out it was hewn using stone tools by our Paleolithic ancestors than if we found out it was mass-produced in a factory last week using the latest techniques.⁹

Indeed, claims of this kind are already frequently made regarding sporting performance. Lacerda and Mumford, for example, claim that

A victory can seem beautiful or dramatic because of the maximum effort and focus of the athlete, even though they have no desire to produce beauty or drama. Sport's aesthetic value derives frequently from situations where athletes are confronted by their limits, and their attempts to surpass themselves is one of the most appreciated aspects of sport. Examples come to mind of Bernard Hinault, finishing a stage of the *Tour de France* with blood streaming down his face and of Gabriela Andersen-Schiess, who entered the Los Angeles Olympic stadium at the end of the 1984 marathon staggering and struggling to finish the competition. Such cases show the ability of sport to turn the ugly into the beautiful and profound.

(2010: 186)

It seems reasonable, then, to expect that we might evaluate the same sequence of moves differently if we know that in one case (the virtual) it is merely the result of a few relatively simple button presses and in the other (the real) it requires years of training combined with an incredibly rare set of talents. In most actual cases, differences of this kind will give the aesthetic advantage to the real-world athlete over the videogame player, but there is no reason to believe that this will necessarily be the case. Indeed, there are already games such as *Surgeon Simulator* where activities that pose no challenge to most individuals in real life—such as picking up a hammer or using a pair of scissors—are made rather more difficult to perform within the game. Were someone to produce a sporting equivalent of such games, then we may be inclined to judge an action that would appear clunky and uncoordinated in real life as graceful when performed within the game.

Moving beyond the realm of sports games, there are also more general areas of comparison between videogame and sporting aesthetics. One key aspect of the aesthetics of sport is the relationship between the aesthetic properties of various actions/techniques and their tendency to contribute toward sporting success. Consider Lacerda and Mumford's example of the Fosbury flop. While, in certain respects, this style of movement may seem ungainly, they argue (2010: 191) that it "would not stop us [aesthetically] appreciating Dick Fosbury's genius in innovating it." And, more directly, we will often consider a particular element of a sporting performance (a feint, a shot, a block, or whatever) that contributes to sporting success aesthetically superior to a qualitatively identical move which fails to help, or even hinders, the player's competitive aims. Similarly, we will often take a

key element of the aesthetics of a videogame performance to be how well the actions in question contribute toward the player's goal. A sequence of skillfully executed jumps and spins that allows the player's character to narrowly clear a seemingly impassable chasm will, *ceteris paribus*, be judged aesthetically superior to an otherwise identical sequence that ends in the character's plummeting to an untimely death.

It is, however, important not to overstate the commonalities between these two kinds of performance. First, the features I have highlighted above are not universal when it comes to videogames. Rather, these comparisons arise from focusing on the (admittedly very wide) class of videogames that feature overall goals and (relatively) clear criteria for success. There are, however, various games, such as *Animal Crossing*, the *Flight Simulator* series, and *Minecraft*, that lack such features. Further, even when we focus on games of the first kind, there are still important differences between videogame performance and sporting performance. Most obviously, videogame performances are often *narratives* (or at least token instances of narrative types) whereas standard sporting performances, while a perennial theme of various kinds of narrative, are not themselves narratives.¹⁰

It might be objected, though, that videogames are not the only area where we perennially encounter a mix of narrative and gameplay. The same occurs with, for example, items as diverse as tabletop RPGs, card games such as *Gloom*, and storytelling contests. This is true, and I believe that there is much in common between the aesthetics of videogame performance and the aesthetics of performance in these other cases. In particular, there are very close analogies between the aesthetics of videogame performance and the aesthetics of performances of non-video games—such as tabletop or live-action RPGs—which are instances of what Aaron Meskin and I (2016) term “Self-Involving Interactive Fictions” (SIIFs). That is, roughly, fictions that are about those who play them in virtue of their interactions with the game in question. I will not, however, say anything about such cases here, since their aesthetic properties—and, *a fortiori*, the aesthetic properties of their performances—are even more undertheorized than the aesthetics of videogames.¹¹ As such, someone looking for a straightforward analogue to videogame performance amongst already well-trodden theoretical ground will need to look elsewhere.

5. Videogames and Film

Next, let's consider the case of film performance. The various similarities between these two art forms have already been noted in a number of places (such as Meskin and Robson [2011, forthcoming]) and the essays in King and Krzywinska [2002]). Yet, it is also true that a standard performance of a videogame is importantly different from a standard performance of a film, since the former is open to a kind of aesthetic evaluation which the latter is not. With respect to film case, Carroll (1996: 67) argues persuasively that

token performances of films are not legitimate subjects for aesthetic evaluation in their own right. We may, for example, evaluate different showings of *Citizen Kane* differently in some respects, but this will either be because of technical difference (such as the visual or sound quality) or because of factors concerning our own biographies (such as the mood we're in or a change in our level of relevant knowledge). It would, however, be difficult to understand someone who claimed to find one showing of a film *aesthetically* superior to another.¹² In contrast, there are various ways in which one playing of a videogame can differ aesthetically from another. I have already examined some of these in relation to the comparison with sporting performance in section 4, but there are also important differences relating to the aesthetic elements of videogame *narratives*.

In some respects, the ability to alter videogame narratives has been widespread from the beginning. Players can almost always make minor changes to the minutiae of videogame narratives—by, for example, defeating enemies using different weapons or by navigating a different route to their goal—and it has long been a widespread feature of videogames to allow different playings to have different endings (often coming down to a simple choice between a “good ending” and a “bad ending”). However, such differences are typically irrelevant when it comes to evaluating the aesthetic differences between the *narratives* of various videogame *performances*. If a player's choice of whether to defeat a demon in *Doom* using a pistol or a shotgun makes any aesthetic difference, this will likely be for the kinds of reason highlighted in my discussion of sporting aesthetics above—concerning, for example, the comparative difficulty of achieving each task—rather than because of any change in the aesthetics of the game's narrative. By contrast, alternative endings to the same game can certainly differ in ways that are both narratively important and aesthetically relevant (one ending may be better written, better acted, and so forth than the other). However, the praise (or blame) for aesthetic differences of this kind doesn't really belong to the player. The player's actions may determine which of these pre-scripted endings belongs to his performance of the game, but they don't typically determine any of the aesthetically relevant features of the endings themselves. As such, the difference here seems closely analogous to the comparison between the aesthetics of a playing of *Dark Souls* that includes a visit to Anor Londo and one that does not; cases that will, as mentioned above, fall outside my purview in this chapter.

More recent videogames have, however, made it commonplace for players to have significant control over various aspects of game narratives in ways that *do* make an aesthetic difference. A player of *Witcher 3* will, for example, likely be faced with hundreds of choices during her playings that influence the way in which the narrative develops. Further, such choices will also have important aesthetic ramifications. Consider, for example, what the playing in question will tell us about the main character (Geralt of Rivia). In some playings Geralt's pattern of choices will clearly present

him as a cynical mercenary or as a hero with an (admittedly well-hidden) heart of gold. Others will present his character as more mixed and complex, and still others will form no coherent pattern, leaving that performance's interpretation of the main character as an incoherent mess. Clearly, though, such issues are going to play a significant role in the success (or otherwise) of the narrative of that playing. Most obviously, a narrative in which the main character has no consistent characterization will—assuming it is not intended as, for example, some sort of postmodern reflection on the erosion of personality—almost certainly be an aesthetic failure.

It is also important to stress that parallel issues frequently arise with respect to the element of games often seen as most similar to standard films: cut-scenes. In an earlier paper with Aaron Meskin (2011: 557–558), I discussed the case of *Grand Theft Auto IV*, which

tells the story of the main character (Niko) through a complex interweaving of cut-scenes, audio clips and interactive gameplay. It is our contention that there are many cases in a game such as this where what happens in the interactive sections of the game can affect what is represented by internally indistinguishable cut-scenes. To use just one example, before entering the final mission the player must decide whether to get revenge on a character who has betrayed them or to cooperate with that character in their nefarious dealings for greater financial reward. This decision affects which cut-scenes are played but it also affects the overall narrative of the game, including how we are to interpret earlier cut-scenes: are Niko's previous vows of vengeance genuine or merely bluster, is he a man with a code or one only concerned with money?

Nor is this the only way in which the aesthetics of cut-scenes might vary. Again, consider the *Witcher* case and how we should interpret the game's early cut-scenes, which are (largely) independent of the player's choices. Geralt's words and actions in these early scenes may well be interpreted very differently depending on the overall impression that the playing gives of his personality (or lack of same).

These examples show that there are important differences between standard cases of film performance and standard cases of videogame performance. Yet, standard cases aren't the *only* cases, and certain nonstandard cases make the comparison here a rather closer one. For example, token performances of an interactive film such as Bob Bejan's *I'm Your Man* can also differ aesthetically. Those who are controlling the film can influence how aesthetically successful the film is in various respects.¹³ They may, for example, choose to make the film's narrative focus more on one character than another or to make various characters perform different actions at various points. And, again, such decisions may well (in contrast to more standard film performances) generate aesthetic differences between different performances.

Indeed, there are certain nonstandard instances of both films and video-games that seem very close to each other in aesthetic (and other) respects. In particular, there are—as Aaron Meskin and I (2011: 555) note—very strong analogies between interactive films and

full motion video based games, where the player's interactions are limited to inputting, or failing to input, certain commands when prompted in order to move from one cut-scene to the next. There just doesn't seem to be any principled difference between these examples and interactive films like *I'm Your Man*. Indeed one notorious example of this type of game (*Dragon's Lair*) has even been released to be played on a standard DVD player.¹⁴

However, it is important not to overstate the significance of such cases. *Dragon's Lair* and *I'm Your Man* are clearly contra-standard in various respects. Most relevantly, the latter is unusually interactive for a film and the former unusually lacking in interactivity for a videogame.

Returning to standard cases of videogames, we can see that they are less analogous with interactive films than we might initially suppose. In particular, the aesthetic capacities of interactive film performance are typically rather more limited than those found in videogames. In the *I'm Your Man* case, for example, the viewer makes various choices about which character's actions to observe and about what decisions various characters will make in the course of the narrative. However, this level of control pales in comparison to the myriad choices, both large and small, presented to players of a videogame such as *Witcher 3* or *Grand Theft Auto IV*.¹⁵ While the overall narratives of both interactive films and videogames will often hinge on a small series of key "decision points," the latter, but not the former, will frequently allow the player to make innumerable smaller choices throughout. What clothes will Geralt wear? How often will he use signs and potions in combat? What faction will he favor in *Gwent* (the in-game card game)? How aggressive will he be in his interactions with various fauna and flora? And much more besides.

6. Videogames and Theatre

Finally, I turn to consider the connections between videogame performance and the performance of various theatrical works. In many respects, the comparison between these two diverse kinds of performance is a strikingly close one. It is, for example, standard for both kinds of performance to feature narrative content and for there to be aesthetic differences between different performance tokens. Once again, though, there are also important points of contrast between standard instances of performance within the two art forms. In particular, as with films above, it is contra-standard for theatrical works to be interactive in any substantive sense. Given this, I will largely

focus on considering the comparison between videogame performance and performances of certain kinds of interactive theatrical work. It is here where I think we find one of the strongest points of comparison between videogames performance and performance within a reasonably well-theorized art form.¹⁶ A comparison that becomes even stronger when we focus on those cases of interactive theatre that are also SIIFs. While many interactive plays will not qualify as SIIFs—since, for example, they fail to make anything fictional regarding their audiences or fail to do so in virtue of audience interaction—some high-profile interactive plays do seem to qualify. In Robson and Meskin (2016: 173), for example, we discuss the case of a performance of Rand’s *Night of January 16th*, where

a number of audience members will be chosen to play the role of jury members and be asked to decide whether they believe the defendant, Karen Andre, to be guilty or not guilty. It becomes fictional in the work world of that particular performance that the relevant audience members are serving on the jury. Moreover, they are able, by virtue of their interactions, to make certain things true of themselves within the work world of the performance (for example that they find Andre guilty or not guilty).

Again, though, we should resist the urge to overstate the similarities between the two, and there remain important points of contrast between standard examples of videogame performance and standard examples of interactive (even SIIF) theatrical performance.

First, the typical constraints on what counts as a performance of an interactive play such as *Night of January 16th* are, in some respects, stronger than the constraints with respect to videogame performances. For example, were the actors—even actors in full costume in an appropriate setting—to merely spin around on the spot, this would not count as a genuine performance of any of these works. By contrast, if a player of *No Man’s Sky* were to do the same, this would qualify as a performance, albeit it not a very successful one, of the videogame in question. In other respects, however, the constraints in place within the theatre are rather weaker. Consider, for example, that the choices a player has with respect to the actions of her avatar are typically more limited than the choices an actor has in an interactive play. If a play requires the performer to extemporize certain kinds of interaction with the audience—as is famously the case with many performances of the “porter” scene in *Macbeth*—then it will be open to them to utter any one of an indefinite number of sentences. By contrast, most videogames still only offer a choice of three or four dialogue options to players at each stage in the conversation. More generally, we can see that the options for a real-life actor are typically more open. They can, again, choose to perform any one of a virtually endless list of actions, provided that these are compatible with their performance still qualifying as an instance of the play in question. They can choose to laugh, to dance a small jig, to roll their eyes, to rend their

garments, and so on. By contrast, while players of a videogame may well have some rather more exotic options available to them (flight, teleportation, etc.), these will typically be far less expansive in number than those available to the actor. There will, for example, likely be no method available for players to make their avatars perform the various actions described above.

Another important point of contrast between the two kinds of performance concerns the identity of audience and performer. As Dominic McIver Lopes points out (2010: 67–84), those who engage with certain forms of interactive art (particularly interactive computer art) often fail to fit neatly into our standard art-appreciative categories. They are not themselves artists or performers (in the more demanding sense) but nor are they mere passive spectators.¹⁷ I do not wish to enter into the intricacies of such classificatory issues here, but one feature worth highlighting from Lopes' discussion is his claim that in such cases "Quite often the role of audience and user are played by the same person, who attends to the work partly by attending to herself" (2010: 83). That is, very roughly, that the person who generates the performance in question is often the primary appreciator for that performance. And, when it comes to videogames, this is still typically the case. By contrast, the primary audience for an interactive theatrical performance will standardly be distinct from those who generate the performance. Further, this difference will also have important consequences when it comes to assessing the aesthetic qualities of the performances in question. It will, for example, typically be of little relevance when assessing the aesthetic value of a performance of an interactive play to determine how enjoyable it is for an actor to perform his role or, more generally, what his experience of performing that role is like. By contrast, one of the most important aspects of assessing the aesthetics of videogames, and their performances, involves (as discussed at length in Tavinor, 2017) considering the kinds of experience that they afford to players.

Again, though, it is important to stress that these are only *standard*, rather than necessary, features in both cases. The audience and performer are not always identical in the videogame case (as my discussion in section 3 highlights), and they are not always distinct in the theatrical case. Consider, for example, a nonstandard performance of *Night of January 16th* where the entire twelve-person audience also takes on the role of the jury. Here, it will likely be directly relevant to assessing that performance to consider the experiences of those audience members. By contrast, an audience viewing a performance in a professional videogame tournament can legitimately treat the experiences of those generating this performance as irrelevant to their aesthetic assessment.

7. Where to Now?

We have seen, then, that the aesthetics of videogame performance cannot be easily assimilated to the aesthetics of performance in other well-theorized domains. This is not, of course, to claim that there is anything

unique (whether aesthetic or otherwise) about such performances. In particular, I suspect that there will be important connections between the aesthetics of videogame playings and the aesthetics of various other SIIFs (especially when it comes to other SIIF games such as tabletop RPGs). However, as already highlighted earlier, performances within these other areas have received even less theoretical attention than videogame performance. As such, there is no established body of work on performance in these areas to draw on. Rather, we might hope that an understanding of the nature, and aesthetic value, of performance in videogames will shed light on the aesthetics of performance in these other domains also. Given this, those who are interested in either the aesthetics of videogames or the aesthetics of works within these other areas would do well to give more focus to consideration of the aesthetics of videogame performance.

Notes

1. As I will explain more fully later, I am using “performance” here in a very wide sense, which includes, for example, the individual showings of a film.
2. There are some notable exceptions here, such as Tavinor (2017).
3. Similar claims apply to Tavinor’s (2011a: 179) discussion of entering Mexico for the first time during a playing of *Red Dead Redemption*.
4. Though for an excellent discussion relevant to this issue, see Gaut (2010: 133–151).
5. A greater total audience than that year’s NBA Finals and only slightly eclipsed by viewers of the baseball World Series.
6. Nor is this the only practice we might appeal to. For example, an increasingly wide range of games allows players to upload their performances (and view the performances of others) online.
7. For example, they may well note that they found it difficult to smoothly read the novel to themselves if this is the result of its needlessly complex sentence structure.
8. It is commonplace, following Best (1974), to make a distinction between “aesthetic” and “purposive” sports. The former includes sports such as figure skating and dressage where success or failure straightforwardly depends on the aesthetic element of the relevant performance. With the latter, by contrast, there is no straightforwardly aesthetic element in the way the sport is scored. Videogame analogues of the former would, of course, have various interesting aesthetic elements but I will focus below on videogame analogues of purposive sports.
9. This is, of course, one of the most famous lessons from Walton (1970).
10. Or, for those inclined to reject this stark claim, we might say instead that videogame performances often have a high degree of narrativity whereas sporting performances standardly have a low degree of narrativity.
11. Though for some relevant discussion, see Novitz (1996) and Cova and Garcia (2015).
12. For discussion of some potential counterexamples to this claim, see Yanal (2008). Even if we accept Yanal’s arguments, though, it will still be the case that we don’t *standardly* evaluate individual showings of films aesthetically.
13. Though judging by the almost universal lambasting the film received from critics, it is doubtful that any performance will be especially successful.

14. And, conversely, a minority of critics have classified *I'm Your Man* as a videogame.
15. For more on aesthetic comparisons between videogames and interactive film, see Frome and Smuts (2004).
16. I say “reasonably” here because while the art form of theatre has been subject to a great deal of philosophical scrutiny (by, for example, Hamilton [2007] and Stern [2013]), interactive theatre has been rather less discussed. Still, a number of extant works (such as Niesz and Holland [1984] and Preston [2014]) have touched on the aesthetics of interactive theatre.
17. Though, as Lopes himself (2010: 76–77) points out, audiences of traditional media are often more active than we give them credit for.

References

- Bartel, Christopher. “Ontology and Transmedial Games.”, Chapter 2, this volume.
- Best, David. (1974). “The Aesthetic in Sport.” *The British Journal of Aesthetics* 14: 197.
- Breitenbach, Angela. (2015). “Beauty in Proofs: Kant on Aesthetics in Mathematics.” *European Journal of Philosophy* 23: 955–977.
- Carroll, Noël. (1996). *Theorizing the Moving Image*. Cambridge: Cambridge University Press.
- . (2009). *On Criticism*. New York: Routledge.
- Cova, Florian, and Amanda Garcia. (2015). “The Puzzle of Multiple Endings.” *Journal of Aesthetics and Art Criticism* 73: 105–114.
- Davies, David. (2009). “Works and Performances in the Performing Arts.” *Philosophy Compass* 4 (5): 744–755.
- Dutton, Denis. (1979). “Artistic Crimes: The Concept of Forgery in the Arts.” *British Journal of Aesthetics* 19 (4): 302–314.
- Eaton, Anne W. (2012). “Robust Immoralism.” *The Journal of Aesthetics and Art Criticism* 70 (3): 281–292.
- Frome, Jonathan, and Aaron Smuts. (2004). “Helpless Spectators: Generating Suspense in Videogames and Film.” *TEXT Technology* 13: 13–34.
- Gaut, Berys. (2010). *A Philosophy of Cinematic Art*. Cambridge: Cambridge University Press.
- Hamilton, James R. (2007). *The Art of Theater*. New York: John Wiley & Sons.
- Holt, Jason. (2016). “Virtual Domains for Sports and Games.” *Sport, Ethics and Philosophy* 10 (1): 5–13.
- Irvin, Sherri. (2008). “Scratching an Itch.” *The Journal of Aesthetics and Art Criticism* 66 (1): 25–35.
- Juul, Jesper. (2005). *Half-Real Video Games between Real Rules and Fictional Worlds*. Cambridge, MA: MIT Press.
- King, Geoff, and Tanya Krzywinska (eds.). (2002). *Screenplay: Cinema/Videogames Interfaces*. London: Wallflower Press.
- Kivy, Peter. (2008). *The Performance of Reading: An Essay in the Philosophy of Literature*. Oxford: Blackwell.
- Lacerda, Teresa, and Stephen Mumford. (2010). “The Genius in Art and in Sport: A Contribution to the Investigation of Aesthetics of Sport.” *Journal of the Philosophy of Sport* 37 (2): 182–193.
- Lopes, Dominic McIver. (2010). *A Philosophy of Computer Art*. Abingdon, UK: Routledge.
- McAllister, James W. (2005). “Mathematical Beauty and the Evolution of the Standards of Mathematical Proof.” In *The Visual Mind II*, edited by Michael Emmer, 15–34. Cambridge, MA: MIT Press.
- Meskin, Aaron, and Jon Robson. (2011). “Videogames and the Moving Image.” *Revue Internationale de Philosophie* 254 (4): 547.

- . (forthcoming). “Videogames and Film.” In *The Palgrave Handbook for the Philosophy of Film and Motion Pictures*, edited by N. Carroll, L. Teresa, D. Summa-Knoop, and S. Loht. Basingstoke: Palgrave.
- Niesz, Anthony J., and Norman N. Holland. (1984). “Interactive Fiction.” *Critical Inquiry* 11 (1): 110–111.
- Novitz, David. (1996). “Disputes about Art.” *Journal of Aesthetics and Art Criticism* 54: 153–163.
- Preston, Dominic. (2014). “Some Ontology of Interactive Art.” *Philosophy & Technology* 27 (2): 267–278.
- Robson, Jon, and Aaron Meskin. (2016). “Video Games as Self-Involving Interactive Fictions.” *The Journal of Aesthetics and Art Criticism* 74 (2): 165–177.
- Saito, Yuriko. (2001). “Everyday Aesthetics.” *Philosophy and Literature* 25 (1): 87–95.
- Smuts, Aaron. (2005). “Are Video Games Art?” *Contemporary Aesthetics* 3.
- Soucek, Brian. (2009). “Resisting the Itch to Redefine Aesthetics: A Response to Sherri Irvin.” *The Journal of Aesthetics and Art Criticism* 67 (2): 223–226.
- Stern, Tom. (2013). *Philosophy and Theatre: An Introduction*. Chicago: Routledge.
- Tavinor, Grant. (2009). “BioShock and the Art of Rapture.” *Philosophy and Literature* 33 (1): 91–106.
- . (2011a). “Response to Plunkett: On Place Attachment in Virtual Worlds.” *World Leisure Journal* 53 (3): 179–185.
- . (2011b). “Video Games as Mass Art.” *Contemporary Aesthetics* 9.
- . (2017). “What’s My Motivation? Video Games and Interpretative Performance.” *The Journal of Aesthetics and Art Criticism* 75 (1): 23–33.
- Walton, Kendall L. (1970). “Categories of Art.” *The Philosophical Review* 79 (3): 334–367.
- Yanal, Robert. (2008). “Defining the Moving Image: A Response to Noel Carroll.” *Film and Philosophy* 12: 135–140.

7 Videogames and Creativity

Aaron Meskin

1. Introduction

What is the relationship between videogames and creativity? Whether or not they are art (and some of them surely are), it is clear that the design and production of videogames can, and indeed typically does, involve creativity. What about playing videogames? On the one hand, videogames have sometimes been seen as a threat to creativity. A recent *Newsweek* article reports that “It’s too early to determine conclusively why U.S. creativity scores are declining. One likely culprit is the number of hours kids now spend in front of the TV and playing videogames rather than engaging in creative activities.”¹ On the other hand, defenders of videogames have touted their connection to creativity as a significant virtue. So, for example, writing in the *Guardian*, Lucy Prebble has argued that “gaming is essentially private and individual (although it really doesn’t have to be). It is creative, in comparison to the passivity of watching a film or reading a book. You are making choices and, often, are even designing the world yourself.”² Or, as the *Telegraph* put it succinctly, “Videogames more creative than reading.”³ And a recent scholarly overview of the benefits of videogame play states that “video games seem to be associated with . . . enhanced creativity” (Granic, Lobel, and Engels, 2014: 69), although the authors admit that the results of the cited study leave significant questions unanswered.

Was *Newsweek* right to contrast playing videogames with engaging in creative activities? Or is there a significant (positive) connection between videogames and creativity? I shall argue that *Newsweek* was wrong. In fact, playing videogames often counts as a creative activity. The key linking concept is the notion of problem solving, which is central to much videogame play and to many standard examples of creativity. But it is not clear, at least at this point, whether videogame play has any causal effect on creativity.

As the preceding discussion has made clear, it is useful when thinking about the connection between videogames and creativity to distinguish three questions:

The creation question: How, and to what extent, is creativity involved in the production of videogames?

The causal question: To what extent does videogame play promote or retard creativity?

The gameplay question: To what extent does videogame play involve creativity?

I shall briefly discuss the creation question when I discuss the nature of creativity in section 2. My focus, however, will be on the causal and gameplay questions. The causal question is, of course, appropriately investigated by means of experimental and other empirical methods. In the first part of section 3, then, I discuss the empirical research relevant to the question. But I do not just report on those results. Philosophers often play a useful role by critically examining the assumptions, methods, and results of empirical scientists. This is what I do in the second part of section 3, where I conclude that there is no clear evidence of a causal relationship between videogame play and creativity. In particular, I argue that extant studies are not well suited to provide evidence relevant to the central causal questions about videogames and creativity. Section 4 focuses on the gameplay question. Whether or not videogame play causes an increase or decrease in levels of creativity, there is a separate question about whether videogame play *involves* creativity. I argue that, at least for many videogames, play does involve creativity. I pay specific attention to the significance of problem solving in videogame play. I also address some potential objections to my argument. In section 5, I briefly discuss the question of whether videogame play is more creative than ordinary forms of artistic engagement such as reading. I argue that although some authors (such as Prebble) overestimate the passivity of traditional artistic engagement, videogames do—in virtue of their interactive nature—offer opportunities for creative problem solving that are not available in more traditional artistic contexts. The final section comprises a brief conclusion. But, first, I need to say a bit about how to think about creativity.

2. Creativity

Unsurprisingly, philosophers disagree about the nature of creativity. Perhaps surprisingly, there is a standard view or, at least, a family of standard views, which are rooted in Kant's discussion of genius (Kant, 1790/1987: 175). Kant argued that genius cannot be understood entirely in terms of originality "since nonsense too can be original."⁴ So some further valuable feature (being "exemplary" in Kant's case) must be required.⁵ Broadly Kantian accounts of creativity, then, hold that originality and value are central to (if perhaps not exhaustive of) creativity. So, for example, Matthew Kieran has argued that the ability to produce "novel and worthwhile artefacts" suffices for what he calls "minimal creativity" (2014: 125).⁶ But the best-known and most influential version of the standard view is that of Margaret Boden, who argues that creativity "is the ability to come up with ideas or artefacts that are new, surprising, and valuable" (Boden, 2007: 83). Perhaps most

influentially, Boden distinguishes two distinct kinds of creativity (“psychological creativity” and “historical creativity”) corresponding to two distinct ways something might be new; namely, new to the person who came up with it or historically new (83–84). Boden also characterizes three ways in which creativity can be surprising: by involving the combination of unfamiliar ideas, by involving the exploration of a conceptual space, and by the transformation of a conceptual space (84–89). It is the latter form of creativity, which involves “someone’s thinking something which, with respect to the conceptual space in their minds, they couldn’t have thought before,” that Boden holds to be the “deepest” form of creativity (89). Boden is here thinking of changes of cognitive style that allow an agent to think or do something that was impossible given the earlier style. Matthew Kieran (2016) offers the examples of “the introduction of the epistolary novel in the seventeenth century or stream-of-consciousness writing in the early twentieth century,” which allowed authors radically new literary possibilities.

The production of videogames often meets Boden’s criteria for both psychological and historical creativity. Videogame producers produce new games and, most importantly, new kinds of games. These games and game-kinds possess financial, aesthetic, and ludic value. Their production often involves combinatorial and exploratory creativity and, in some cases, perhaps even transformational creativity in which the development of a game required a change in thinking style. So, for example, consider the development of text-based adventure games such as *Colossal Cave Adventure* in the 1970s, side-scrolling games in the early 1980s, open-world games in the mid-1980s, and movement-based games such as *Dance Dance Revolution* in the 1990s. The development of these games seems more a matter of “changing the map” (i.e., transformational creativity) than merely exploring a preexisting map (i.e., exploratory creativity).

There are, however, a number of reasons to think Boden’s account isn’t quite right. First of all, it is not clear that creativity is an ability rather than a disposition (Gaut, forthcoming). If a person has the ability to produce new and valuable things but is never disposed to exercise that ability, it is not clear that person counts as creative. Second, it is not obvious that creativity must result in ideas or artifacts (at least when those are narrowly construed) rather than actions. Dance and music improvisation often involves creativity, and it seems that this may be the case even when they do not produce new ideas or artifacts. Third, the value condition is controversial because of cases of “dark” or “malevolent” creativity; for example, the creativity of a criminal or terrorist (Cropley, Kaufman, and Cropley, 2008). Finally, and most notably, the three conditions seem not to capture important agential features of creativity (for example, that it is a feature of intentional agents and that it is inconsistent with purely mechanical or accidental processes) (Gaut, 2003; Stokes, 2008; Gaut, 2010).

Responding to some of these worries, Berys Gaut has suggested that “creativity is the capacity to produce original and valuable items by flair”

(Gaut, 2010: 1041; see also Gaut, 2003: 151). What is meant by “flair”? It turns out that flair is whatever it is that rules out various counterexamples to the sufficiency of the originality and value conditions (viz., the production of new and valuable things by non-agential or lucky or mechanical processes, or by agents who fail to use judgment or exercise evaluative capacities) (Gaut, 2010: 1040–1041; Gaut, 2003: 151). Again, on such an account, videogame developers will often count as exhibiting creativity, since game design is typically not a mechanical or lucky process, and it involves judgment and evaluation. Some sort of account along these lines (with additional tweaks to handle the dispositional nature of creativity and the problem of dark creativity) is likely on the right track with respect to capturing a core folk notion of creativity.

Boden and others have noted that creativity is not “an all-or-none affair” (Boden, 2007: 84). In other words, “creative” is a gradable adjective. But one thing that has, perhaps, not been attended to as much as it should have been is that “creative,” like “tall” and “short,” appears to be not only a gradable adjective but, more specifically, a *relative gradable adjective*, since it admits of the modifier “very” (Kennedy and McNally, 2005). (In this way, it is contrasted with other gradable adjectives such as “closed” and “empty.”) “Creative” is, then, a context-sensitive term. And this means that it will plausibly pick out different properties in different linguistic contexts because those contexts shift the standards for what counts as “creative.” For example, what counts as creative for 9-year-olds might not count as creative for 19-year-olds. In fact, “creative” is (like “good” and “similar”) also a *multidimensional* relative gradable adjective (Sassoon, 2013). Evidence for this comes from the acceptability of constructions such as “creative in every respect,” “creative in some respects,” and “creative except for.” And this means that there is not just one scale, with a contextually varying cutoff point, for the application of the term, but multiple dimensions of creativity whose relevance is contextually determined. In fact, it is plausible that “creative” is a *mixed* multidimensional adjective in which pragmatic factors determine how many of the dimensions of creativity are relevant to whether “creative” applies in a particular context (Sassoon, 2013: 340).

If this is right, then intuitions about whether the word “creative” applies in various cases are not especially good evidence for the presence or absence of creativity, since there are a very wide range of contextual factors that are relevant to its application. In other words, it will be unsurprising if we find significant disagreement, or at least apparent disagreement, in judgments about what counts as “creative” due to these contextual factors. Different subjects may have different contrast classes in mind, different dimensions in mind, and even different weightings of those dimensions. Judgments about cases, then, do not provide decisive evidence for and against theories of creativity. (Just as one wouldn’t want to develop a theory of various kinds of intelligence entirely on the basis of judgments about whether “intelligent” applied in various hypothetical cases.) We shall return to this point below.

3. The Causal Question

Now that we have at least some grasp of what creativity amounts to, let us look at the causal question; namely, to what extent does videogame play promote or retard creativity?⁷ The question has been studied by psychologists and game researchers, but, I shall argue, the design and results of their studies leave it unanswered.

3.1. Three Studies

I shall not discuss every study about the causal relationship between videogames and creativity. But there is not, as a matter of fact, that much research that has been done on the question. The first two studies I discuss are two of the most frequently cited in the literature about videogames and creativity, and the third study is one of the most recent ones in the area.

The Dance Dance Revolution Study

Hutton and Sundar (2010) used a videogame to study the influence of affect on creativity and the role of arousal in mediating that influence. Participants in their study played the 1998 “dance mat” videogame, *Dance Dance Revolution*, at three levels of exertion (low, moderate, and high) and had affect induced by a standard mood induction method (they were asked to identify emotions and then told they had succeeded, inducing positive affect, or failed, inducing negative affect). The main dependent variable was performance on a widely used paper-and-pencil test for creativity, the Abbreviated Torrance Test for Adults (ATTA). Overall ATTA scores (i.e., “Creativity Index” and “Creative Level” scores) were generated by combining measurements of four creative abilities (flexibility, fluency, originality, and elaboration, which are combined to produce a “Creative Ability” score) with fifteen creativity indicators (e.g., richness and/or colorfulness of imagery).

Results were mixed. The study finds that “a low or high level of arousal, rather than a medium level, improved the ability to process information or objects in different ways, in this sample” (Hutton and Sundar, 2010: 299). In other words, on *one* of four creative abilities measured (i.e., flexibility), the researchers found an effect of arousal that “approached significance” (ibid.). Turning to overall creativity scores (i.e., Creativity Index), the study showed a significant interaction between arousal and valence (i.e., mood): “low arousal levels resulted in higher creativity scores only when coupled with a negative mood” (ibid.), and something similar is true about high arousal and positive mood in relation to overall creativity scores. As the authors put it: “In practical terms, our study implies that after playing a videogame, those who are happy—and somewhat unexpectedly, those who are sad as well—tend to be more creative than those who are relaxed or angry” (301).

I shall have more to say below about the way in which creativity was measured here. But even if we put concerns about the dependent variable aside, it is worth noting that the study does not do much to establish that videogame play generally improves creativity even under certain affective conditions. A “physical” videogame that involves substantial exertion, *Dance Dance Revolution*, was used to induce various levels of arousal, and it is arousal level, measured by galvanic skin response, that is the relevant independent variable. In fact, because of the between-subjects design and the lack of a control condition in which creativity was measured in the non-play/non-arousal condition, the study provides no reason to think that videogame play increases creativity scores at all, even under the specified affective conditions. That is, the study did not explore the effect of valence on subjects who did not play the game and, hence, didn’t exert themselves at all, nor did it look at individual subjects across different levels of exertion. It is, therefore, consistent with its results that playing videogames at any level tends to decrease creativity scores.

The Michigan State Study

Perhaps the best-known research on creativity and videogame use is the widely reported Michigan State study that explored technology use generally and its relation to creativity (Jackson et al., 2012). Jackson and colleagues found significant and positive correlations between self-reported videogame use and creativity as measured by a test based on the Torrance Test of Creativity—Figural. In summary, the creativity test they used involved presenting subjects with simple drawings (an egg and an elf looking at its reflection) and asking them to perform various tasks in response (viz., generate a pictorial elaboration and a story in the egg case; come up with questions, causes, and possible futures in the elf case). As in the prior study, fluency, flexibility, originality, and elaboration were measured, although some other measures were also used.⁸ Although no correlations were found between creativity scores and computer use, Internet use, and cell phone use, “all types of videogames were strongly related to all measures of creativity except Racing/Driving games, which were related only to two of the six measures of creativity” (373).

The Genre Study

Yeh’s (2015) study investigated the way in which different videogame genres (action and non-action) affected creativity performance. In this within-subjects study, participants played both an “action” videogame (*Light Heroes*) and a “casual” or “non-action” game (*Clusterz*). Creativity was measured by a figural idea generation task. In brief, subjects were presented with an abstract line drawing and asked to identify “what invention, artefact or any idea, real or imaginary” it represented (402). Subjects were “encouraged to think of as many ideas as possible and to be as original as

possible” in a five-minute time period (*ibid.*). Scores were generated for four components of creativity—as in the prior two studies, flexibility, originality, and elaboration were among those components, but Yeh uses the term “productivity” instead of “fluency,” although they measure the same thing.

The results seem to support Yeh’s hypothesis that playing videogames in the action genre produce higher creativity scores than does playing videogames in non-action genres, although she did not find this effect on all four components of creativity that were measured. As she puts it: “overall, as predicted, creativity performance after playing the action game was better than those after playing the non-action game on the scores of originality, flexibility and elaboration” (403). But note that the hypothesis that received support has to do with a comparison between two types of videogame play, not between videogame play and non-play.

3.2. *Problems with the Extant Research*

As discussed above, the research about the causal relationship between videogame play and creativity is inconclusive. The *Dance Dance Revolution* study merely shows that levels of physical exertion (which can be induced by a videogame) can increase creativity scores under certain affective conditions. The Michigan State study found a correlation between videogame play and a creativity measure but leaves the causal question open. Yeh’s genre study does address one causal question, but—at best—only provides evidence that playing action games leads to higher creativity scores than playing non-action games. It is consistent with this that playing any game at all decreases overall creativity scores. But the studies are not just inconclusive: there are additional concerns with regard to their capacity to provide useful information about the causal question. I focus on three such concerns: (1) the focus on single causes versus diffuse causes, (2) the focus on short-term and isolated effects rather than long-term effects, and (3) the way in which creativity is measured.

Single Causes and Diffuse Causes

Following Eaton’s discussion of the harms of pornography (2007: 684–689), let us distinguish single causes (specific encounters with individual games) from diffuse causes (involving repeated exposure to games over an extended time period). An important weakness of some of the aforementioned experimental studies (the *Dance Dance Revolution* and genre studies) is that they focus on single causes; that is, one-off exposures to particular games. But, as is the case with smoking and pornography, the causal relationship between videogame play and level of creativity will almost surely be a dose-response relationship (*ibid.*, 685). For example, it is likely that if there is a positive relationship between videogame play and creativity then that relationship will be such that an increase in exposure will produce an increase in effect.

And experimental studies that focus on single causes are not well suited to discern the existence (or nonexistence) of this sort of relationship.

Kinds of Effects

Relatedly, the experimental studies described above focus on discrete effects; that is, measurements of creativity at a particular point in time. But interest in the causal question is, I suggest, primarily an interest in the long-term effects of videogame play. Compare the debate about the harms of pornography: the primary interest in the effects of pornography on its viewers has to do with its long-term effects, not the immediate physiological and affective consequences of one-off exposure to an instance of pornography. Again, laboratory studies such as the ones mentioned above are poorly suited to discern the long-term effects of playing videogames.

Measuring Creativity

Hutton and Sundar used the ATTA. Jackson and her colleagues used the figural version of the Torrance Test as the basis for designing their measurement tool. Yeh used an idea generation task that has similarities to the figural version of the Torrance Test, and measurement procedures that are, in part, influenced by Torrance. But the Torrance Test and its kin are not good tests for creativity.⁹ Consider the dimensions that the aforementioned tests measure: originality, elaboration, flexibility, and fluency or productivity. None of these measures seem suited to capture the evaluative aspect of the ordinary notion of creativity. Hutton and Sundar describe the abilities that the ATTA focuses on as follows:

fluency is the ability to produce quantities of ideas relevant to the task instruction. Originality is the ability to produce uncommon ideas or ideas that are totally new and unique. Elaboration is the ability to embellish ideas with details, and flexibility is the ability to process information or objects in different ways.

(2010: 297)

As mentioned in section 3.1, Yeh's notion of productivity is equivalent to fluency: "Productivity: the total number of ideas generated within a 5-min period during the task" (2015: 402). Since none of these abilities are clearly linked to the production of items of value, it is hard to see why we should think that they measure creative ability rather than a component of it. Here is another way of seeing the point: a person could exhibit high degrees of fluency, originality, elaboration, and flexibility by virtue of the ability to produce a large number of uncommon and highly detailed ideas across different categories without exhibiting creativity (if those ideas were all valueless). If so, the "Creative Ability" score does not measure creativity.

The same is true of the various “criterion-referenced creativity indicators” that Hutton and Sundar measure, such as “abstractness of titles,” “openness,” “future orientation,” and “humor” (297). Perhaps “richness and colorfulness of imagery,” which is an indicator associated with various verbal tasks, might be understood in an evaluative way by some scorers. But this is a very small factor in the overall creativity score. So it is implausible that the ATTA measures what we ordinarily think of as creativity.

A second reason why these tests fall short as a measure of creativity stems from their focus on discrete effects. They measure performance at a particular point in time. But creativity, I have suggested, is plausibly a disposition. If so, then any such test is ill-suited to measure it. (This is a slightly different issue than the worry about long-term effects, since not all long-term effects are a matter of dispositions.)

Finally, the aforementioned tests of creativity do not even clearly capture the newness or originality condition that is central to creativity. This might seem odd since originality is one of the abilities that they explicitly measure. But consider the way in which the studies measure originality. In the ATTA, which was used in the *Dance Dance Revolution* study, originality is scored by counting the number of responses (verbal or figural) that are not on a list of common responses. The Michigan State University study measured originality by getting trained undergraduates to rate how “unusual and rare” responses were (Jackson et al., 2012: 372). Yeh had two independent raters score responses on a five-point scale from “not original at all” to “highly original” (Yeh, 2015: 402). Perhaps the last study does measure originality, but the way the other two studies measure it should give one pause. Newness, after all, is not the same thing as being unusual or rare. The psychological newness of a response is consistent with its not being at all unusual or rare. And the fact that a response is unusual does not imply that it is psychologically new. These measurements of originality, then, do not seem to capture the element of newness that is involved in the ordinary notion of creativity.

4. The Gameplay Question

So there is no good evidence that videogame play increases (or, for that matter, decreases) creativity. But, as I have already mentioned, this is not the only question about videogame play and creativity that is of interest. I turn, then, to the gameplay question. Does videogame play involve creativity? Or, alternatively, is videogame play a creative activity?

4.1. Creativity in Gameplay

Let us put aside various nonstandard cases: the creative use of cheat codes, glitches, and bots (Hamlen and Blumberg, 2015), creative game talk (Wright, Boria, and Breidenbach, 2002), and the creative construction and

modification of avatars in social virtual worlds such as *Second Life* (Ward, 2015: 122–126). What about ordinary gameplay? Is it creative?

Of course, one sort of ordinary videogame play, the kind found in sandbox and world-building games such as *Minecraft* and *Terraria*, clearly allows for a high degree of creativity. *Minecraft* gamers, for example, build virtual computers, cities, artworks, buildings, and more. I will not focus on this sort of gameplay below because there is not, it seems to me, any substantive question about whether this sort of videogame play is creative—for example, on any reasonable account, the sort of complex building that takes place in *Minecraft*'s “Creative” mode is straightforwardly creative.¹⁰ However, it is worth noting that the account of creative gameplay I offer below may well apply to these games as well.¹¹

One might wonder whether engagement with videogames involves creativity because they are games. But playing games is not inherently creative. Snakes and Ladders does not allow for creativity, nor do other luck-based games such as the card game War. Tic-tac-toe might allow for a very limited amount of creativity while learning the game, but it cannot be said that play generally involves creativity. Creativity also seems largely absent from games based on physical skill such as Operation.

Nor are videogames creative merely in virtue of their (strong) interactivity.¹² Videogames are strongly interactive in that they prescribe that user/player responses determine features of the game's display (Lopes, 2010). But interactivity alone is not enough for creativity. There are many works of art that are interactive that do not typically involve creativity. Consider, for example, Anish Kapoor's large mirrored sculptures. These works of art are interactive because viewers' actions affect what they look like for a time (Lopes, 2010: 45), but it is not clear that those actions are standardly creative in any way. And for a clear example of interactivity without user creativity, consider a hypothetical artwork that meets the criteria for being interactive, because it prescribes that responses determine its display, but only allows for only two simple audience responses (for example, flicking a switch or not).

The key concept that sheds light on the creativity involved in much videogame play is *problem solving*. Again, my focus is not on whether playing videogames improves the ability to solve problems (there doesn't appear to be much evidence either way), but, rather, with whether gameplay *involves* problem solving.¹³ Perhaps Granic, Lobel, and Engels put it too strongly when they claim that “problem solving seems central to all genres of video games” (2014: 69); nevertheless, problem solving is standard for many, perhaps most, of those genres.¹⁴ And problem solving is, arguably, closely linked to creativity.

I would not go so far as to claim that “creativity is a form of problem solving” (Gaut, quoted in Woerner, 2013: 4–5). There are examples of creativity (e.g., in the case of dance or music improvisation) that do not seem to involve problem solving. It is surely possible to produce new and valuable

things non-mechanically and non-luckily even when one is not solving a problem. Nor are all examples of problem solving creative—mechanically generating a solution, or accidentally stumbling on one, does not count as creative.

But when problem solving involves producing a new and valuable solution in a non-mechanical, non-accidental way, it is plausible that it counts as creative. And videogame play, or at least much of it, involves just this sort of activity.

Perhaps the most straightforward games to consider in this context are puzzle-platform games such as *Portal*, *Fez*, and *Monument Valley*, in which problem solving is front and center. But many, although perhaps not all, other genres of videogames involve puzzles and/or other forms of problem solving. Consider the indie RPG, *Undertale*. It contains numerous problems to solve; for example, how to defeat the Mad Dummy, an incorporeal creature who initially appears to be immune to attack. *Istroid*, a science fiction strategy game, requires the player to design a fleet that will defeat her opponents. Team-based first-person shooters, such as *Team Fortress 2*, require players to figure out successful strategies for defeating the other team or achieving objectives (e.g., capturing a control point). *Super Mario 3D World*, a popular platform adventure game, requires users to solve puzzles (for example, by manipulating a playable character through holes and across gaps) in the Captain Toad levels.¹⁵ Survival horror games, such as *Silent Hill*, as well as other forms of the broad action adventure genre, typically involve puzzle solving as well as the solution of large-scale problems such as how to survive. More generally, boss fights—which appear in a wide range of videogames—often involve (very difficult) problems to be solved.

Obviously, I cannot address every genre of videogame nor every game. But the claim I make is not meant to be a universal one. Rather, it is the more modest claim that for most popular genres of videogames, problem solving is a standard or generic feature. A common definition of problem solving in psychology holds that it “is cognitive processing directed at achieving a goal when no solution method is obvious to the problem solver” (Mayer, 1992).¹⁶ This, I claim, characterizes much videogame play. And it is this feature that is at the basis of much of the creativity involved in videogame play.

4.2. *Objections and Replies*

The modesty of the claim means that pointing to some videogames, or entire classes of videogames, that do not involve problem solving is no objection to my argument. I agree that there are some games that do not involve problem solving. Perhaps, for example, some racing games do not involve it since their solution methods are obvious. Similarly, some shooting games, such as *Marksmen: Long Range*, may involve pure skill rather than problem solving. If this is right, then playing these games may not involve creativity. (Perhaps some such games allow for creativity in some other way.)

A more significant challenge to my claim might focus on creativity's value condition. Is it really the case that the problem solving involved in videogame play typically produces something of value? If not, it would be a mistake to count it as creative. And, after all, it would seem odd in many cases to call videogame play "creative." This challenge can be met. A range of different values can be realized through videogame problem solving. The solution to a problem might, for example, possess *aesthetic value* in virtue of its elegance or simplicity.¹⁷ Or it might possess *cognitive value* if it is clever or insightful. Finally, an instance of problem solving might possess *attributive value* of various kinds (as in "a good strategy" or "a good move"). Of course, a skeptic might argue that these good strategies are not, in fact, really valuable, but—as discussed above—some finessing of the value condition is required to handle cases of "dark creativity" and, presumably, that will handle this issue as well. Furthermore, we should not be impressed by resistance to applying the term "creative" to these activities. As discussed above, "creative" is highly context-sensitive and, hence, our judgments about the application of the term are not a good guide to the presence or absence of some degree of creativity.

It might be objected that only good or great videogames involve creative problem solving. This is far too strong a claim. Perhaps good and great videogames typically involve *more* creative problem solving than mediocre or bad ones. But playing the latter involves some problem solving and a limited amount of creativity. Again, resistance to characterizing play in such cases as "creative" may stem from the context-sensitivity of the term. (If the contrast class is videogames in general, then the standard for what counts as "creative" may be high enough to exclude its being predicated in some cases. But this provides no reason to think that the relevant property is entirely absent.) Of course, it might be the case that truly disastrous "failed" games (for example, Atari's *E.T. The Extra-Terrestrial* and ZX Spectrum's *Sqij!*) don't engender any creative play because they are almost, or entirely, unplayable,¹⁸ but this is consistent with my generic claim.

A final challenge to my claim allows that videogame play may often involve problem solving but denies that sophisticated videogame play involves creativity. Experienced gamers, it might be suggested, already know how to solve the problems they face in new games. In fact, it might be suggested that experienced gamers typically don't even confront problems insofar as the methods they need to use in order to achieve their goals are obvious.¹⁹ Perhaps. It would be interesting if it turned out that gameplay was creative in novices but not experts. But I am skeptical. Perhaps experienced gamers do know, in some sense, how to solve the problems they face. That is, the general method may be obvious. Nevertheless, I claim that in ordinary cases there is another sense in which they do not know how to solve the problems; that is, at least when they first face them. Although the general method may be obvious, the specific method is not. In other words, experienced gamers often know the solution-types to the problems they face, but they do not, if

I am right, know the particular, or token, solutions. To get a sense of what I am talking about, consider that changing heroes (i.e., switching characters) mid-game is often a smart strategy when playing *Overwatch*.²⁰ That general problem-solving method (i.e., that solution-type) may be known to any experienced *Overwatch* player. Nonetheless, the specific way in which that method could be used in a particular context (i.e., the token solution) may be unknown to the experienced player and, hence, may invite a creative solution. Something similar may happen when experienced players, playing a new game, confront an unfamiliar token of a problem type with which they are familiar.

5. Videogames Versus Reading

Playing games is, then, often a creative activity. But is it really the case that videogame play is, as Prebble stated, “creative, in comparison to the passivity of watching a film or reading a book”? That is, are gamers more active and creative than viewers and readers? It is not clear that this is the case. In the first place, it is a mistake to think of watching a film or reading a book as a passive pursuit. They might be (largely) physically passive, but reading and viewing are not by any means psychologically passive.

Notice, first of all, that accusations of passivity are usually directed at junk, popular or mass art (i.e., kitsch), not high art (see Greenberg, 1939, and for extensive critical discussion see Carroll, 1998). But while it might seem tempting to think that the consumption of junk or popular fiction is a largely passive activity, it is odd to characterize the consumption of “high” or “serious” fiction as passive. Moreover, this temptation should be resisted even in the case of popular fiction. Reading or watching popular fiction is not a passive endeavor. Noël Carroll (1994) has pointed out that although works of junk fiction (romance, westerns, mysteries, etc.) are designed for easy consumption, ease does not entail passivity (238). In fact, he has argued that the cognitive and affective activity involved in the consumption of junk fictions (that is, their ability to “exercise our cognitive, emotional and moral powers”) is the primary source of the pleasures they provide (237). More recently, Alan Goldman (2011) has argued that mystery fictions possess significant aesthetic value in virtue of their capacity to promote imaginative, interpretive, emotional, and perceptual activity. If this is right, then it is a mistake to characterize the consumption of narrative fiction as necessarily, or even generically, passive.

So reading and viewing are not passive, not even in the case of junk or popular fiction. But this leaves open the possibility that videogame play is less passive (i.e., more active) than watching or reading. Aaron Smuts (2005: 2), for example, argues that “Given the interactive nature of video games, there is simply no room for the charge of passivity. Video game players are anything but mentally or intellectually passive during typical game play.” Perhaps there is something to this. Videogames are strongly interactive and, in virtue of this,

prescribe that users make a wide range of decisions or choices. When it comes to conscious and intentional activity, then, they may typically engender more activity than reading or viewing. This might be basis for a claim that game-play has an advantage over the ordinary consumption of narrative along one dimension of creativity. Perhaps there are simply more possibilities for creative decision making in the case of games than in the case of books and films.²¹

But this is not the only dimension of creativity. (Remember the multidimensionality of “creative.”) Audiences for works of fiction typically exhibit some degree of creativity in virtue of coming up with new and valuable ideas non-accidentally and non-mechanically. More specifically, audiences exhibit creativity in virtue of, among other things, exploring metaphors, constructing and refiguring their models of fictional worlds, and identifying and considering themes (Carroll, 2014). Now, it is also the case that players of many videogames engage in this sort of creative activity. Most videogames are, after all, fictions (Meskin and Robson, 2012) and, as such, require—at a minimum—players to actively construct a model of the fictional world in which they are playing. But it may be that if we focus on this sort of creativity, works of literature often have an advantage. So, for example, they may possess richer metaphors and themes and, hence, require readers to come up with more valuable new ideas than do ordinary videogames. Maybe. We should be careful to compare like with like—there are thematically rich videogames (*BioShock*, *Undertale*) and thematically impoverished ones (take your pick among the team-based first-person shooters), just as there are works of great literature and works that do not possess interesting themes. That being said, I think it is reasonable to say that, along one dimension of creativity, reading serious literature (and watching serious films) may beat videogame play.²²

The upshot is that Prebble’s claim may be too strong. Videogame play may be more active and, perhaps, more creative along one dimension than reading or watching, but the latter may often be more creative along another dimension.

6. Conclusion

I have argued that there is a close connection between videogame play and creativity. For most genres of videogames, player creativity is typical or standard. This stems from the centrality of problem solving in those genres. On the other hand, the jury is still out as to whether there is a causal link between videogame play and creativity. On my reading of the available evidence, it is simply not clear whether playing videogames (or even certain kinds of videogames) enhances, diminishes, or has no effect on creativity. Finally, I have argued that although engaging with serious literature or film may be more creative along some dimensions than playing videogames, videogame play may be more creative than reading or watching along other dimensions. If I am right, it is a mistake to contrast playing videogames with creative activities.²³

Notes

1. Po Bronson and Ashley Merryman, "The Creativity Crisis," *Newsweek*, <http://europe.newsweek.com/creativity-crisis-74665> (accessed June 29, 2017).
2. Lucy Prebble, "Gaming Is an Artform Just Like Theatre," *The Guardian*, www.theguardian.com/technology/2012/feb/12/lucy-prebble-computer-games-playwright (accessed June 29, 2017).
3. Nick Collins, "Video Games 'More Creative Than Reading'," *The Telegraph*, www.telegraph.co.uk/technology/video-games/video-game-news/9077458/Video-games-more-creative-than-reading.html (accessed June 29, 2017).
4. The term "originality" is used in both evaluative and non-evaluative ways. On either reading, is it plausible that it is not, alone, sufficient for genius. For a useful discussion of the complexities of the relationship between originality and value, see Bartel (2010).
5. For a discussion of Kant's "original nonsense" argument, which presents an alternative account of what Kant is doing, see Hills and Bird (forthcoming).
6. More, on his account, is required for "exemplary creativity."
7. The focus here is on psychological creativity rather than historical creativity.
8. Factor analysis was used to generate four composite measures, and two other measures were added (Jackson et al., 2012: 372).
9. For other criticisms of the reliance on the Torrance Test in creativity research, see Baer (2011).
10. For a discussion of the art of, and in, *Minecraft*, see the Vox YouTube video "Minecraft Isn't Just a Game. It's an Art Form": www.youtube.com/watch?v=-Of_yz-4iXs (accessed January 22, 2018).
11. Thanks to Grant Tavinor for encouraging me to think harder about these cases.
12. For discussion of the weak/strong interactivity distinction, see Lopes (2001).
13. For a brief discussion of some of the relevant literature on videogame play and problem solving, see Granic, Lobel, and Engels (2014: 69–70).
14. And many theories of games seem to make problem solving central to them. So, for example, Bernard Suits (2014: 55) argues that "playing a game is the voluntary attempt to overcome unnecessary obstacles."
15. An editor who shall go unnamed suggested that it might be easier to just reference the spin-off game *Captain Toad: Treasure Tracker*.
16. One of the editors of this volume suggested that this might be an odd definition insofar as it would seem to exclude intuitive geniuses from the category of problem solvers. I don't think this is quite right, since such geniuses might be intuitive in some domains but not others. But it also doesn't seem that odd to think that intuitive geniuses do not engage in the psychological process of problem solving. In any case, I wouldn't put too much weight on the definition. Let's just say that this sort of cognitive processing is standard in videogame play.
17. For examples of discussion of various elegant and inelegant solutions to problems in the team-based multiplayer online first-person shooter *Overwatch*, see <http://tay.kinja.com/overwatchs-symmetra-overhaul-teleports-her-in-the-right-1789283655> and <https://kotaku.com/1787113637> (accessed January 22, 2018).
18. See Keith Stuart, Andy Kelly, Simon Parkin and Richard Cobbett, "The 30 Worst Video Games of All Time" (part 1 and 2), *The Guardian*, www.theguardian.com/technology/2015/oct/15/30-worst-video-games-of-all-time-part-one (accessed July 2, 2017) and www.theguardian.com/technology/2015/oct/16/30-worst-video-games-of-all-time-part-two (accessed July 2, 2017).
19. A number of audience members at the University of Stuttgart made this suggestion in response to an earlier version of this chapter.
20. Chris Thursten, "A Beginner's Guide to Improving Your *Overwatch* Winrate," *PC Gamer*, www.pcgamer.com/overwatch-beginners-guide/ (accessed January 22, 2018).

21. Grant Tavinor (personal correspondence) suggested that I might be underselling things a bit here; i.e., that world-building games, in particular, might prescribe a categorically different kind of activity than is prescribed by ordinary fictions. Perhaps this is right. Again, my primary focus here is on other sorts of games: I don't think *Minecraft's* "Creative" mode is typically criticized for encouraging passivity.
22. My hypothesis is that this is a contingent matter rather than a fact about the nature of the two art forms. Thanks to Jon Robson for pressing me to clarify this point.
23. Thanks to Jon Robson, Grant Tavinor, and Anna Abraham for comments on an earlier draft of this chapter. Audiences at Stuttgart University, Ritsumeikan University, and the Just a Game? Conference at Kent University also provided helpful feedback. Ethan Meskin advised on videogames.

References

- Baer, John. (2011). "How Divergent Thinking Tests Mislead Us: Are the Torrance Tests Still Relevant in the 21st Century? The Division 10 Debate." *Psychology of Aesthetics, Creativity, and the Arts* 5 (4): 309–313.
- Bartel, Christopher. (2010). "Originality and Value." *Hermeneia* 10: 66–77.
- Boden, Margaret. (2007). "Creativity in a Nutshell." *Think* 5: 83–96.
- Carroll, Noël. (1994). "The Paradox of Junk Fiction." *Philosophy and Literature* 18 (2): 225–241.
- . (1998). *A Philosophy of Mass Art*. Oxford: Clarendon Press.
- . (2014). "The Creative Audience: Some Ways in Which Readers, Viewers, and/or Listeners Use Their Imaginations to Engage Fictional Artworks." In *The Philosophy of Creativity: New Essays*, edited by Elliot Samuel Paul and Scott Barry Kaufman, 62–81. Oxford; New York: Oxford University Press.
- Cropley, David H., James C. Kaufman, and Arthur J. Cropley. (2008). "Malevolent Creativity: A Functional Model of Creativity in Terrorism and Crime." *Creativity Research Journal* 20 (2): 105–115.
- Eaton, Anne W. (2007). "A Sensible Antiporn Feminism." *Ethics* 117 (4): 674–715.
- Gaut, Berys. (2003). "Creativity and Imagination." In *The Creation of Art: New Essays in Philosophical Aesthetics*, edited by Berys Gaut and Paisley Livingston, 148–173. Cambridge: Cambridge University Press.
- . (2010). "The Philosophy of Creativity." *Philosophy Compass* 5 (12): 1034–1046.
- . (forthcoming). "The Value of Creativity." In *Creativity and Philosophy*, edited by Berys Gaut and Matthew Kieran. Abingdon, UK: Routledge.
- Goldman, Alan H. (2011). "The Appeal of the Mystery." *Journal of Aesthetics and Art Criticism* 69 (3): 261–272.
- Granic, Isabela, Adam Lobel, and Rutger C. Engels. (2014). "The Benefits of Playing Video Games." *American Psychologist* 69 (1): 66–78.
- Greenberg, Clement. (1939). "Avant-Garde and Kitsch." *Partisan Review* 6 (5): 34–49.
- Hamlén, Karla R., and Fran C. Blumberg. (2015). "Problem Solving Through 'Cheating' in Video Games." In *Video Games and Creativity*, edited by Garo P. Green and James C. Kaufman, 83–97. London: Elsevier.
- Hills, Alison, and Alexander Bird. (forthcoming). "Against Creativity." In *Creativity and Philosophy*, edited by Berys Gaut and Matthew Kieran. Abingdon, UK: Routledge.
- Hutton, Elizabeth, and Shyam S. Sundar. (2010). "Can Video Games Enhance Creativity? Effects of Emotion Generated by *Dance Dance Revolution*." *Creativity Research Journal* 22 (3): 294–303.

- Jackson, Linda A., Edward A. Witt, Alexander Ivan Games, Hiram E. Fitzgerald, Alexander Von Eye, and Yong Zhao. (2012). "Information Technology Use and Creativity: Findings from the Children and Technology Project." *Computers in Human Behavior* 28: 370–376.
- Kant, Immanuel. (1790/1987). *Critique of Judgment*, trans. W. S. Pluhar. Indianapolis: Hackett.
- Kennedy, Christopher, and Louise McNally. (2005). "Scale Structure and the Semantic Typology of Gradable Predicates." *Language* 81 (2): 345–381.
- Kieran, Matthew. (2014). "Creativity as a Virtue of Character." In *The Philosophy of Creativity*, edited by Scott Barry Kaufman and Elliot Samuel Paul, 125–144. New York: Oxford University Press.
- . (2016). "Creativity." In *The Routledge Companion to Philosophy of Literature*, edited by Noël Carroll and John Gibson, 163–172. New York: Routledge.
- Lopes, Dominic McIver. (2001). "The Ontology of Interactive Art." *Journal of Aesthetic Education* 35 (4): 65–81.
- . (2010). *A Philosophy of Computer Art*. Oxford: Routledge.
- Mayer, Richard E. (1992). *Thinking, Problem Solving, Cognition*, 2nd ed. New York: Freeman.
- Meskin, Aaron, and Jon Robson. (2012). "Fiction and Fictional Worlds in Videogames." In *The Philosophy of Computer Games*, edited by John Richard Sageng, Tarjei Mandt Larsen, and Hallvard Fossheim, 201–217. Dordrecht: Springer Press.
- Sassoon, Galit W. (2013). "A Typology of Multidimensional Adjectives." *Journal of Semantics* 30: 335–380.
- Smuts, Aaron. (2005). "Video Games and the Philosophy of Art." *American Society for Aesthetics Newsletter* 25 (1): 1–3.
- Stokes, Dustin. (2008). "A Metaphysics of Creativity." In *New Waves in Aesthetics*, edited by Kathleen Stock and Katherine Thomson-Jones, 105–124. Basingstoke: Palgrave Macmillan.
- Suits, Bernard. (2014). *The Grasshopper: Games, Life, and Utopia*, 3rd ed. Peterborough: Broadview Press.
- Ward, Thomas B. (2015). "Content, Collaboration, and Creativity in Virtual Worlds." In *Video Games and Creativity*, edited by Garo P. Green and James C. Kaufman, 119–136. London: Elsevier.
- Woerner, Chris. (2013). "Creativity, Ethics and Education: An Interview with Berys Gaut." *Postgraduate Journal of Aesthetics* 10 (1): 2–17.
- Wright, Talmadge, Eric Boria, and Paul Breidenbach. (2002). "Creative Player Action in FPS Online Videogames." *Game Studies* 2 (2), www.gamestudies.org/0202/wright/ (accessed January 1, 2018).
- Yeh, Chloe Shu-Hua. (2015). "Exploring the Effects of Videogame Play on Creativity Performance and Emotional Response." *Computers in Human Behavior* 53: 396–407.

8 Interactivity, Fictionality, and Incompleteness

Nathan Wildman and Richard Woodward

1. Introduction

At the end of Hidetaka Miyazaki's masterpiece *Dark Souls*, the player is faced with a choice: to link the flame and let the cycle continue, prolonging the Age of Fire, or to walk away and let the world fade to ash, ushering in the Age of Dark. This represents the culmination of a long and difficult journey that involves many other choices: where to go and in what order, who to kill and who to spare, and so on and so forth. Though many elements of the journey are fixed for all who battle to the end—the Bells of Awakening must be rung, for example—much is left up to the player.

Dark Souls, like most videogames, is plausibly classified as a work of fiction.¹ This is reflected in the ease by which we apply to it the concept of fictionality, the concept of something being true “in” or “according to” a representational work.² Even setting aside that the story of *Dark Souls* is opaque and open to interpretation, certain things are undoubtedly true “in the world of the story”: for instance, it is true in *Dark Souls* that there are two Bells of Awakening (rather than twelve), that something (rather than nothing) happens when both Bells are rung, and that the fire is fading (rather than burning bright). Indeed, part of the richness of *Dark Souls* lies in the novel ways in which the fictional goings-on are indicated in indirect and subtle ways, via item descriptions, character design, and environmental clues, as opposed to the more direct methods often employed in other videogames.

Unlike more familiar works of literary fiction, however, there is something importantly *interactive* about *Dark Souls*. In part, this is because there seems to be an important sense in which much of the story is, in one way or another, in the hands of the player. For instance, if the player enters the Painted World, he can choose whether to slay or spare Priscilla, and the player's choice seems to play a significant and essential role in shaping the content of the story itself: players who spare Priscilla *make it fictional* that she is spared, those who slay her *make it fictional* that she is slain. Put otherwise, *Dark Souls* leaves certain aspects of the story *open*, and it is up to the player to decide which path is taken, and hence what is fictionalized. This feature

is further underscored by an important difference between the reasons why players repeatedly play through *Dark Souls* and why readers reread *His Dark Materials*. In both cases, our repeat engagement can be motivated by a desire to see what we have missed. But in the case of *Dark Souls*, our repeat engagement seems to be motivated by a desire to see how things can turn out differently if other choices are made (or to see how different choices ultimately deliver the same results).

We think these appearances are not deceptive: *Dark Souls*, like most videogames, can be rightly classified as an *interactive fiction*.³ That is, there is an important sense in which videogames like *Dark Souls* are interactive in ways that fictions from more traditional media are not. And one important aspect of this contrast arises out of the special role that players have in determining what is and what is not fictional.

The relevant notion of interactivity is unclear, however, and stands in need of explication. And this lack of clarity isn't just a problem for understanding videogames. As the category of works of fiction can intuitively be taken as subcategory of the category of works of art, it is natural to think that the category of works of interactive fiction can be taken as a subcategory of the category of works of interactive art. But, despite the hype surrounding so-called interactive art, there is a mundane sense in which *all* artworks are interactive, since engagement and appreciation obviously require audience participation, from sheer attention to a subtler awareness of the contexts in which the relevant artwork was created and appreciated. To the extent that the label "interactive art" is not merely a buzzword, the idea must be that some (but only some) artworks have certain distinctive features the presence of which license the application of a more specific concept of interactivity not present in more traditional artworks. The question, then, is what those features that characterize the salient concept of interactivity are.

Dominic McIver Lopes (2001, 2010) offers a convenient starting point for addressing this question. Central to Lopes' proposal is a distinction between the structure of our *experience* of an artwork and the structure of that artwork itself. For instance, the structure of *The White Album*—that is, the intrinsic or representational features of the work "the apprehension of which are necessary for aesthetic engagement with it" (2001: 68)—is not altered by shuffling the tracks. Similarly, the narrative structure of Noé's *Irréversible*, in which the order of narrated events differs from their chronological order, is not altered by the possibility of using a DVD to watch the chapters chronologically. In both cases, our experiences may vary depending on how we choose to engage with the target work, but the work itself remains unchanged.

With this in mind, Lopes distinguishes between *weakly* and *strongly* interactive works. According to him, a work is weakly interactive just in case appreciators of that work are in control of the order in which its content is presented to them. It should be clear that many, if not all, artworks turn out to be weakly interactive in this sense: we can read the chapters of

1984, or listen to the tracks that make up *The White Album*, in any order we want, and even paintings like *Guernica* seem weakly interactive insofar as we have control over which part of the painting we examine first. But in these cases, the content of the work seems independent from the order in which we access it: though we have control over how we engage with the work, our choices have no effect on the nature of the work itself.

This marks the key feature of strongly interactive works: their content is “partially determined by the interactor’s actions” (2001: 68). That is, the choices one makes when engaging with a strongly interactive work helps shape the very content of the work. Moreover, not only is the structure of a strongly interactive artwork shaped in part by the appreciator’s choices, but fully appreciating such an artwork also requires appreciating that the work is so interactive (2001: 77). So whilst weakly interactive artworks may be malleable with respect to how we engage with their representational content, strongly interactive artworks are malleable in a more significant way.

Though some have qualms about its extensional adequacy, Lopes’ proposal provides a highly suggestive model for understanding interactive fictions.⁴ Insofar as the structural properties of an interactive artwork are somehow *determined* by the choices of those appreciating that work, it is natural to think that interactive fictions are those fictions where the choices of appreciators play a constitutive role in determining what is fictional, that is, true according to that work. At the very least, the conception of interactivity wherein appreciators play a constitutive role in shaping what is fictional in ways beyond what is found in more traditional fictions is deserving of serious attention, apparently applicable with respect to videogames like *Dark Souls*, and dovetails with the wider discussion of the more general nature of interactive art.⁵ In this sense, it provides a plausible starting point for future exploration of the concept. What remains to be seen is whether the notion of interactivity can be further explicated in a way that coheres with our understanding of fictionality itself.

We believe that the key to doing so involves carefully distinguishing various ways in which fictions can “leave things open.” For just as there seems to be a mundane sense in which all artworks are (weakly) interactive, there also seems to also be a rather mundane sense in which all fictions “leave things open,” since fictions seem to be essentially *incomplete* insofar as there are always questions about the fictional goings-on that are left open and unresolved.⁶ Properly understanding the contrast between interactive fictions like *Dark Souls* and non-interactive fictions like *His Dark Materials*, we will argue, involves the recognition of a particular *kind* of fictional incompleteness that is present in the former but not the latter. The resulting characterization of interactivity via this specific type of fictional incompleteness will be useful not only to those who are interested in the nature and aesthetics of videogames, but also to those who are interested in the more general notion of interactive art.

2. Walton on Fictionality

Though there is considerable debate about how the concept of fictionality should be understood, the dominant approach that can be found in the contemporary literature is due to the pioneering work of Kendall Walton in his *Mimesis as Make-Believe*.⁷ According to Walton, the key to understanding fictionality is to recognize that our engagement with fictions is both inherently *imaginative* and inherently *structured*.

That imagination plays a role in our engagement with fiction should not be surprising: Walton describes the idea as akin to pulling a rabbit out of a hutch. When we read a story like *Harry Potter*, we respond by imagining certain things: that there are wizards and witches, that there is a school called “Hogwarts,” that one young wizard who attends that school is called “Harry,” and so on. But, as Walton notes, our imaginative responses to a fiction are not chaotic: they are shaped by the objective features of the work in question (and perhaps by wider features of the context of creation/appreciation). Thus central to his proposal is an analogy between truth and belief on the one hand, and fictionality and imagining on the other:

Imagining is easily thought of as a free, unregulated activity, subject to no constraints save whim, happenstance, and the obscure demands of the unconscious. In this respect, imagination appears to contrast sharply with belief. Beliefs, unlike imaginings, are correct or incorrect. Belief aims at truth. What is true and only what is true is to be believed. We are not free to believe as we please. We are free to imagine as we please. So it may seem, but it isn't quite so. Imaginings are constrained also; some are proper, appropriate in certain contexts, and others not.

(1990: 39)

So, for instance, just as we form beliefs with the goal of getting the world right, our imaginings are goal-directed too: loosely put, when we imagine things on the basis of engaging with a work of fiction, we want our imaginings to get its associated “fictional world” right. Hence, just as *there are tigers* is the thing to believe in a context where there are tigers, *there are witches* is the thing to imagine in a context where one is reading a story in which it is fictional that there are such things.

However, in disanalogy to the case of belief, where it is natural to think that the question of whether *p* is to be believed is fixed downstream of the question of whether or not *p* is true—that is, to the extent that one ought to believe that there are tigers, that's *because* it is true that there are tigers—Walton (1990) thinks that fictionality can be analyzed in terms of its normative role via the following definition:

what it is for *p* to be fictional just is for there to be a prescription to imagine that *p*.⁸

Properly understanding this definition requires treading carefully. For one, the relevant claims of fictionality are *work-relative*: the proposition that there are witches is fictional with respect to *Harry Potter* but not to *1984*, for instance. Hence the idea is that the fictionality of p with respect to a work w is tied to the existence of a prescription to imagine p when one engages with w , and to the extent that the features of w generate the prescription to imagine p , we might say that p is w -fictional just in case w prescribes imagining p .

Similarly, the relevant prescriptions are also *goal-relative*: if one engages with *Harry Potter* merely with the goal of examining J. K. Rowling's use of personal pronouns, there is no requirement that one imagines that there are witches since one is not engaging in a way connected to appreciating the work as a work of fiction. Thus the fictionality of p with respect to a work w is tied to the existence of a prescription to imagine p when one engages with w with the goal of fully appreciating that work.

Finally, it is important to note that the target concept of fictionality is operative with respect to questions of what is true according to a given *work*. That might sound trivial, but its importance emerges once it is remembered that there is another concept of fictionality that plays an important role in Walton's account, connected not to what is true according to a given work but rather to questions of what is true according to a *game of make-believe*. And, as we shall see in section 4, tracing the connection between these two concepts will have a special significance for our discussion about the nature of interactive fictions.

3. Fictional Incompleteness and Prescriptions (Not) to Imagine

Walton's account specifies not only the conditions under which a given proposition is fictional, but also the conditions under which a given proposition is *not* fictional: it is not the case that p is fictional just in case there is no prescription to imagine that p . The phenomenon of *fictional incompleteness* thus emerges in cases where there is a *gap* in the imaginings prescribed by a work. To illustrate, consider a case in which a work is silent over some detail about a given character, such as the color of that character's eyes. Such incompleteness is tied to the fact that it is neither fictional that the character has blue eyes, nor fictional that the character has green eyes, nor fictional that the character has brown eyes, and so on. But neither is it fictional that the character does *not* have blue eyes, nor fictional that the character does *not* have green eyes, nor fictional that the character does *not* have brown eyes, and so on. In each case, Walton's explanation is that there is a gap in the imaginings prescribed by the work. Hence the picture is one where a fiction is incomplete with respect to a given proposition p just in case neither p nor $\text{not-}p$ are fictional—which, for Walton, is explained in terms of there being neither a prescription to imagine p nor a prescription to

imagine *not-p*. (Note that in such cases the disjunction *p* or *not-p* may still be fictional, even though neither disjunct is.)

However, there is an important structural mismatch between the way we normally think about fictionality and the Waltonian account in terms of prescriptions to imagine.⁹ Fictionality is typically regimented in terms of fictional operators such as “it is fictional that,” where the relativization to a work is left implicit, and “According to *Harry Potter*,” where it is made explicit. However, when we consider how such operators interact with negation, it is clear that there are only three options: negation can take wide scope, as in “it is not fictional that *p*,” narrow scope, as in “it is fictional that *not-p*,” or both, as in “it is not fictional that *not-p*.” All three cases are accommodated by Walton’s account: the wide-scope case emerges when there is *no* prescription to imagine *p*, the narrow-scope case when there is a prescription to imagine *not-p*, and the both-scope case when there is *no* prescription to imagine *not-p*.

But there is a further way negation can interact with prescriptions to imagine that has no obvious regimentation in terms of fictional operators, emerging whenever there is a prescription *not* to imagine *p*. Such prescriptions are different from the three cases considered above. That there is no prescription to imagine *p* does not entail that there is a prescription not to imagine *p*, since the work may permit imagining *p* even though it does not mandate doing so. For example, in *Harry Potter*, there is no prescription to imagine that Ron has an even number of freckles, but there is nothing preventing us from imagining that this is so: appreciators are permitted but not prescribed to imagine that Ron’s freckles are evenly numbered. And that there is a prescription to imagine *not-p* does not entail that there is a prescription not to imagine *p*, since the work may be inconsistent, mandating imagining both *p* and *not-p*. Finally, that there is no prescription to imagine *not-p* does not entail that there is a prescription not to imagine *p*, since one reason why a work may not prescribe imagining *not-p* is because it rather prescribes imagining *p*. For instance, the reason why it would be a mistake to imagine that Hermione is not a witch is precisely because she is one.

These observations help to clarify the notion of fictional incompleteness. For even if the general specification of fictional incompleteness is given in terms of it neither being fictional that *p* nor fictional that *not-p*, and even if that condition obtains whenever there is neither a prescription to imagine *p* nor a prescription to imagine *not-p*, there are (at least) two very different species of fictional incompleteness that can be distinguished. On the one hand, we have cases where there is not only no prescription to imagine *p* and no prescription to imagine *not-p*, but also no prescription *not* to imagine *p* and no prescription *not* to imagine *not-p*. Put otherwise, in such cases, imagining *p* and imagining *not-p* are both *permitted*, though neither is prescribed. (We assume, in line with the standard literature on deontic modals, that permission is the dual of obligation.) On the other hand, there will be cases where there is no prescription to imagine *p* and no prescription

to imagine not- p , though there is also a prescription *not* to imagine p and a prescription *not* to imagine not- p . In these cases, imagining p and imagining not- p are not merely not required, but in fact *prohibited*. Accordingly, call the former cases of *permissive incompleteness*, and the latter cases of *prohibitive incompleteness*.

Standard instances of fictional incompleteness, which arise due to fictions being silent over details inessential to appreciating the work, are naturally classified as permissive cases. Imagining Ron as having an even number of freckles even though the work is itself silent over the matter seems acceptable; in Walton's terminology, such imaginings are *authorized* by *Harry Potter*, even though the imaginings have gone beyond what are, strictly speaking, prescribed by the work.

However, there are cases that more plausibly fit the prohibitive model. Consider the question of whether *Blade Runner's* Rick Deckard is a human being or a non-human replicant. Unlike a "don't care" question (for example, does he have an even number of freckles?), whether Deckard is a human or replicant lies at the very heart of the film, such that fully appreciating *Blade Runner* may be thought to require being in a state of imaginative uncertainty about his true nature, to suspend making an imaginative judgment one way or the other. Put otherwise, fully embracing the ambiguity of *Blade Runner* involves playing a game of make-believe that does not settle whether or not Deckard is human.¹⁰

Finally, recall that Walton's starting point for building his account is the analogy between the link between belief and truth on the one hand and between imagining and fictionality on the other. That analogy is again suggestive: if there is a gap in what is true (perhaps due to vagueness or the openness of the future, say), we should not conclude that it is always permissible to believe whatever we wish; in such cases we are required to suspend belief. Similarly, if there is a gap in what is fictional, we should not conclude that it is always permissible to imagine whatever we wish; in some cases, we should suspend imaginative judgment.

Now, recall that one of our central goals is to make sense of the idea that interactive fictions are distinctive insofar as the choices of appreciators play a constitutive role in determining what is and what is not true in the story in ways that go beyond what is found in more traditional, non-interactive works. Our previous discussion of fictional incompleteness is an important step insofar as it gives precise content to the thought that fictions *leave things open*. That is, to say that a fiction leaves it open whether p (for example, that *Harry Potter* leaves it open whether Harry's blood type is A+, or that *Blade Runner* leaves it open whether Deckard is a replicant) is to say that it is not the case that p is fictional but also that it is not the case that not- p is fictional (for example, that it is neither fictionally true nor fictionally false that Harry's blood type is A+, and neither fictionally true nor fictionally false that Deckard is a replicant). This general characterization of fictional incompleteness, moreover, allows for two more specific cases

within the context of Walton's conception of fictionality: the case where appreciators are permitted to respond to a case of fictional incompleteness by imagining what they want, and the case where appreciators are not permitted to respond by imagining what they want.

Of course, the phenomenon of fictional incompleteness is ubiquitous, and by no means restricted to interactive fictions: *Harry Potter* and *Blade Runner* are just as incomplete as *Dark Souls*. So, if we are to make the case that there is a kind of fictional incompleteness that is distinctive of interactive fictions, we must establish that there is a further kind of fictional incompleteness, beyond the permissive and prohibitive cases, and that the presence of this kind of fictional incompleteness is the hallmark of interactive fictions.

4. Works, Games, and Choices

According to Walton, when we engage with representational artworks—"fictions," in his sense—we engage in sophisticated games of make-believe, much like the games played during childhood (cops and robbers, bears, and so on). In light of our previous discussion, this analogy should not be too surprising, since our engagement with children's games, like our engagement with fictions, is both *imaginative*, in the sense that playing the game involves imagining that certain things are the case, and *structured*, in the sense that there are oftentimes rules that determine what is to be imagined (for example, the players of a game might be prescribed to imagine that x is dead if, in reality, x is lying motionless on the ground, or the players might be prescribed to imagine that x is a bear if, in reality, x is a tree stump). We devote much time and energy to playing such games of make-believe during our childhood years, and it would be surprising if the urge to engage in such games disappeared without a trace in adulthood (especially given the important roles that such games play). According to Walton, this urge instead re-manifests itself in our engagement with fiction.

However, in the case of fiction, there is a distinction between what is true in the *work* and what is true in the *game of make-believe* we play with that work. That is, there is a concept of fictionality defined in terms of the existence of prescriptions to imagine that is operative with respect to questions of what is true according to a given *work*. But there is another concept of fictionality connected to questions of what is true according to a given *game of make-believe*.¹¹

And it is crucial to see that there is no simple one-to-one correlation between works and their associated games. It is perfectly possible, for example, that two people could read *Harry Potter* but play different games of make-believe as a result: Billy could play a game according to which Harry is an evil child and Alice could play a game according to which Harry is a good child. Then even though their games of make-believe are tied to the same work of fiction, they are distinct insofar as they have different contents

that are generated on the basis of different principles of generation. But not all games of make-believe are born equal: there is clearly some sense in which Billy is playing the wrong game and Alice is playing the right one. Or, to use the nomenclature that Walton introduces, Billy is playing a game that is *unauthorized* for *Harry Potter*, whereas Alice is playing a game that is *authorized*.

The distinction between what is true in a work of fiction and what is true in a game of make-believe has a special relevance in the context of fictional incompleteness. For suppose that Alice is not only playing a game in which Harry is good, but also one in which Harry has A+ blood. (For instance, suppose Alice has the bizarre belief that all good children have type A+ blood, and comes to imagine that Harry has A+ blood on the basis of imagining that Harry is a good child.) Then though it is neither true in the work nor false *in the work* that Harry has type A+ blood, it is still true *in Alice's game* that Harry has A+ blood: it is something she should imagine on the basis of the principles of generation she accepts. And assuming that this is a case of permissive incompleteness, it follows that her game is authorized for *Harry Potter* even though there is something true in her game that is not true in the work that is *Harry Potter*.

In cases of permissive incompleteness, then, it is allowed that a game of make-believe can be authorized even though it is *more* complete than the work: though p will be neither fictionally true nor fictionally false, we allow that p can be true in some authorized games and false in other authorized games.

By contrast, in cases of prohibitive incompleteness, it is not only the work that is incomplete: since appreciators are prohibited from imagining one way or the other, there will be no authorized game in which p is true and no authorized game in which $\text{not-}p$ is true. So each individual game authorized for the work in question will be incomplete with respect to p . If Alice were to play a game in which she imagined that Deckard was human or that he was not human (but rather a replicant), she would not be playing an authorized game, since, in both cases, there would be something that is true in her game that is not true in any game authorized for *Blade Runner*.

With these distinctions in mind, we can finally turn to the kind of incompleteness found in *Dark Souls*—and by extension, other interactive fictions. In one sense, the incompleteness in *Dark Souls* is permissive in character: it may not be true in *Dark Souls* that the player-character links the fire rather than lets it fade, but players are permitted to choose to link the fire, and permitted to choose to let the world fade to ash. However, in another sense, the incompleteness in *Dark Souls* is very different to the cases of permissive incompleteness that we have considered so far. One way to see this is to note that if the player-character does not make a choice—perhaps when faced with the burden of deciding the fate of Lordran, the player just quits and plays something less onerous—then there is a clear sense in which the player stops engaging with the work. In other words, full appreciation of *Dark*

Souls requires that the player resolve the incompleteness.¹² Nothing like this is true of the cases of permissive incompleteness we have considered; in those, appreciators are *allowed* to resolve the incompleteness as they see fit, though the work does not *force* them to resolve the incompleteness. Hence, whilst the kind of incompleteness we find in *Dark Souls* is permissive in the sense that the player is permitted to resolve the work-level incompleteness in a variety of ways, it differs from standard cases of permissive incompleteness by also being prescriptive, in the sense that the player is not only permitted but prescribed to resolve the incompleteness in some way (though there is no particular resolution that is so prescribed).

The contrast between these cases can be precisely modelled within the Waltonian conception of fictionality. Whilst Alice is *permitted* to imagine that Harry has blood type A+ and *permitted* to imagine that Harry has some other blood type, she is not *required* to imagine one way or the other. That is, though there are authorized games in which Harry has blood type A+, and authorized games in which Harry has some other blood type, there are also authorized games that are incomplete with respect to Harry's blood type (though it might be true in such games that he either does or doesn't have A+ blood). Meanwhile, though the player of *Dark Souls* is permitted to link the flame and permitted to let the fire fade, she *is* required to go one way or the other. That is, whilst there are games of make-believe that are authorized for *Dark Souls* in which the Chosen Undead (the player-character) links the flame and other authorized games in which the Chosen Undead lets the fire fade, there are no authorized games in which the Chosen Undead neither links the flame nor lets the fire fade.

Moreover, the kind of incompleteness found in *Dark Souls* and other interactive fictions differs from more familiar kinds of incompleteness in another way. For instance, in normal cases of permissive incompleteness, the appreciator may resolve the incompleteness simply by imagining one way rather than the other; it is true in Alice's game that Ron has an even number of freckles simply because that is how Alice imagines Ron. But in the case of *Dark Souls*, resolving the incompleteness is accomplished by the player's doing something more—that is, inputting certain commands at the relevant point—which makes it true in the player's game that the fire is linked. In other words, it is not true in Isabel's game that the fire is linked simply because that is what she imagines. Rather, it is true in her game that the fire is linked because she exploits the media-specific mechanisms (command inputs) that ensure that it is true in her game that the fire is linked.¹³ And note that it will be true in her game that the fire is linked *even if* she doesn't imagine it to be linked. If she inputs the relevant command and then becomes distracted by her cat, it will be nonetheless true in her game that the fire is linked even though she doesn't imagine it. The commands she inputs make it the case that linking the fire is the thing that is now prescribed to be imagined, whether or not she does indeed imagine that the fire is linked.

In this sense, the kind of incompleteness found in *Dark Souls* differs from standard cases of incompleteness in two ways: (a) the appreciator is not only merely permitted, but in fact required to resolve the incompleteness, and (b) the specific mechanisms (that is, media-specific principles of generation) by which the incompleteness is resolved are distinctive.

5. Interactivity as Incompleteness

The form of incompleteness found in *Dark Souls* and other interactive fictions is an instance of *forced choice incompleteness*:

Forced Choice Incompleteness

A work is *forced choice incomplete* with respect to p just in case (a) there is no prescription to imagine p and no prescription to imagine not- p (i.e., p is neither fictionally true nor fictionally false) and (b) there is a prescription to either imagine p or imagine not- p .

Understanding the second clause is crucial here. To say that there is a prescription to either imagine p or imagine not- p is not to say that there is a prescription to imagine the disjunction, p or not- p . One does not comply with the prescription to either imagine p or imagine not- p by imagining a disjunction: one complies with it by imagining one of the disjuncts. And though there is no requirement to imagine one disjunct *rather than* the other, there is a requirement to either imagine one disjunct *or* to instead imagine the other. More generally, all cases of forced choice incompleteness will be cases of permissive incompleteness (since there cannot be a prescription of either imagine p or imagine not- p if there are prohibitions on imagining p and imagining not- p), though not all cases of permissive incompleteness will be cases of forced choice incompleteness (since it might be not only permitted to imagine p and permitted to imagine not- p but also permitted *not* to imagine p and permitted *not* to imagine not- p).

The concept of forced choice incompleteness, we submit, allows for the demarcation of a kind of incompleteness that sheds new light on our understanding of interactive fictions. In particular, it allows us to address the puzzling question of how we can reconcile the idea that interactive fictions leave certain questions about the fictional goings-on *open*, whilst at the same time allowing that, in a given interaction, the fictional goings-on are *settled* by the choices made by the appreciator. By holding that interactive fictions generate cases of forced choice fictional incompleteness, we can have our cake and eat it. Interactive fictions leave questions of fictionality open by generating cases of fictional incompleteness. And the fictional goings-on are settled by choices made by the appreciator because all games of make-believe that are authorized for that work will resolve the target incompleteness in one way or the other. They are genuine cases of incompleteness since there is no

prescription to imagine one way *rather than* the other, but since there is a prescription to imagine one way *or* the other, they also share a feature that is typically only found in cases of fictional completeness. That is, in cases of forced choice incompleteness, there is a prescription to imagine, though there is no particular imagining that is so prescribed.

Our proposal also gives a natural explication of the intuition that interactive fictions are distinctive insofar as their content is determined by the choices and decisions of appreciators in ways that go beyond what is found in traditional fictions, that is, that interactive fictions leave things open and require appreciators to decide how things will turn out. In this way, it nicely extends and clarifies Lopes' notion of (strong) interactivity by linking it to a developed notion of fictionality.

And, as should be clear, what counts as interactive fictions in our sense isn't just limited to videogames like *Dark Souls*; *Choose Your Own Adventure* stories (tellingly also known as *gamebooks*) like Edward Packard's *The Cave of Time*, instances of live-action and tabletop role-playing games like *Dungeons & Dragons* and *Gloomhaven*, and "interactive movies" such as *Kinoautomat* in which readers/players/viewers are required to make choices that determine the fictional goings-on will also generate cases of forced choice incompleteness. However, the kind of incompleteness we propose to take as the hallmark of interactive fictions is plausibly *not* found in works of traditional, non-interactive fiction. In this way, it is distinctive of genuinely interactive fictions.

6. Incompleteness and Genre Classification

Before concluding, we would like to anticipate one objection that might be raised against us. Specifically, one might object that forced choice incompleteness is not distinctive of interactive fiction since it is found in a particular range of traditional fictions, namely, those that are incomplete with respect to matters of genre classification.

There is a long-running critical dispute over the interpretation of William James' *The Turn of the Screw*, which can be read either as a naturalistic tale of a governess who hallucinates spirits threatening her charges or as a supernatural story of a woman genuinely being haunted by malicious ghosts. Both readings seem to comport with the fictional goings-on, though how we classify the story with respect to its genre greatly impacts what is and is not fictional. For example, if we take it to be a ghost story, then it is fictional that there are ghosts that the governess sees, which will not be the case if we classify it differently. In this way, *The Turn of the Screw* is *genre incomplete* in the sense that it is left open into which genre the work is to be classified.

This genre incompleteness entails that *The Turn of the Screw* is incomplete with respect to the proposition that there are ghosts: this proposition will be fictionalized if we read *The Turn of the Screw* as a ghost story, its negation being fictionalized if we read James' work as a naturalistic story. As

neither genre classification is prescribed, there is no prescription to imagine that there are ghosts, nor a prescription to imagine that there are no ghosts. Further, one might think that readers are not only permitted to read James' work in either way, while also being required to read the work one way or the other, which entails that they are required to either (classify it as a ghost story and) imagine that there are ghosts or instead (classify it as a naturalistic tale and) imagine that there are no ghosts. And this looks problematic for our claim that forced choice incompleteness is characteristic of interactive fictions. For *The Turn of the Screw*, like other genre-incomplete fictions, is intuitively a traditional and non-interactive fiction. Consequently, our proposal appears to mistakenly classify some paradigmatically non-interactive fictions as interactive.

In response, first note that the availability of multiple interpretations only generates genuine fictional incompleteness if we assume that the interpretations (and the genre classifications on which they are based) are all equally legitimate. After all, that it is possible to (mis)read *The Maltese Falcon* as a ghost story doesn't entail that it is incomplete with respect to ghosts; rather, such an interpretation is simply not authorized for the work. It is not implausible that *The Turn of the Screw* is similar: arguably James did not intend the work as anything other than a ghost story and, at least to the extent that authorial intention plays an important role in determining how a work should be understood and interpreted, that gives us a reason to resist the claim that the work is incomplete with respect to the existence of ghosts.

Moreover, it is not obvious that genre incompleteness entails *forced choice* incompleteness, since the fictional incompleteness generated by cases of genre incompleteness might naturally be classified in other ways. For instance, one of the main worries about simply classifying *The Turn of the Screw* as a ghost story and dismissing all other interpretations as illegitimate is that doing so seems to miss one of the most aesthetically interesting features of the work, namely the way in which the work is elegantly ambiguous, poised between interpretations. Indeed, one might think that the kind of incompleteness generated by *The Turn of the Screw* is actually akin to that of *Blade Runner*: that is, rather than being prescribed to make a choice between two competing and mutually inconsistent options—that is, a choice between playing a game that resolves the incompleteness one way or the other—fully appreciating the work requires *not* making a choice, and being in a state where one's imaginative responses are carefully poised between the competing options. So understood, the incompleteness generated by *The Turn of the Screw* would be prohibitive rather than permissive, and thereby very different from the kind of incompleteness we have associated with interactive fictions.

Similarly, the option of not resolving the incompleteness seems *permitted* by *The Turn of the Screw*. This means that the kind of fictional incompleteness generated by genre ambiguous works is not best understood in terms of

the binary choice of either classifying the story as an instance of one genre (ghost story) and thereby imagining p (that there are ghosts) or instead of classifying the story as an instance of another genre (naturalistic story) and thereby imagining not- p (that there are no ghosts). There is in fact a third option—which is certainly permitted and might even be prescribed—of letting one’s imaginings be poised between the two options by simply not imagining either way. In this way, the kind of fictional incompleteness generated by cases of genre incompleteness will be distinct from the kind of incompleteness that we have associated with interactive fictions, where full appreciation requires making a binary choice.

In sum: the present objection assumes that the kind of fictional incompleteness generated by cases of genre incompleteness is an example of forced choice incompleteness, where appreciators are required to make a binary choice between two competing genre classifications, and in turn between imagining one proposition or instead imagining its negation. Our reply is that the kind of fictional incompleteness generated by genre incompleteness is not best understood in this way, since it robs genre-incomplete works of their most distinctive feature, namely their inherent ambiguity.¹⁴

Notes

1. Aarseth (2007) contends that videogames are virtual, rather than fictional. However, there is no obvious incompatibility between Aarseth’s notion of virtuality and the notion of fictionality employed here.
2. For an overview of the literature on fictionality, see Woodward (2011, 2014). We associate the idea that fictionality is distinctive of fiction with Walton (1990). For further discussion of the distinction between fiction and nonfiction, see Friend (2012); Stock (2013); Matravers (2014); and Davies (2015).
3. In treating (most) videogames as interactive fictions, we follow Tavinor (2005, 2008, 2009); Robson and Meskin (2012, 2016); Meskin and Robson (2010, 2012); and Cova and Garcia (2015). The “most” qualifier is necessary because plausibly some videogames—for example, *Tetris*, *Chessmaster*, and *Puzzle Bobble*—are not fictions in the ordinary sense of the term, though they may be fictions in Walton’s sense (see Walton, 1990).
4. See Smuts (2009) and Preston (2014).
5. See, for example, Tavinor (2005, 2008, 2009); Robson and Meskin (2012, 2016, 2017); and Patridge (2017) for similar thoughts.
6. For further discussion about the essential incompleteness of fiction, see Wildman and Folde (2017), and Wildman (n.d.).
7. For a more detailed outline of Walton’s account of fictionality, see Woodward (2014).
8. Walton (2015) has distanced himself from this proposal, and now takes prescriptions to imagine to be necessary but not sufficient for fictionality. See Woodward (2014, 2016) for a defense of the original proposal.
9. The following observations are explored in more detail in Williams and Woodward (n.d.).
10. Our take on the *Blade Runner* case is, admittedly, controversial: whereas its director, Ridley Scott, has said that Deckard is a replicant, Philip K. Dick, the author of the story on which it is based, has said that Deckard is human (and this is how Harrison Ford said he played Deckard in *Blade Runner*). And there

is also a tricky question of how our interpretation of *Blade Runner* is affected by its recently released sequel. For our part, we do not think that the beliefs of fiction makers decisively settle questions of what is true according to the works they create: considerations of aesthetic charity also play an important role. And *Blade Runner* is *better* if interpreted along the lines we have described. For more on the factors relevant to the determination of fictionality, see Woodward (2014: 832–835).

11. Compare Walton's (1978: 10–11) distinction between *imaginary* fictional truths and *make-believe* fictional truths. The relation between that distinction and the one drawn by Walton (1990) is somewhat unclear, and we will take the latter as canonical.
12. Note that if the player resolves the incompleteness by (say) linking the fire, it will no longer be permissible to imagine that the fire fades to ash. What is going on here is that the permission to imagine that *p* is coordinated with a conditional obligation: if the player chooses to link the fire rather than letting it fade to ash (as she is permitted to do), then she will be obliged to imagine that the fire gets linked and doesn't instead fade to ash.
13. For different media, this will take different forms: for example, this will mostly involve the use of controllers in videogames, but will consist of turning to a specific page in the case of *Choose Your Own Adventure* books.
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References

- Aarseth, Espen. (2007). "Doors and Perception: Fiction vs. Simulation in Games." *Intermediality: History and Theory of the Arts, Literature and Technologies, Playing 9* (Spring): 35–44.
- Cova, Florian, and Amanda Garcia. (2015). "The Puzzle of Multiple Endings." *The Journal of Aesthetics and Art Criticism* 73: 105–114.
- Davies, David. (2015). "Fictive Utterance and the Fictionality of Narrative and Works." *British Journal of Aesthetics* 55: 39–55.
- Friend, Stacie. (2012). "Fiction as a Genre." *Proceedings of the Aristotelian Society* 112: 179–209.
- Lopes, Dominic Mclver. (2001). "The Ontology of Interactive Art." *Journal of Aesthetic Education* 35: 65–81.
- . (2010). *A Philosophy of Computer Art*. London and New York: Routledge.
- Matravers, Derek. (2014). *Fiction and Narrative*. Oxford: Oxford University Press.
- Meskin, Aaron, and Jon Robson. (2010). "Videogames and the Moving Image." *Revue Internationale de Philosophie* 64: 547–564.
- . (2012). "Fiction and Fictional Worlds in Videogames." In *The Philosophy of Computer Games*, edited by John Richard Sageng, Tarjei Mandt Larsen, and Hallvard Fossheim, 201–217. Dordrecht: Springer.
- Patridge, Stephanie. (2017). "Videogames and Imaginative Identification." *Journal of Aesthetics and Art Criticism* 75 (2): 181–184.
- Preston, Dominic. (2014). "Some Ontology of Interactive Art." *Philosophy and Technology* 27 (2): 267–278.
- Robson, Jon, and Aaron Meskin. (2012). "Videogames and the First Person." In *Mimesis: Metaphysics, Cognition, Pragmatics*, edited by Gregory Currie, Petr Kotako, and Martin Pokorny, 435–464. London: College Publications.

- . (2016). “Videogames as Self-Involving Interactive Fictions.” *The Journal of Aesthetics and Art Criticism* 74 (2): 165–177.
- . (2017). “Still Self-Involved: A Reply to Patridge.” *Journal of Aesthetics and Art Criticism* 75 (2): 184–187.
- Smuts, Aaron. (2009). “What Is Interactivity?” *Journal of Aesthetic Education* 43: 53–73.
- Stock, Kathleen. (2013). “Imagination and Fiction: Some Issues.” *Philosophy Compass* 8: 867–896.
- Tavinor, Grant. (2005). “Videogames and Interactive Fiction.” *Philosophy and Literature* 29: 24–40.
- . (2008). “Definition of Videogames.” *Contemporary Aesthetics* 6.
- . (2009). *The Art of Videogames*. Oxford: Wiley-Blackwell.
- Walton, Kendall L. (1978). “Fearing Fictions.” *The Journal of Philosophy* 75: 5–27.
- . (1990). *Mimesis as Make-Believe: On the Foundations of the Representational Arts*. Cambridge, MA: Harvard University Press.
- . (2015). “Fictionality and Imagination: Mind the Gap!” In *In Other Shoes*, edited by Kendall L. Walton, 17–35. Oxford: Oxford University Press.
- Wildman, Nathan. (n.d.). “Are empty fictions possible?” Unpublished manuscript.
- , and Christian Folde. (2017). “Fiction Unlimited.” *Journal of Aesthetics and Art Criticism* 75 (1): 73–80.
- Williams, J. Robert G., and Richard Woodward. (n.d.). “The Cognitive Role of Fictionality.” Unpublished manuscript.
- Woodward, Richard. (2011). “Truth in Fiction.” *Philosophy Compass* 6: 158–167.
- . (2014). “Walton on Fictionality.” *Philosophy Compass* 9: 825–836.
- . (2016). “Fictionality and Photography.” *Journal of Aesthetics and Art Criticism* 74: 279–289.

9 Why Gamers Are Not Narrators

Andrew Kania

I don't go to the gym as often as I should. When I do go, my favorite—indeed, often my only—activity is riding the *Expresso Virtual-Reality Exercise Bike*. This is an exercycle for the gaming generation (and for me, I suppose). Instead of watching old *Seinfeld* episodes while you burn those calories, you select a route that is displayed in first-person perspective on a screen in front of you. That is, you see something like what you would see biking along the route that you have selected. The image is responsive to how you move the handlebars and how fast you pedal; the work required to turn the pedals (and thus progress through the virtual route) is responsive to the gradient of the part of the course you are on. An additional motivation is that other, computer-generated riders are represented, who can be set to inspiringly ride just a little slower than you.¹ Despite the somewhat clunky graphics and the limitations of what you can do in the virtual world (for example, it is impossible to leave the route and explore the countryside), the experience is much more engaging than riding an ordinary exercycle. If even this isn't enough to motivate you, another option is to play a game on the bike.² For instance, in “Dragon World” you must navigate the landscape to collect coins and tame dragons. It seems uncontroversial that one's interaction with the Expresso bike generates fictional truths (for example, that one is cycling past a giant bunny rabbit). But does one's activity generate—in whole or in part—a *story*? If so, who tells that story? The designers of the bike? The rider? Both? The answers to these questions seem less obvious to me, yet many contemporary videogames, at least superficially similar to the Expresso bike in their self-involving, fictional, digital interactivity, are commonly described not just as interactive fictions, but as interactive narratives.³ Indeed, narrative has featured prominently in arguments in favor of admitting videogames to the realm of art. If videogames are similar to films in their ability to present long, complex, emotionally engaging narratives through rich, temporally extended pictorial and sonic representations, how could videogames be denied the art status generally accorded to films?⁴

I am concerned here not with the relevance of the narrative capacity of videogames to their status as art, but rather with the nature of that capacity itself. For while the similarities just mentioned between films and

videogames are undeniable, the interactivity of videogames is a notable difference. If the story of a videogame is largely a matter of the fictional events that occur, and the order in which they occur, during a playing of the game, then the gamer—the player-audience of the game—is partly responsible for that narrative. This might seem to make the player a teller of that story—a narrator.⁵ Perhaps surprisingly, for all the ink that has been spilt on narrative in videogames, I am aware of no sustained discussion of whether videogame players are (co-)narrators of the stories manifested in their gameplay (if any).⁶ In this essay, I aim to defend the thesis that although many videogames are rightly characterized as interactive narratives, the players of such games are not (co-)narrators of the stories manifested in the “interactive films” produced in part by their gameplay. It is perhaps worth noting explicitly up front that, unlike some theorists, I do *not* use the term “narrator” to refer only to *fictional* narrators. I use the term “narrator” throughout to mean simply “storyteller.” There are fictional narrators and actual narrators, and while both come up in what follows, my main focus is on the question of whether gamers are *actual* (co-)narrators of the stories manifested in their playthroughs.

1. Conceptual Groundwork

I ignore the question of the definition of “videogame” here. My hope is that my arguments will be compelling with respect to videogames in which the gamer seems most plausibly a narrator of the story of a given playthrough. I will then assume that my conclusions hold for the less plausible cases. Some examples of the kind of game I have in mind are *Red Dead Redemption* and the *Legend of Zelda*, *Grand Theft Auto*, *Call of Duty*, *World of Warcraft*, *Portal*, and the *BioShock* series. For simplicity, I mostly restrict my discussion to single-player games, but near the end of the chapter I will briefly argue that my arguments apply, *mutatis mutandis*, to multiplayer games.

Similarly, I am not concerned here with deciding whether or not videogames are or can be artworks. I sometimes use art terminology in my discussion, but nothing hangs on this. (Instead of referring to a “work,” for instance, one might simply refer to a “game.”) For what it’s worth, I agree with the growing consensus among aestheticians that videogames at least have the potential to be artworks and that some existing videogames probably are artworks, while as yet no videogame qualifies as a great (or perhaps even a good) artwork.⁷

More important for this project are questions about the “ontology” of videogames, specifically questions about the nature of, and relationships between, videogame, gamer, and playthrough. Videogames are like novels or films, and unlike oil paintings or marble sculptures, in being “ontologically multiple,” that is, there are many different genuine “instances” of a single videogame (for example, the various playthroughs of *Red Dead Redemption*).⁸ However, like musical works for performance, and unlike

novels or films, the different instances of a videogame differ in artistically relevant ways. This does not in itself imply that videogames are works for performance—differences between instances of prints or cast sculptures may be artistically relevant, yet these are clearly not works for performance. I argue elsewhere that gamers are not typically performers (Kania, forthcoming), but that conclusion is less important for my purposes here than the idea that videogames, unlike typical musical works for performance, and obviously unlike most traditional narrative fiction, such as novels and films, are *interactive*. Interactivity has only recently begun to be explored by philosophers, but it surely contributes greatly to the compelling sense of immersion in the fictional world of a videogame, heightening the player's emotional investment and involvement in the narrative (Tavinor, 2009). I will assume Berys Gaut's account of interactivity—"a work is interactive just in case it authorizes that its *audience's* actions partly determine its instances and their features" (2010: 143, original italics)—while resisting Gaut's idea that gamers perform the games they play.⁹ That is, typical (perhaps all) videogames are interactive because they are appreciated through being "instanced" (that is, played) by someone who affects significant features of that instance (for example, by taking a left turn and thus encountering the zombies, rather than taking a right and discovering the spaceship for which one has been searching). Unlike the vandalism of a film screening by a disgruntled projectionist or the hacking of a videogame by a cheating coder, such determination of features of the instance by the audience is *authorized* or *prescribed* by the game.¹⁰

There is no necessary connection between interactivity and narrativity.¹¹ Many paintings are neither interactive nor narrative. Traditional novels are narrative but not interactive. Daniel Rozin's *Wooden Mirror* is interactive but not narrative: It comprises a computer that manipulates an array of wooden tiles to produce an image of whatever is in front of it.¹² A work of art might be interactive and narrative, yet not an interactive narrative. This would be the case if it comprised a narrative, yet was interactive only with respect to non-narrative features. For instance, an artist might publish a story in an electronic format that allows you to alter the color and font of the text while you read, intending those to be artistically relevant features of the work, but does not allow you to change the linguistic content of the text. To be an interactive narrative, a work must be such that its user properly determines *narrative* features of the instance of the work that she is appreciating. Such works need not be computer-based. At one point in Laurence Sterne's *Tristram Shandy*, the eponymous fictional narrator asks the reader to draw a picture of the widow Wadman (Sterne, 1997: 422–424 [volume 6, chapter 38]). If we take Sterne's invitation (expressed through Shandy) seriously, and draw Wadman where indicated, we have arguably contributed to the narrative of this copy or instance of the work.¹³ And we can easily imagine a clearer case where an author asks us not to draw a picture but rather to write a continuation of the story. This would be a narrative work—it tells

a story. It is interactive because the user properly contributes artistically relevant features to the work's instance. And it is an interactive narrative because the artistically relevant features are narrative features.¹⁴

The question I am centrally interested in here is whether the user of such an interactive narrative work is thereby a narrator of the story of that particular instance. In different terms, I am interested in whether *interactive* narratives are *collaborative* narratives, the latter being cases where more than one person contributes to the telling of a story. A simple example would be an oral story improvised for an audience by two or more people. But many narrative artworks are narrated collaboratively. Berys Gaut plausibly argues that most films have many authors—all those who contribute to a film's artistic properties (2010: Ch. 3). Since most films are narrative, and many different people (writer, director, actors, and so on) typically contribute to communicating the narrative properties of a film to its audience, most films are produced (in part) by collaborative narration. But traditional films are not interactive narratives, of course, since their narrative properties are fixed during the process of their creation; a film's audience does not contribute to the film's narrative properties. This point might seem of merely taxonomic interest. For various reasons, we may not want to call a playthrough of a videogame (or an instance of another kind of interactive narrative) a work of art in its own right, but since the gamer (or user) is contributing narrative properties to the playthrough (or instance) through her interactions with the work, doesn't she similarly function as a collaborative narrator with respect to the particular playthrough (or instance)? One difference that I will argue is significant is that a contributor to a collaborative narrative need not be an audience of that narrative (just as a performer need not be his own audience), while someone interacting with a work is, of necessity, an audience for the work instance to which she contributes. This does not show that the interactor *cannot* be a collaborative narrator. Nonetheless, I believe that users of interactive narratives are not *thereby* necessarily co-narrators of the stories they interactively affect. Moreover, I believe that gamers who play even the best candidates for interactive-narrative videogames, such as *Red Dead Redemption*, are not in fact co-narrators of the stories of their individual playthroughs. Seeing why, however, will require moving carefully through some thorny issues in the philosophy of narrative.

2. Some Arguments Against the Possibility of Interactive Narrative

Though I acknowledge that many videogames are interactive narratives, it is helpful to begin by looking at some arguments against this possibility, since they contain the kernels of good arguments that gamers are not typically co-narrators of the stories told in their playthroughs. Gaut considers and rejects five such arguments (2010: 227–230). Some are obviously inadequate.¹⁵ For instance, according to the *bifurcation* argument, there are two

kinds of sequences in videogames: (i) non-interactive narrative “cut-scenes,” which are like miniature films presented to the player during the game, and (ii) non-narrative interactive gameplay. Thus, though there is narration and interaction in videogames, there is no interactive narration. Gaut responds that this is an empirical argument, and claims that there are extant counterexamples of continuously interactive narratives, such as *Façade* (2005) (Gaut, 2010: 227). This may not be the best response to the bifurcation argument, since opponents of interactive narration may claim that Gaut is simply begging the question in assuming that *Façade* is an instance of interactive narration. A stronger response is that the bifurcation argument begs the question to the opposite conclusion: Even if it is true that cut-scenes are narrative and clearly distinct from interactive gameplay, this does not show that the interactive gameplay is not narrative, much less that interactive narrative is impossible. The black-and-white scenes of *The Wizard of Oz* (1939) are clearly narrative, and distinct from the color scenes. That does nothing to show that the color scenes are non-narrative. So the bifurcation argument fails.

More promising, in my view, are what Gaut calls the *temporal distance*, *simulation*, and *error* arguments. The *error* and *simulation* arguments are similar. The eponymous “error” of the first is the purported conflation of events themselves with their narrative representation. Walking to a café is an event. One could tell a story about one’s trip to the café, but one need not, and certainly the original event is not itself a story. The error argument asserts that those who classify the player of the game as a narrator are making something like this conflation. Of course, in the videogame case, the relevant actions are fictional—the player-character (fictionally) shoots a zombie, for instance—but this makes no difference to the conflation of event and narrative: the player-character does not (typically) tell a story about the shooting of the zombie. Gaut’s response to this argument is that it misidentifies the location of the narration. It need not be the player *character* who tells the story of the gameplay; it could be an *actual* person—the gamer or designer. Just as a novelist tells a story by creating a verbal representation, and a filmmaker by making a pictorial and sonic representation, the gamer might contribute to the story of her playing of the game by creating (parts of) a pictorial and sonic representation. The player would thus be an actual teller of the story, not a fictional narrator (Gaut, 2010: 230).¹⁶ A similar mistake occurs in one version of the *simulation* argument. According to this version, a narrative is a form of representation, while a videogame is a “simulation”—a model of a situation, rather than a representation. But Gaut points out that a model just is a kind of representation, so this argument also fails (2010: 228–229).

What Gaut calls a second version of the simulation argument depends on the open-endedness of videogames. According to proponents of this argument, a narrative requires the narrator’s knowing in advance what is going to happen (presumably so that he can then represent it), while the

open-endedness of videogames precludes the player from meeting this condition on being a narrator (Gaut, 2010: 229).¹⁷ In my view, this argument is more akin to the *temporal-distance* argument than to the first version of the simulation argument, so I will treat them together. According to the temporal-distance argument, narration must occur at some temporal point after the events narrated (again, so that the narrator knows what to represent) (Gaut, 2010: 227). In response to both these arguments, Gaut points out that authors often do not know how their stories will develop. Novelists can begin their (fictional) narratives without knowing how they will end, and sportscasters narrate the (actual) action of a game as it occurs (2010: 228–229).¹⁸ Taking these responses in turn, if we are considering finished narrative works, such as novels, at some point the author must make a decision that fixes the ultimate shape of the *entire* narrative (even if the decision is simply to stop working on the narrative). Nothing like this occurs in the playing of a game. Perhaps this is the wrong comparison, though, since playing a game is not like writing a novel: one cannot go back and revise the earlier parts of one's playing.¹⁹ A closer analogy might be with an improvising storyteller. Such a person may have no idea how the story is going to continue until the next words come out of her mouth. Indeed, she may be surprised by how the tale develops, just as a musical improviser may notice things in a recording of his performance of which he was unaware while performing. So ignorance of what will happen next in a story does not preclude someone from being its narrator.

What of the sportscaster? It's worth noting that though a good sportscaster may make it seem as if she is narrating events concurrently with their occurrence, she must in fact be narrating them after the fact, otherwise she wouldn't know what to report.²⁰ A better example might be someone telling the story of his trip to the café *as it happens* to the friend he's making the trip with. This person could narrate some of his actions simultaneously with performing them: "I am turning toward the café. I am opening the door." Two kinds of events will present such a narrator with difficulties: First, it will be difficult to narrate the crucial event of one's ordering an espresso simultaneously with ordering the espresso; the barista may become confused. Second, unexpected events may stymie the narrator's efforts. In the middle of his claim to be turning toward the café, the narrator may trip and fall. He can only narrate such an event after the fact. Similarly, if the barista turns out to be the narrator's disguised archenemy, the narrator might find himself spluttering through a glass of iced coffee thrown in his face, just as he thought (and was thus narrating) that he was ordering an espresso. The lesson of these examples is that the relevant distance between the narrator and narrative is not temporal but, as the second version of the simulation argument has it, *epistemic*: in order to narrate a sequence of events a narrator must know what those events are. It's easy to see why these epistemic and temporal relations have become confused—in everyday life one usually knows about events (and thus can relate them to others) only after they have

occurred. But in typical cases of narrative fiction (e.g., the novelist or improvising storyteller above), the events are determined by one's representation of them, so (i) the temporal and epistemic relations come apart and (ii) the epistemic condition is typically automatically fulfilled.

For my purposes, it's worth considering two other strategies that our autobiographical narrator might employ. Even if it's correct that the narrator must know the events of his narrative, he could arguably narrate certain events *in advance* of their occurrence. In order not to confuse the barista, he could mumble his narrative to his friend ("I am now going to order an espresso") before enacting the event narrated. Of course, if the barista throws an iced coffee in his face before he can order, his narrative will turn out to be false, but, according to at least some respectable theories of knowledge, this does not show that he didn't know what would occur in the case in which he *does* successfully order the espresso. Unfortunately, since gameplay is often exploratory, one often has significantly less justification for thinking one's actions will be successful when playing a videogame than in ordinary life.²¹ Still, the claim under consideration is only that the player *contributes* to the telling of the story. Perhaps at the very least the proponent of interactive narration can argue that the player narrates events such as "I will attempt to fire my gun to kill that zombie."

The second strategy that the autobiographical narrator might employ is to eschew linguistic representation of his actions in favor of mimetic representation. A person might give an account of his day by acting out what he (and others) did. Why not cut out the representational middleman and let the events represent themselves? That is, the narrator might say to his friend, "Let me tell you the story of my day. Watch me," and then proceed to the café, letting his actions and the events surrounding them represent the course of the very day he is living through. There is something rather odd about this as a case of storytelling, but I'm not sure it's *not* such a case. You might worry that it's unclear how much of what happens is part of the represented narrative, but that might be true of an ordinary theatrical presentation. You might also wonder what's happened to the epistemic condition on narration, but this is arguably a limit case: the narrator simply decides that whatever happens will be part of the narrative, in much the same way that a performer of John Cage's *4'33"* decides to allow any ambient sounds that occur during a certain period of time to determine the sonic contents of the performance.²²

The story so far: of the arguments that Gaut considers against the possibility of interactive narration, the most powerful are the simulation and temporal-distance arguments. However, the relationship between narrator and events narrated that has the potential to cause problems for gamers being narrators is not *representational* or *temporal*, as some of these arguments would have it, but *epistemic*. The potential problem for the videogame player's being a narrator of the story told in her gameplay is thus that she does not know, as she plays, what is happening or will happen, and thus

her actions cannot constitute narration of those events. I have suggested two replies on behalf of the defender of the gamer as co-narrator: First, the player knows what she is *trying* to do in the game. If the narrative is interactive, then it is presumably the player's control of her player-character's actions (or other interactive features) that constitute her contributions to the narrative of her playing of the game. So perhaps it is enough that she contributes representations of her attempted actions. Second, the player may have an overarching intention that whatever happens during the gameplay will be part of its narrative, just as our autobiographical narrator may intend all his actions to represent themselves in the narrative of his day.²³

3. Necessary Conditions on Narration

This last reply goes to the heart of the issue—the intentional nature of narration. Gaut plausibly argues that in order to be a narrator, a person must *intend to transmit story information* (2010: 232–233).²⁴ He then argues that videogames are interactive narratives and that their designers, at least, meet this criterion. But Gaut intriguingly (though not explicitly) demurs from considering whether the *player* of the game is a narrator. I will cast doubt on the typical gamer's meeting each of the three parts of this criterion. Consider first *transmission*. Central to this concept is the notion of something travelling from one place to another. Gaut's central insight about interactivity, which I appealed to in explaining the concept above, is that “the audience role in the interactive case is to appreciate the work *by* instantiating it; merely watching the work while someone else instantiates it does not count as fully appreciating it” (2010: 143, original italics). But if gameplay is typically self-directed, as this conception of interactivity suggests, then any transmission intended in it will be atypical at best. This doesn't show that one *cannot* tell oneself a story. The notion of something travelling from one place to another may be central to the concept of *mail*, too, but one can still send oneself a letter. My suggestion is not that telling oneself a story is impossible, but rather that it does not fulfill the main *telos* of storytelling. Performance is similar to storytelling in this way. It, too, is typically a communicative act, and it should thus not surprise us that, although one can perhaps perform for oneself, it is unusual (perhaps unheard of?) to find a performance *tradition* the *paradigms* of which are self-directed performances.²⁵ At the very least, this should give us pause when considering whether videogame players typically tell themselves stories through their gameplay.

Now, supposing the gamer *does* transmit information to herself, is it *story* information? There is little consensus on the details of what makes something a story, but there is moderate agreement, among philosophers at least, that a story is a representation of events as linked in some way. One popular candidate for the relevant link is *causation*, which allows us to distinguish “chronicles”—lists of events not represented as having any

connection—from stories. But Gregory Currie wisely suggests caution in attempting to restrict the notion of narrative even this much, for three reasons (2010: 27–48). First, it may be that causation is merely a kind of lowest common denominator, typically present wherever other salient features of paradigmatic narratives (unity, goal-directed action, and so forth) occur. Second, Currie points out that it may be more useful to work with a continuum of narrativity, rather than a binary concept according to which everything simply either is or is not a story. And, third, we use the concept of narrative in at least three different ways: (i) to distinguish narratives from clear cases of *non-narrative* representations (for example, mathematical theories), (ii) to mark a *threshold* on the continuum of narrativity, and (iii) to classify a given representation as an *exemplary* narrative: “a sustained account focusing on the histories of a few highly interrelated persons and their fortunes, replete with information about connections of dependency . . . , all this held in place by . . . thematic unity” (Currie, 2010: 35).

None of these details create problems for Gaut’s treatment; like Currie (and for similar reasons), he appeals only to a vague conception of story information: “a story is a representation of a series of linked events,” where the precise nature of the linkage is left open (Gaut, 2010: 233, italics removed). But Gaut helpfully glosses this conception in a way that raises questions about whether the contributions that a gamer makes to the unfolding fiction of her playthrough count as story information. The gloss is that “the story represents them as linked, whether or not they really are” (2010: 233). That is, for represented events to count as narrative, they must not just be represented, nor just represented and linked, but represented *as* linked. After all, there may be a chronicle in which the events listed are *in fact* causally related, but are not *represented* as such. (For example, a denier of anthropogenic climate change might offer the following brief chronicle: *Twentieth century: unprecedented amounts of carbon released into the atmosphere. Twenty-first century: climate change accelerates.*) The point, for my purposes here, is to cast doubt not on whether the gamer represents her character, say, as shooting a zombie, nor on whether, in the playthrough’s fiction, this causes twenty further zombies to turn from their repast to exacting revenge upon the player-character, but on whether the gamer represents these events as linked in this way.

It might be objected that this is an unfair example, since the gamer is only directly responsible for representing the shooting, not its consequences. Because gameplay is *interactive* narration, if it is narration at all, we should expect the narrative labor to be divided between the co-narrators. Perhaps the gamer is responsible for representing some of the events (her fictional actions) and the game designers are responsible for the representation of all other events, and the relevant links between them. If this is correct, then the gamer would certainly be a co-narrator in some sense, but the less of the relevant information the gamer transmits, the less of a contribution she makes to the narrative, and if it turns out that she represents *none* of the

relevant *linkages* that make the representation narrative, then there's also a sense in which she is not a narrator in even a pretty minimal sense. But perhaps this is still unfair, since the gamer may plausibly be thought to represent some events as linked in the relevant way. There may be some kind of overarching intention, of the sort we considered with respect to the autobiographical narrator above, that the fictional events she represents through her gameplay be represented as causally linked to others (represented by the game designers, say) when it is plausible to consider them so linked in the fictional world of her playthrough. More simply, there may be sequences of events that the character specifically represents as linked. For instance, the gamer may represent her character as (fictionally) pulling a trigger (by actually pushing a particular button), intending to represent her character as (fictionally) thus causally firing her gun in the direction of a particular zombie. In sum, though there are some reasons for caution, this may be the part of the criterion for narration that it is least difficult to argue that the gamer might meet with respect to the fictional events of her playthrough.

What, finally, about the *intention* to tell a story? That is, even if the player transmits information of the right sort in playing the game, does she intend to do so? I believe it is instructive to reconsider my exercise regime at this point, for the arguments just considered are equally applicable to my actions as I ride the Espresso bike. I intentionally contribute to the representation of my cycling avatar in the fictional course I am riding, and it seems as plausible in this case as it does in that of videogame play, that I represent the fictional events determined by my actions and represent them as linked in the relevant way. Do I transmit that information? Such a claim sounds a little odd to my ears, but it's certainly true that I would notice if the display ceased to be responsive to my actions, so I am at least paying attention to the effects of my actions (both actual and fictional) on the fictional world of the virtual ride. What sounds not just odd but downright wrong is that I *intend* to transmit that information to myself, that is, that I'm telling the story of my ride to myself by riding the bike.²⁶ If my claims about the Espresso bike are plausible, then one question is whether there is a relevant difference between my activities at the gym and the typical gamer's activities when she plays *Red Dead Redemption*.

As I have said, in his defense of the possibility and value of interactive narration, it seems to me that Gaut never explicitly defends the idea that the player of a videogame is a narrator of the story of her playthrough. When he does discuss the gamer's actions, however, he could be interpreted as suggesting that the gamer is a narrator. For instance, he says that “[i]f interactors partly determine the story, then they are in a position akin to the authorial one, except that their determination is of the particular instance of the work . . . not the work itself” (2010: 229) and that “the question is whether one is *actually* engaged in storytelling by means of making certain things fictional” (230). But in both of these places, Gaut's primary objective is not to argue that the gamer is a narrator, but rather to argue that the

gamer is not a *fictional* narrator (in the context of arguing that a fictional narrator is not a necessary condition on narration, interactive or otherwise). And, as already mentioned, throughout most of his defense Gaut attributes narrational agency to the game designers (or their equivalents) and is silent on the question of whether the gamer (or other interactor) is a storyteller.

Consider the “clear, paradigm case” that Gaut provides to illustrate the concept of interactive narration (2010: 230). This is a kind of parable intended to demonstrate the continuity between uncontroversial storytelling and interactive gameplay (2010: 230–231). In the parable, Jane tells her son, Otis, bedtime stories prominently featuring the hero Teddy and his nemesis the Dragon. As the parable proceeds, Jane cedes some of her storytelling power to Otis, allowing him to choose between various continuations of the story. At some point, they decide to act out the story rather than having Jane tell it verbally, with Otis playing Teddy and Jane playing the Dragon. In a final twist, Gaut reveals that Jane is a videogame designer who has been working on her new blockbuster: *Teddy and the Dragon*. On its release, she can relax while Otis continues to contribute to tellings of stories featuring his two favorite characters, by controlling the Teddy character in the game.²⁷ The moral Gaut draws from his parable is that

there is a close affinity between live-action role-playing games, which is what the enacted version of ‘Teddy and the Dragon’ is, and videogames, since both can serve as vehicles for make-believe and storytelling. The difference is that videogames standardly use moving pictures for storytelling, whereas live-action role-playing games use enactment.

(2010: 232)

But it is also notable that when Gaut discusses the storytelling in the videogame version of *Teddy and the Dragon*, he says the following kind of thing: “Jane and her team of designers use the videogame *Teddy and the Dragon* to tell interactive stories, just as Jane uses words and actions in her live action telling of the story to Otis” (235). What he does not bring out explicitly is that though Otis, like a typical gamer, may contribute to the narrative of his playthrough of the game by interacting appropriately with it, this does not thereby make him, nor the typical gamer, a *narrator* of that story.

A potential source of confusion here is the danger of slippage from fiction to narrative. Gaut explicitly points out that “Jane could simply play a game of make-believe with Otis while lacking any intention to transmit story information: in this case no story is told in their game” (2010: 234–235). It is worth dwelling on this point with respect to videogames. Many traditional games are governed by a fiction, though this is often easily overlooked. For instance, chess is a battle game, in which you control a king’s retinue, aiming to trap your opponent’s king while defending your own. In Monopoly, you play the role of a would-be tycoon attempting to build a real estate empire.²⁸ Nothing about these fictions is essential to the

structure of these games *qua* games, as can be seen in the various “novelty” versions of each (for example, *Simpsons* chess sets and *Lord of the Rings* Monopoly). But it seems likely that a version of Monopoly that eschewed *any* governing fiction would be less compelling. I imagine it would be more difficult even to learn to play such a game: without some governing fiction, the various arcane rules that we naturally think of as being *about* going to jail, mortgaging properties, building hotels, and so on, would likely be more difficult to remember. The role of the fiction in these cases thus seems to be to increase players’ engagement with the game. (Presumably this explains part of the appeal of the novelty versions, too. Fans of *Lord of the Rings* will find playing that version of Monopoly even more compelling.)²⁹ What the fiction does *not* appear to do is make the playing of the game the telling of a story. Of course one *could* tell a story of one’s playing of the game (that is, of the fiction the game supports)—“I sunk [*sic*] your battleship!”—but that doesn’t make typical playings of the game tellings of stories. Indeed, it may be that the development of games that utilize digital technology’s potential for interactive audio-visual representations was due in large part to the player’s *immersion in the game* that such technology promotes, rather than to its aptness for interactive narration.

The upshot of all this is that even if a gamer typically determines, in part, the fictional events of the narrative in her playthrough of a videogame, it does not follow that she is a narrator, even a co-narrator, of that narrative. Indeed, there are reasons to think that she is not. In other words, even the best candidates for interactive narrative videogame playthroughs are not collaborative narratives. With this idea in mind, it is worth revisiting some of the arguments against the possibility of interactive narration considered above. The simple insight that I believe these arguments aim to express (but fail to do so in the versions Gaut considers) is that *videogame players do not think of themselves as storytellers*, that is, they do not intend to transmit story information. They thus fail to meet the intentional condition on narration.³⁰ Both the simulation and temporal-distance arguments attempt to focus on an aspect of gameplay that shows players are not narrators, but each picks the wrong aspect. Videogames are not the wrong kind of representation to support narratives, and players may not lack the relevant (epistemic) relationship to the events of the fiction; it is simply that players do not typically use these representations and their relations to them to tell stories. As it turns out, the error argument perhaps comes closest to putting its finger on the problem. Proponents of the idea that gamers are narrators of the stories of their playthroughs do not conflate fictional events with a narrative about those fictional events; rather, they conflate the determination of the fictional events of a narrative with the telling of that story. Many of the most engaging and artistically promising videogames are narrative, and their narratives are interactive. But it does not follow that when one plays such a videogame, one is the narrator of the resulting story.

A natural question to ask about where we have ended up is: who, in the end, tells the story of a given playthrough of a game? The answer suggested by the discussion thus far is that the designers of the game are the sole narrators of the stories of its playthroughs.³¹ What sounds odd about this is that the designers appear to determine many, but not all, narrative features of a given playthrough. The temptation to consider the gamer a co-narrator of a playthrough, if not of the game, arises precisely from the gamer's role in determining the remaining features of the narrative. But what I hope to have clarified in the discussion so far is that, although the two typically go together in traditional narrative forms, merely determining some features of a narrative is not sufficient for being a narrator of that narrative. Still, can it really be the case that the designers of a game intentionally tell the story of every given playthrough of the game—including many whose features they have not, and perhaps *could not have*, foreseen? Though it may seem unintuitive at first, I believe that we must embrace this conclusion. Its unintuitiveness can be softened by a couple of considerations. First, the designers' intentional transmission of information they are unaware of (for example, an unforeseen path through the game discovered by a creative gamer) is similar to the overarching-narrational-intention strategy of the autobiographical narrator discussed earlier. Such an intention is not typical of traditional, non-interactive narratives, since the tellers of such stories typically have tighter control over the details of their narratives. But there's no clear reason we should not consider such intentions genuine narrative intentions. Moreover, the ignorance of designers should not be overstated. Typical contemporary videogames are expensive products, carefully designed and extensively tested before release. The storytelling intention is widely distributed, but a game's designers collectively have a pretty good idea of the parameters of possible playthroughs if not, of course, of the details of particular future playthroughs.

Second, considering contemporary videogames as falling on a spectrum of interactive narratives may lessen the apparent strangeness of their designers' being the sole locus of narrational activity. A *Choose Your Own Adventure* book, for instance, is an interactive narrative. Its narrative possibilities are clearly determined by the author when it is published and, in my experience at least, reading such books is an experience of *discovering* a story implicit in the work but over which one has some control, rather than that of *telling* a story by determining (some of) its events. The author of the book may be surprised by aspects of certain "readthroughs" (for example, narrative clunkiness or tedious repetition), but, as with the musical and narrative improvisers discussed above, this does not show that the author is not the teller of these stories.

Finally, it is worth noting that both Grant Tavinor and Berys Gaut could be interpreted as implicitly subscribing to this account of videogame narration in their discussions of related issues. Tavinor usually talks of the gamer's relationship to the narrative as one of "discovery," even in cases

of what he calls a “stronger sense of interactive narrative, one in which the player has a formative role in the course of the narrative by [the designers] allowing them [i.e., the player] to make a contribution to the fictive content depicted in the narrative” (2009: 125, italics removed).³² And, as already noted, throughout the discussion of his “clear, paradigm case” of interactive narrative, Gaut talks of “Jane and her team of designers us[ing] the videogame *Teddy and the Dragon* to tell interactive stories, just as Jane uses words and actions in her live action telling of the story to Otis” (2010: 235). That is, Gaut implies that the narrational action is unidirectional, *from* Jane (and the other designers, in the videogame case) *to* Otis, even though the latter is a participant in these interactive narratives. And when it comes to discussing the *value* of interactive narration, Gaut devotes most of his space to issues such as the necessity of designers’ “pruning the story tree,” that is, controlling the choices available to the gamer; there is very little consideration of the narrational capacities of the gamer or audience.

In the face of the apparent oddness of the gamer’s not being a co-narrator of the interactive story of his playthrough, might it not be simpler and more intuitive to revise the cluster of narrative concepts with which we have been working? Robert Stecker has suggested that narratives might arise non-intentionally in the sense that creating a representation with the right kind of information (that is, story information) would be sufficient for having created a narrative. That is, there might be stories that are not told by anyone.³³ Fully considering this suggestion would take us too far afield, so let me say just that it seems to me that any local gains in intuitiveness here would be outweighed by more global costs. I believe that Gaut is right to consider the intentionality of narrative a consensus view, one moreover that coheres with a broadly intentionalist conception of artworks, games, and other artifacts.³⁴ Of course, we can treat certain non-narrative representations *as if they were* narratives, just as we can treat a natural phenomenon as if it were an artwork. But such a distinction relies on the essential artifactuality of narratives and artworks.

Does consideration of multiplayer games complicate this view? One might initially think that the other players provide obvious candidates for a distinct audience to whom each gamer might be telling the story of her playthrough. But, of course, if there is narrative involved in a multiplayer playthrough, it is a single narrative to which the multiple players are contributing; the players are not each telling separate but related stories to one another. Anyway, it seems no more plausible to me that any such players have the relevant storytelling intention than in the single-player case. If one could race other people in real time on networked Espresso bikes, this would do nothing to change my intuitions, at least, about whether one would thereby be telling a story. Assuming a Waltonian theory of fiction, multiplayer videogaming seems remarkably similar to Walton’s examples of a group of children playing a game of mud pies or one in which tree stumps are imagined to be bears (Walton, 1990). The only difference is that the

props in the videogame case are manufactured for a more immersive and compelling imaginative experience. So if we can (and typically do) play mud pies with our friends without thereby telling a culinary tale, it seems to me that we can (and typically do) play videogames with others without thereby telling a tale of zombies, the Wild West, or whatever.³⁵

4. Conclusion

Nothing I have said shows that the user of an interactive narrative work could not possibly co-tell the story of a particular instance of that work. To borrow Gaut's characters for a moment, it might turn out that Otis wants to tell a story to his friend Odette but, because he's bored of Teddy and the Dragon and doubts his ability to create a new story from scratch, he asks his mother to begin a new story that he can continue in various ways on different occasions. When Otis tells this story to Odette on a particular occasion, he is "interacting" with the story that Jane has created and telling the current co-authored instance to Odette. However, he is not an interactive narrator in the sense of the term that we have been using, since the audience for the telling is not the narrator himself (Otis) but a third party (Odette). But we can almost as easily imagine that Otis is a lonely child who tells stories to himself. If he co-authors an instance of Jane's new story, telling it to himself, we have as clear an example of the user of an interactive narrative telling a particular instance of the story to himself as we could hope for. What I have argued in this essay is that consideration of the concepts of interactivity, narrative, and narration shows that this situation is significantly different from that of the typical gamer. Considering even the best candidates for interactive narrative videogames, players of those games, while co-authoring the stories of their playthroughs by interacting with them, are not thereby narrators of those tales.³⁶

Notes

1. It is also possible to race your "ghost" from an earlier ride on the same route, and there are "leaderboards" listing the best times in which others have completed the route at your gym. More information can be found at www.expresso.net/. Full disclosure: I have no financial interest in Interactive Fitness Holdings, LLC, distributors of the Espresso. If you work for the company, however, I'm open to offers.
2. I take no stand on whether the race mode described thus far is itself a game. For discussion of some relevant issues, see Suits (2014: 24–43) and Nguyen (2017).
3. One obvious difference between a ride on the Espresso bike and a playthrough of a contemporary videogame is that if the former involves a story, it is a much more boring one than that of the latter. But boringness does not typically lead us to deny, or even be confused about, the narrative status of some fiction. Nevertheless, the boringness of the Espresso story (if such it be) is indirectly relevant to its narrative status, as I will note below. On self-involving fictions as an important category of artifacts, see Robson and Meskin (2016).

4. Berys Gaut (2010) makes an extended case of this kind for videogames. See especially §§1.2, 3.9, 5.7, 6.5, and 7.5 (6–20, 140–151, 224–243, 272–281, 300–305).
5. A note on terminology: I use the terms “gamer” and “videogame player” interchangeably, and the term “gameplay” for their activities. I call each instance (i.e., playing) of a game a “playthrough.”
6. This is not the place to list the issues that *are* debated in this literature. For philosophical introductions to it, see Nguyen (2017), especially §3; Gaut (2010: 224–243); and Tavinor (2009: 110–129). For a games-studies perspective, see Arsenaault (2014).
7. For arguments in favor of videogames having the potential to be art, see Smuts (2005); Tavinor (2009: Ch. 9); and Lopes (2010: Ch. 7). For dissent, see Rough (2017); for replies to Rough’s arguments, see Conrad (2016).
8. Of course, there is also the distinction between the videogame and its tokens in the sense of the different copies of the game that different people might buy. But that aspect of their ontology is irrelevant to my concerns here. For a discussion of these two senses of “copy” (as they apply to film), see Carroll (1996: 66–70).
9. For some defense of Gaut’s account of interactivity, see Kania (forthcoming).
10. The notion of authorization or prescription “by a game” is of course shorthand for however you think such norms are constituted (for example, by the intentional actions of the game’s designers). See Davies (2012) for some helpful discussion.
11. I return to the question of what narrativity amounts to in §3.
12. *Wooden Mirror* is discussed in Lopes (2010: 46–51).
13. One way in which this example is less than ideal is that it is debatable whether Wadman’s appearance in the reader’s drawing is a *narrative* feature of the resulting instance. Another source of uncertainty is whether Sterne intends to issue a serious invitation to the reader through Shandy. An alternative interpretation would be that by getting the reader to laugh at, rather than take seriously, the irreverent invitation to draw in a book (as with many other techniques he employs throughout the novel), he brings to our attention, and perhaps communicates something about, the norms of reading that we usually take for granted.
14. Despite initial appearances, *Choose Your Own Adventure* books are not actual paradigmatic examples of interactive narrative. I return to them later in this essay.
15. I won’t even consider what Gaut calls the *no-narrators* argument, so terrible is it (Gaut, 2010: 229).
16. Note that this would not imply that the player is a co-author of the *game* or *work*. The story to which she contributes, most obviously her contributions to it, may belong only to this playthrough or work-instance.
17. For the importance of open-endedness to the value of interactive artworks, see Tavinor (2009: Chs. 5 & 6); Lopes (2010: Chs. 5–7); and Gaut (2010: 236–243).
18. Derek Matravers also claims that one can narrate events presently occurring (2014: 52).
19. One complication here is that videogames are typically constructed so that one *must* “go back” and replay certain sections of the game, often when one’s player-character dies. But players tend to think of a single playthrough as the notional continuous sequence of events comprising the completed narrative of the entire game, excluding those deaths. And when one’s concern is the narrative of the playthrough, one’s player-character’s multiple deaths are typically ignored. Alternatively, if one goes back to an early “save” and continues the game along a substantially different trajectory, this will count as a *different* playthrough, presumably because of the different artistically relevant properties of the completed narratives or gameplays.

20. Two complications here are the possibilities of (i) knowing things about the future, and (ii) narrating events as they happen, rather than after they are completed. I discuss both of these complications in what follows.
21. Although narratives do not have to be veridical, something like this is required for interactive narrative. The gamer is not a teller of the story of her play-through if, for instance, she tells a story of her (player-character's) killing every zombie, passing through every level, and beating the game, when in fact she is herself killed within the first minute by the first zombie she encounters.
22. For some complications in the Cage case, see Kania (2010: 344–349).
23. This need not make the player the sole author of the narrative of her gameplay, since the game designers may have a similar intention. But it may be enough to transform all of her (fictional) actions in playing the game into contributions to its narrative.
24. Cf. Gregory Currie (2010: 6): “[N]arratives are intentional-communicative artefacts: artefacts that have as their function the communication of a story, which function they have by virtue of their makers’ intentions.”
25. See, again, this essay’s sibling (Kania, forthcoming) for exploration and rejection of the notion of gameplay as performance.
26. Of course, as with any events, I might tell the story of that ride to someone else later. For what it’s worth, I suspect that the claim that I *transmit* story information in this case strikes me as odd in proportion to my intuition that the concept of transmission is itself essentially intentional.
27. Beneath the surface of Gaut’s simple tale clearly lurks a further, minatory moral about the breakdown of the traditional family and the resulting exploitation of child labor.
28. We can tell that this is fiction rather than reality because at the end of the game the winner isn’t elected President of the United States.
29. In some games there seems to be no governing fiction, for example tic-tac-toe, Trivial Pursuit, or Sudoku, though note that these tend to be games with relatively simple rule-structures. In others, it seems likely that there used to be a governing fiction that has dissipated over the history of the game. (Checkers or draughts and the face or court cards of a standard deck of playing cards may be examples.) For further discussion of the fictive nature of (video)games, see Tavinor (2014) and Robson and Meskin (2016: 172–173).
30. What *do* gamers (intend to) do? They surely often intend merely to play games. But they may do all sorts of things, e.g., explore the fictional world of the videogame. See Nguyen (forthcoming) for discussion.
31. Having spent some time considering the Espresso bike, it is worth noting that its designers seem less likely than those of typical videogames to have narrative intentions. One sign of this, as hinted earlier, is the sheer boringness of the putative stories manifested in Espresso bike rides.
32. To be fair, Tavinor may also be interpreted as arguing that this is a current technological limitation and that gamers may in future become genuine tellers of the stories of their playthroughs.
33. In discussion at the European Society for Aesthetics meeting in 2015. Of course, the representation could still be an essentially intentional artifact on this view.
34. This intentionalism does not imply an actual (or perhaps any) intentionalist theory of artistic (or other) *interpretation*.
35. Note that in these cases it may be that no story is told *at all*, in contrast to the kind of case where (I have argued) game designers tell the stories of play-throughs of their games.
36. For helpful discussion of earlier versions of this essay, I thank Julie Post; Patrick Keating; Jon Robson; my commentator, Grant Tavinor, and audience at the American Society for Aesthetics Pacific Division meeting in 2015, especially

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References

- Arsenault, Dominic. (2014). "Narratology." In *The Routledge Companion to Video Game Studies*, edited by Mark J. P. Wolf and Bernard Perron, 475–483. New York: Routledge.
- Carroll, Noël. (1996). "Defining the Moving Image." In *Theorizing the Moving Image*, 49–74. Cambridge: Cambridge University Press.
- Conrad, Daniel. (2016). "The Compatibility of Artworks and Games." *Undergraduate Student Research Awards* 31. Trinity University, http://digitalcommons.trinity.edu/infolit_usra/31 (accessed January 20, 2018).
- Currie, Gregory. (2010). *Narratives & Narrators: A Philosophy of Stories*. Oxford: Oxford University Press.
- Davies, David. (2012). "Enigmatic Variations." *Monist* 95: 643–662.
- Gaut, Berys. (2010). *A Philosophy of Cinematic Art*. New York: Cambridge University Press.
- Kania, Andrew. (2010). "Silent Music." *Journal of Aesthetics and Art Criticism* 68: 343–353.
- . (forthcoming). "Why Gamers Are Not Performers." *Journal of Aesthetics and Art Criticism*.
- Lopes, Dominic McIver. (2010). *A Philosophy of Computer Art*. New York: Routledge.
- Matravers, Derek. (2014). *Fiction and Narrative*. Oxford: Oxford University Press.
- Nguyen, C. Thi. (2017). "Philosophy of Games." *Philosophy Compass* 12: e12426.
- . (forthcoming). "The Forms and Fluidity of Game Play." In *Suits and Games*, edited by Thomas Hurka. Oxford: Oxford University Press.
- Robson, Jon, and Aaron Meskin. (2016). "Video Games as Self-Involving Interactive Fictions." *Journal of Aesthetics and Art Criticism* 74: 165–177.
- Rough, Brock. (2017). "The Incompatibility of Games and Artworks." *Journal of the Philosophy of Games* 1.
- Smuts, Aaron. (2005). "Are Video Games Art?" *Contemporary Aesthetics* 3. <http://www.contempaesthetics.org/newvolume/pages/article.php?articleID=299> (accessed January 20, 2018).
- Sterne, Laurence. (1997). *The Life and Opinions of Tristram Shandy, Gentleman*, edited by Melvyn New and Joan New. London: Penguin. (First published 1759–67).
- Suits, Bernard. (2014). *The Grasshopper: Games, Life, and Utopia*, 3rd ed. Peterborough: Broadview Press. (First published 1978).
- Tavinor, Grant. (2009). *The Art of Videogames*. Malden, MA: Wiley-Blackwell.
- . (2014). "Fiction." In *The Routledge Companion to Video Game Studies*, edited by Mark J. P. Wolf and Bernard Perron, 434–441. New York: Routledge.
- Walton, Kendall L. (1990). *Mimesis as Make-Believe: On the Foundations of the Representational Arts*. Cambridge, MA: Harvard University Press.

10 Videogames and Virtual Media

Grant Tavinor

1. Videogames and Virtual Reality

After decades of what might have seemed like false promises, virtual reality headsets are beginning to have a real and transforming influence on videogaming. Principally this owes to the development and successful commercial release of VR headsets such as PlayStation VR, the Oculus Rift, and the HTC Vive. A useful example of the impact of this technology on the interactive potential of videogame media is *The London Heist* (2016), a game included in the *PlayStation VR Worlds* bundle and which is essentially a demo for the PlayStation 4 VR headset. The scenarios in *The London Heist* are drawn from recent British crime cinema, and the game contains some genuine surprises for the initiate to virtual reality. A striking feature in the game is the imposing presence of the characters one encounters in the gameworld. One menacing character stands before you with a blowtorch in hand, and it is hard not to feel threatened by his muscular, tattooed, cockney-accented presence. The experience of interacting with the world is similarly impressive: in one sequence a virtual cell phone rings, and it is natural to reach for the phone in virtual space, answer it, and put it to your ear. And because the PlayStation 4 camera tracks the position of the controller in your hand and places sound sources within the virtual world, equally startling is that players hear the voice on the other end as coming from the virtual mobile phone in their real hands.

The nature of videogame worlds and their interactive potential has drawn considerable interest from philosophers and game theorists, who have proposed what are sometimes competing theoretical approaches and conceptualizations. How to account for a player's apparent presence and interaction in worlds such as that presented by *The London Heist* is likely to involve an extension of this body of theory; indeed, some accounts of videogame media do not make a clear distinction between the VR worlds under discussion here and more customary modes of videogame media.

For some theorists, videogames present media items and worlds that are credibly seen as *fictional*, but that allow a sophisticated sense of interaction uncommon in other fictive media (Tavinor, 2009; Meskin and Robson,

2012; Robson and Meskin, 2016). The view that these items are fictions is often prompted by their dependence on the imagination and the “merely imagined” nature of the objects depicted, but also because previous accounts of fiction, such as that developed by Kendall Walton (1990), are so readily adaptable to videogames. Another theoretical approach to this aspect of videogames and other such artifacts is to consider them as instances of virtual objects and worlds, or of the more encompassing phenomenon, “virtual reality.” This approach sometimes involves the characterization of virtual worlds and items as different in kind to fictions: as being virtual *rather than* fictional (Aarseth, 2007; Chalmers, n.d.). Allied with this view is that some aspects of virtual worlds are *not* “merely imagined,” but that participants really act within virtual worlds (Velleman, 2008). Finally, some theorists have taken a particularly strong interpretation of the nature of virtual worlds, seeing the apparent existence of virtual objects and worlds as having a metaphysical significance (Heim, 1993; Chalmers, 2003, n.d.). For these thinkers, virtual reality is “truly real.”

The development of virtual reality has thus led to a range of views, from those that claim that such developments require a reformulation of our views on the depictive and interactive possibilities of fictive media, to those that make the rather more ambitious claim that such artifacts prompt a revision of our basic views about what is real. There is also an apparent theoretical inconsistency in this range of views centering on the competing conceptual accounts of the phenomena under concern as fictional *or* virtual. These two concepts are frequently applied to videogames and similar artifacts, but not always in a way that implies that the combined consideration of the concepts might be informative about the nature of virtual reality. But perhaps the videogames under question here are fictional *and* virtual? I will argue here that once we settle on the appropriate conceptual relationship between virtuality and fiction, we will understand how the concepts combine in the technological development of VR media; moreover, without the potentially distracting involvement of metaphysical issues that has left the literature about virtual reality in such a muddle.

2. The Metaphysics of Virtual Reality

If my intention is to offer a theory that makes combined use of the concepts of fiction and virtual reality, then clearly I need to address the claims that fiction and VR are in fact competing or exclusive characterizations of the phenomena under concern here, or claims that the concept of virtuality is more appropriate than fictionality as a characterization of the nature of the worlds, objects, or activities seen in videogames and similar media. I have addressed this issue elsewhere (Tavinor, 2011b), but here I want to expand on these ideas.

There is an important clarification to make at the outset about the scope of this discussion. The use of the term “virtual” is rather loose in much of

the discussion around videogames and digital media, being used to refer both to the *worlds* of videogames generally, and more specifically to the apparent *virtual reality* produced by VR technology such as the PlayStation VR headset. Some of the arguments considered below are directed primarily at non-VR gameworlds and objects, others to the objects and worlds experienced in VR headsets, and still others focused on speculations about fully immersive or “perfect” Matrix-like VR worlds. Of course, virtual worlds and reality are not restricted to game applications, with both non-immersive digital worlds and VR having educational, medical, and military uses, among others. And the adjective “virtual” is also used to refer to computational artifacts, such as online virtual stores or currency, which may not represent worlds of any kind. My intention here is to explain the sense of virtual media that operates in all these uses, but ultimately to do so to inform our understanding of the apparent videogame virtual realities produced by the new wave of commercial VR headsets. I suspect that there is a common sense of the term “virtual” in all these cases, but I also think that its proper use extends well beyond these phenomena to encompass some things that we would not ordinarily think of as virtual media. The terminological upshot of this is that I will refer to a range of *virtual media* and technologies, such as videogames, platforms such as *Second Life*, and virtual stores and museums, but also to the specific form of this virtual media, *virtual reality* or *VR*.

It seems natural, for some theorists at least, to adopt a metaphysical approach to explain the issues with the worlds of videogames, virtual media and VR, and also to discount the potential fictional nature of these things. Games theorist Espen Aarseth argues that the objects within videogames are “ontologically different” to those in fictions because virtual items “can typically be acted upon in ways that fiction is not acted upon” (Aarseth, 2007: 37). The philosopher David Velleman accepts that some aspects of virtual worlds are fictional, but also holds that participants really act in virtual worlds and that in *Second Life* the “character is a chimerical creature in which a fictional, virtual-world body is joined to a literal real-world mind” (Velleman, 2008: 423). Similarly, David Chalmers, better known for his positions in the philosophy of mind, argues that,

The virtual world of *Second Life* involves virtual bodies (avatars) in virtual space. Virtual bodies are distinct from physical bodies, and virtual space is distinct from physical space. We really have these virtual bodies, as well as having physical bodies. There is nothing fictional about this.

(Chalmers, n.d.)

While the theories of virtual worlds and objects that these thinkers ultimately develop differ in various respects, they converge on the claim that the worlds, objects, and activities seen in virtual media are something other than

fictional. Here I will follow the lead of the virtual reality theorist Michael Heim and refer to this position as *virtual realism* (Heim, 1998).

I will argue that virtual realism is an unhelpful and frequently muddled position that conflates issues that are best kept distinct. In the following I will try to undermine the motivations behind such a metaphysical approach to prepare the way for my own account, where virtuality—whether applied to objects, bodies, or worlds—is not some chimerical or exotic mode of being, but rather is a functional quality of a representational, depictive, or interactive medium. Furthermore, virtual media are sometimes used to depict real things, but they also frequently represent or depict objects and activities that are fictional in the sense of being merely imagined. I judge that my approach is to be preferred to virtual realism on the basis that it is capable of accounting for the practices and features we actually observe occurring within virtual worlds and VR technology, but without any obvious metaphysically exotic commitments. Virtual reality is indeed real, but, properly understood, this claim has none of the suspect implications of competing accounts.

David Chalmers offers perhaps the strongest and best-developed account of virtual realism, and it is the one I will focus on here. Chalmers' metaphysical orientation is clear from the very first sentence of his paper: "Is virtual reality truly real?" His answer is unequivocal: "virtual reality is a sort of genuine reality, and what goes on in virtual reality is truly real" (Chalmers, n.d.). Chalmers sets up his argument for virtual realism in contrast to what he calls "virtual fictionalism," which he characterizes as the view that virtual objects and worlds are fictional or imaginary things. This does not strike me as a helpful way to set up the discussion of the relationship between virtual worlds and fictions, principally because it sees those classifications as being mutually exclusive. In section 3 I will argue that it is perfectly sensible to see an item as being a *virtual fiction*. Nevertheless, just because I claim that virtual media sometimes present fictional worlds (in addition to their depiction of the real world), Chalmers' arguments still confront my own position and so need to be accounted for. Ultimately his argument does not deliver the provocative metaphysical conclusion it promises.

Chalmers' position is that virtual objects such as dragons and avatars, rather than being merely fictional objects, are very real *data objects*. He refers to this position as "digitalism," which is the view that virtual items such as avatars and worlds are to be identified with the data objects that we interact with through VR headsets, controllers, and the like. It is a position that he ultimately thinks responsible for the reality of virtual reality. Chalmers' approach is a development of a metaphysical view that he sets out in an earlier paper concerning perfect virtual worlds of the kind presented in the film *The Matrix*, where he argues that because of the identity of virtual objects with computational artifacts, people could say straightforwardly true things of their world while existing within the Matrix, making that scenario "not a skeptical hypothesis, but a *metaphysical hypothesis*"

(2003: 3, emphasis in original). The Matrix is a “perfect and permanent virtual reality”; nevertheless, Chalmers hopes to give the same kind of arguments for the “temporary and imperfect virtual realities” available now.

Chalmers has two basic arguments for this ontological identity of virtual objects and data objects: the causal argument and the perceptual argument. The causal argument infers the reality of virtual objects from our causal interactions with them:

- (1) Virtual objects have certain causal powers (to affect other virtual objects, to affect users and so on).
- (2) Digital objects really have those causal powers (and nothing else does).
- (3) Virtual objects are digital objects.

(Chalmers, n.d.)

The perceptual argument has much the same structure, but operates on the observation that digital objects are the causal basis of our perceptual experiences. I find both arguments to be convincing, but ultimately uninteresting for reasons to be discussed in section 3.

Nevertheless, how these arguments confront virtual fictionalism is that purportedly, because of their nonexistence, fictional objects cannot play the required causal and perceptual roles that digital objects are available to play. Hence, because we *can* causally interact with virtual objects, and because our perception does causally stem from digital objects, virtual objects are real digital objects, and not fictions. Specifically, the fictional dragon Smaug does not exist, and so *he* cannot be the causal basis of our experiences in a videogame in which he is involved. Thus, videogame Smaug is not fictional: he is a real digital object, and moreover, one that the player can really interact with and perceive.

3. Fictional and Virtual Objects

Neither of these arguments establishes that virtual worlds cannot be fictions, because fictional objects (in one important sense, at least) simply *can* play the causal and perceptual role required here. Fictional things such as characters, dragons, and cities are often represented by props that guide our imaginations in our engagement with works of fiction. The classic account of this feature of fiction appreciation is Walton’s discussion in *Mimesis as Make-Believe* of tree stumps and the imaginary bears they represent (1990: 21). While what is represented by the props need not exist, the prop certainly does, and is hence available to ground our causal interaction and perceptual responses with these fictions. Indeed, in many recent movie fictions where CGI has been used extensively, these fictive props *just are* data objects very much like those found in virtual worlds and videogames, and in that fictive context they clearly do have “certain causal powers . . . to affect users” and do comprise the “causal basis of our perceptual experiences”

(Chalmers, n.d.). In film, these digital props play the role of supporting, as Walton would say, “games of make-believe,” making things fictional of the imagined worlds they represent (1990: 38). The same could equally be true with the virtual objects that Chalmers is concerned with, even if they have the causal and perceptual powers he credits them, and even if the specifics of the games of make-believe they are involved in differ to those customarily found in film (which, as I will argue later, to some extent they do).

I suspect that underlying Chalmers’ resistance to the idea that virtual worlds (at least sometimes) present fictions is a lack of precision about what “fictional object” might mean, the relevant distinction being that between objects such as fictive props (for example, stumps, sentences, images and sound, data objects) and the fictional objects these represent (bears in a forest, Anna Karenina, green slime, fire-breathing dragons). Indeed, his argument against virtual fictionalism hinges on fudging this distinction because it depends on the intuition that fictions cannot supply the required causal object needed for our interaction with virtual worlds. These intuitions about the causal impotence of fictional objects depend on interpreting “fictional object” in this context as referring to the (often) nonexistent objects, characters, and worlds portrayed in virtual worlds, rather than referring to the media artifacts—often, animated digital models rendered for viewing on a stereoscopic headset—that do the portraying. This distinction is a frequent concern in the philosophy of fiction, where its lack has often played chaos with the analysis of fiction and works of fiction; for Walton, it is the distinction between fictional objects and the “props” that might generate fictional truths about these objects (1990: 35–38). Interestingly, there are no references in Chalmers’ paper to the widespread literature that has spent considerable effort hashing out these very ideas in the context of fiction.

This ambiguity is also evident in Chalmers’ use of the term “virtual object” (perhaps explaining the ambiguity in the case of “fictional object,” given that the issue with virtual objects ultimately drives his concerns). This ambiguity exists in the first premise of the causal argument:

- (1) Virtual objects have certain causal powers (to affect other virtual objects, to affect users and so on).

Here, I contend, “virtual object” is ambiguous between the apparent objects represented virtually (for example, a dragon) and the media artifacts that represent these things. The latter certainly have the capacity to affect the user causally through their display on screens or VR headsets (and also to be causally affected by the user through the user’s input into keyboards and control devices), but it is very obvious that these causally effective objects are very different kinds of things to *dragons*. It is also credible that virtual objects under this latter interpretation are data objects (it is plainly obvious that they are!). It is under this interpretation that I find both of Chalmers’ arguments convincing, but ultimately uninformative. The argument simply

does not imply that some dragons are data objects. This would be to equivocate on the term “virtual object.”

The lack of this relatively simple distinction in Chalmers’ theory, and the need for the distinction in any successful theory of virtual media, can be teased out by looking at virtual depictions of real places and things. A VR simulation of New York City would surely amount for Chalmers’ purposes to an immersive, interactive, and computational depiction of that city with which one could causally and perceptually interact. This would be a relatively simple application of VR; and it already exists in the case of *Google Earth VR*. For Chalmers’ model to be consistently applied to this case (that is, to preserve his ambiguous usage), the virtual object here—New York City—needs to be characterized as a data object. But this is not the case: New York City is a city even if its depiction in the VR medium is a data object. In such cases, the VR medium allows one to interact with a digital artifact to gather information about, and see images of, this real city. Indeed, given some views of photography representation as being “transparent” (Walton, 1984), and assuming that these arguments also apply where photographs are projected over 3-D meshes and rendered in stereoscopic virtual media, we see the city itself through the virtual depiction. I will have more to say on the transparency of *some* virtual depictions in section 4.

Compare this case to a virtual representation of a clearly fictional city such as Liberty City in *Grand Theft Auto IV* (which is thematically based on New York City). Here the city is clearly a fiction, even though the depictive artifact behind its representation is roughly the same kind of thing as the depiction in *Google Earth VR*, that is, a data object. The difference in these cases is not the depictive object, but rather the origins and intentions that explain the object’s features and uses: one is meant to document a real place, the other to prompt or prescribe an engagement with a place that exists only in the imagination. This example also illustrates, incidentally, that the way that Chalmers sets up the debate between virtual realism and virtual fictionalism to be mutually exclusive positions is faulty, because the VR technologies that we currently have are capable of depicting both fiction and reality. Chalmers’ framing of the issue seems incapable of explaining how this might be the case. Consequently, if we wish to retain these terms, *virtual realism* should be applied only to those cases where virtual media are employed to document real events, activities, and objects; *virtual fictionalism* applies when such depictive media are employed as props for the imagination.

Chalmers somewhat gives the game away in a paragraph on the nature of virtual dragons when he notes that “In the real world there are no physical dragons (giant creatures breathing real fire), but there are numerous virtual dragons (digital objects existing on computers in that world)” (Chalmers, n.d.). It turns out that virtual dragons, then, are data objects that are not very much like dragons at all: indeed, they look suspiciously like representations of fictional dragons. Virtual dragons don’t breathe fire: they *virtually*

breathe fire. Given that the model of causal and psychological interaction in Chalmers' argument is a digital object being red when it appears red under the appropriate circumstances, that is, when viewed through a VR headset, what his account of fire-breathing dragons amounts to is that the data models involved produce interactive digital animations that give the appearance of a dragon breathing fire. This lesson also applies to apparent *interactions* with data objects. Players do not really fight virtual dragons: they *virtually fight them*. And what this must mean for Chalmers is that the player's interaction with the data object produces animations in an immersive interactive computational depiction that give the appearance of the player fighting a dragon. But this gives up on the provocative notion of virtual realism where "what goes on . . . is truly real" (Chalmers, n.d.) to become the rather less exciting claim that a player's interaction with virtual media can produce further virtual depictions that, because of their appearance, are appropriately referred to as "fighting dragons" and so on. It also seems entirely consistent with the virtual dragon being a fictional dragon (that is, a merely imaginary dragon) in addition to there existing a data object that governs the production of animations that act as the prop for the imaginary interaction with such a dragon.

Indeed, if the consistency of these views was not the case, what could Chalmers say about the situation where the digital models, animations, and sounds used to represent a clearly fictional dragon in a CGI film were subsequently used in a VR game? The prop in both cases is a data object—perhaps they might even share the very same digital and art assets—and in each case the dragon seems equally fictional. In such a case I believe that the difference between the movie Smaug and the VR Smaug is properly attributed to the media symptomatic of new virtual medium: qualities such as presence, immersion, and interaction. I will explore these media differences in the second half of this chapter.

4. Structural and Functional Isomorphism

Earlier I suggested that the use of the concept of virtual worlds ranges widely over some very different phenomena, from the worlds of videogames, instances of VR, virtual stores and currency, to fantasies about perfect Matrix-like virtual realities. One might wonder what these uses of the concept have in common (or indeed if they do have anything in common). Michael Heim worries that this profusion of the term in non-technical, everyday and commercial uses threatens to "wear down" the "face value" of the term (1998: 3). Also, when we inspect the list of symptoms associated with virtual reality such as "immersion," "artificiality," "telepresence," "interaction," and "networked communication," Heim suspects that we are likely to just become confused by the concept (1993: 109ff).

However, Heim also notes "virtual" has a meaning that may explain its wide and potentially confusing usage: that of *being something in*

*effect, if not in actuality.*¹ One of Heim’s examples is an automatic teller machine:

Many contemporary experiences—from using ATMs (automated teller machines) to visiting Disney’s “Star Tours”—serve up, in a variety of ways, the experience of interacting with simulations. What we call the “automated teller machine” is not truly a bank teller but a machine that performs many of the functions of a bank teller. The “as if” quality—following the dictionary definition of “virtual”—qualifies the ATM as a virtual bank teller.

(Heim, 1998: 4–5)

In the following section I will suggest, far from being a potentially confusing use, that this analysis of the concept of “virtual” is extraordinarily useful in understanding the profusion of uses and symptoms associated with VR media.

Previously I have suggested that the notion of *functional or structural isomorphism* might help in expanding and elucidating this core “as if” sense of virtuality into something that gives firm guidance on the nature of virtual media (Tavinor, 2011b: 235–236). I took up the issue by inspecting a range of uses of the term in the context of computation, such as virtual computers, virtual memory, and virtual Internet stores. I argued that, in each case, the term *virtual* was “framed to capture the fact that an item might stand as a *functional proxy* for a target—the target being whatever is represented or replicated—allowing for the same kind of functional engagement as the target, but in a non-literal merely *as-if* sense” (Tavinor, 2011b: 236). Isomorphism—literally “equal form”—is a term that has applications in crystallography, biology, and mathematics, where it refers to some kind of correspondence in form between materially dissimilar objects in these domains.

Very recent developments in VR can illustrate how structural and functional isomorphism is also at the heart of VR technology. Perhaps one of the clearest examples of this can be found by looking at Disney Research’s recent work on virtual ball catching, which seems easily characterized as a non-fictive instance of VR.² Here the virtual medium—which amounts to the tracking of the moving ball and its depiction to a participant in virtual space through a VR headset—is used to achieve the end of catching the ball, even though it might appear that the participant cannot directly see the ball. The structural isomorphism typical of virtual technologies is strongly in evidence in Disney’s VR experiments: the ball depicted in the virtual environment is virtual not because it is a mere digital representation of a ball with a corresponding real existence (because a non-interactive digital movie would count as that) but because it is a depiction that bears in this case an extraordinarily precise structural and functional correspondence with this real ball and its movement through space. The correspondence in this case

depends on the counterfactual causal dependence of the VR depictions on the tracked movement of the real ball. More precisely, the structural correspondence comprises the physical properties of the trajectory of the ball and its spatial relationship to the user. The functional correspondence is that the ball (with these precise properties) is represented to the participant in the virtual first-person space he also occupies so that he can catch the ball.

Note, however, that there is absolutely no temptation to indulge in any metaphysical speculation about the reality of virtual worlds to explain this interaction; instead, it seems clear in this case that the virtual medium is a sophisticated employment of depictive technology that allows the functional expansion of the participant's ability to perceive and respond to real-world events. Indeed, I think it is correct to say in this case that the participant *really does see the ball* by utilizing VR, as evidenced by his being able to track and catch the ball and the counterfactual dependence of the depictions on the real ball. If “photographic transparency” is the claim that we really see the objects depicted in photographs (Walton, 1984), “virtual transparency” is a position that claims that we really do see objects depicted in realistic virtual media. And it may be that virtual transparency is in one respect easier to defend than Walton's notion of photographic transparency. In their argument against Walton's claims of photographic transparency, Jonathan Cohen and Aaron Meskin argue that looking at photographs does not count as really seeing the objects depicted in the photographs, because photographs do not carry “egocentric spatial information” about these objects, which they see as a necessary condition of seeing (Cohen and Meskin, 2004). The case of virtual depiction involved in the Disney research, however, does convey egocentric spatial information to the user about the objects depicted, and it is precisely this information that allows the user to catch the ball.³ We might then usefully conceive of VR in this kind of utilization as a technological perceptual appendage or augmentation that allows for genuine seeing.⁴

5. Videogames and Virtual Media

Disney's VR research is intriguing from a videogaming perspective. Representations of ball games have a long history in videogaming, of course, reaching back to near the very beginning of the medium in the form of the game *Tennis for Two* developed at Brookhaven Laboratory in the 1950s (Stanton, 2015: 19–20) and the later development and influence of Atari's *Pong* (Stanton, 2015: 41–45). *Wii Sports* (2006), and particularly its depiction of tennis, was another crucial development in gaming, this time in modes of *virtual interfaces and control*, where one swings a controller to “hit a ball” in virtual space. While not counting as a videogame, the Disney technology is usefully considered in this context because it projects the kind of virtual interface seen in *Wii Sports* into a VR environment and employs this interface to allow for the manipulation of real items. At this point,

virtually mediated games of real tennis—where players perceive only the VR depictions of the tennis game they actually play—seem an inevitability.

Almost all current VR videogames, however, utilize this technology in the context of fictions, and so videogames typically exemplify virtual fictionalism. Furthermore, in the setting of videogame fictions, virtuality is one key aspect of the *interactivity* that has been a frequent topic of recent discussion in the philosophy of videogames and similar artifacts (Lopes, 2001; Gaut, 2010; Tavinor, 2009, 2011a; Wildman and Woodward, this volume). What we can call “medium” or “work” interactivity occurs where the principal audience of the work is also something like a performer who plays a necessary role in producing the display for her own appreciation. In a promising definition of medium interactivity initiated by Dominic McIver Lopes and refined by Berys Gaut, “a work is interactive just in case it authorizes that its *audience’s* actions partly determine its instances and their features” (Gaut, 2010: 143, italics in original). In videogames specifically, such medium interactivity amounts to the means by which the player interacts with and manipulates the algorithmic fictive prop and so produces a display of the work. In the context of gaming this display constitutes a *playing* of the game, though playings are not restricted to game-like activities such as overcoming obstacles or engaging other players in competitive play, and may also involve the simple navigation or exploration of virtual environments, or the “interpretative performance” of a narrative (Tavinor, 2017).

In videogames, such medium interactivity often gives the impression that the player is interacting with a fictional world or even inhabiting a role there, and it is this aspect of interactivity that is mischaracterized by theorists such as Chalmers, Aarseth, or Velleman as amounting to “really” interacting with a virtual world or the virtual objects within it. It is in this sense of interactivity that players of *The London Heist* light cigars, answer phones, and shoot at enemies. Such “fictive interactivity” is a subcategory of medium interactivity, where interactive decisions and actions that the player makes to change the display can themselves be incorporated into the fictive substance of the game. They can be so incorporated because such actions seem “as if” one is really performing the actions involved (explaining why these activities so easily fit under the classification of virtuality of *being something in effect, if not in actuality*).

Frequently—though not always—the locus of this fictional virtual interaction is a *player-character* or *avatar* comprising an “epistemic and agential proxy” of the player in the fictional gameworld (Tavinor, 2009). Jon Robson and Aaron Meskin have argued that videogames are “self-involving” fictions where the player is represented as a character in the gameworld, though they argue that this might also obtain in games without avatars. They also rightly point out that such self-involving fictions exist in other media, such as in a story in which the author figures as a character (2016). This self-involvement is most obvious in the kind of firsthand descriptions appreciators make of their experiences and activities in self-involving fictions; and

this is obvious in videogames too, where players will speak about their fictive activities in the first person. But videogames also go much further than most other self-involving fictions in giving the player an interactive representational embodiment in the form of a virtual media prop.⁵ In this way, the player of a videogame may make it fictional that her character performs actions in the world of the game by actually making decisions or performing actions that affect what is displayed by the fictive prop.

Modern off-the-shelf videogame VR typically has two key features that fit easily into this analysis of fictive interactivity: virtual *situation* and virtual *interaction*. First, VR *situates* the player in the experiential space of the virtual fictional world, thus providing the player's epistemic access to that world. Situation is achieved foremost by the VR headgear that uses stereoscopic vision and motion tracking to define the player's perceptual (and frequently egocentric) orientation on the world. Situation is often called "presence" or "telepresence" (Minsky, 1980) and in the case of videogame fictions is aptly described as a phenomenally rich mode of "self-involvement" where the player's perceptual orientation is projected into the virtual fictional world. Such virtual situation need not be particularly interactive, however. In what are often called "VR experiences," the appreciator may simply watch what amounts to a VR movie. For example, in the short PS4 VR experience *Ocean Descent* that is bundled with *The London Heist*, players find themselves within a diving cage lowered into the ocean depths, and become spectators of the undersea life and other interesting and sometimes frightening things. Nevertheless, this is sufficient for one to have the experience of virtual presence and a limited sense of virtual agency in the ability to look (and perhaps move) around.

This visual situation—the projection of the appreciator's perceptual orientation into the virtual space of the representation—is the most prominent aspect of the current wave of commercial VR, with each commercial release of VR focusing primarily on the development of a VR headset and motion tracking technology. It is responsible for the most experientially striking part of the technology; the impression that one occupies the fictional space of the gameworld can be incredibly strong and sometimes unnerving. *Resident Evil VII: Biohazard* is a largely traditional survival horror game that can be played using the PS4 VR headset. I personally found the sense of presence in this game so strong as to provide an unpleasantly scary experience that made me reluctant to play the game.

VR involves additional representational modes, however. Most VR sets also use stereo or multi-channel sound to further the effect of world situation. An interesting case of this is the phone incident in *The London Heist*, which provides a *spatially isomorphic sound source* by utilizing the spatial tracking of the PS4 game controller to place a manipulable sound source within the virtual fictional world. Here the VR spatial representation of the sound utilizes the actual spatial location of the controller, and players are situated in the world by their situation within an actual stereo soundscape.

Note, however, that stereo sound has long had this appreciator-situating use in non-VR gaming and in other media such as cinema (Christopher Nolan's *Dunkirk* makes expert use of this technique). Thus, while visual situation in a virtual world may give us the most complete impression of "immersion" or "presence," auditory VR has a formally identical effect. If stereoscopic vision is merely the visual manifestation of a technology that has long been used in auditory media to situate players in a gameworld, the new wave of VR is perhaps much less novel than it might appear.

Finally, haptic and kinesthetic representations are also a common but quite limited virtual media. At the moment this largely amounts to controllers that vibrate when colliding with virtual world items, and other similarly superficial haptic representations. While these haptic controls are quite crude, it is surprising the extent to which they do give the virtual world a physical feel. Related to haptic representations are kinesthetic representations, particularly the representation of *movement* (or more specifically, acceleration) through space to coincide with the physical motions represented in the visual and auditory presentations of the virtual world. Currently kinesthetic virtual representations are achieved by actually moving the participant through space, such as on a hydraulic platform (such as in Disneyland's Star Tours ride) or even a roller coaster.

Second, VR allows for a rich sense of the fictive interactivity described above. Interactivity in the VR games frequently involves manipulating the furniture of the virtual world via a proxy situated "within" those worlds. So in *The London Heist*, not only can one look around and inspect the virtual scene, but one can manipulate objects within it by lighting cigars, answering phones, and shooting guns. Again, there is a variation in this interaction in that some of the manipulation—commonly referred to as *gestural control*—might be seen as fully virtual by having the control correspond quite closely to movements one might make in the real world to perform an action. While many games rely on an attenuated sense of interaction where one's actions do not correspond in a strong sense to the actions depicted in the VR world (for example, where they employ traditional control devices such as gamepads), in the gestural control found in *PlayStation VR Worlds* one can "hit a ball" by physically gesturing toward it with the controller. Because the position of the controller is tracked by the motion-sensing camera involved in the system, the VR system projects the real physical movement into the virtual space in which the player is visually and aurally situated (and because the controller provides haptic feedback, one can "feel" their interaction with the ball). Another case of such gestural control in *The London Heist* occurs in the aiming and shooting of guns. Here the interaction with the world is achieved by physical movements that correspond quite closely to the physical movements depicted as belonging to the character in the world, both in terms of the gestures required to aim the gun—which may involve the player leaning over and around virtual obstacles to get a clear shot at enemies—and in pulling the trigger on the gun. Interestingly, in the

latter case the controller trigger can be seen to have a dual function: it is obviously a means of controlling the game, but it also counts as a haptic representation of a virtual world object: the trigger of a gun.

So what does the structural and functional isomorphism that I have claimed to be crucial to virtuality amount to in these fictional cases? In the case of virtual realism, the correspondence was between the VR representation and the real items represented. Obviously that is not available here. Hence, the structural and functional isomorphism has to be a correspondence between fictive props and the *imagined* features of the worlds they present. This is most clear in the case of situated spatiality created by the use in VR of the stereoscopic headset and motion-tracking camera: players of *The London Heist* move their heads and eyes in a way that maps onto the imagined movements of their fictional world proxy. This fictive spatial correspondence is not in the least bit mysterious, however, as we can see a similar situation in Walton's famous tree stumps/bears example referred to earlier. In that case there is a spatial correspondence between the stumps and the fictional bears they represent, so that "coming across a stump in the forest, Eric and Gregory imagine a bear means that one discovers a bear" (1990: 37). The difference in the two cases amounts mostly to the richness in depictive, representational, and interactive detail of VR media props.

Does this mean that such more traditional games of make-believe really are virtual realities (by involving isomorphs between a participant's actions and what they are prescribed to imagine) and that the principal difference in modern VR are the media developments of stereoscopic headsets, motion tracking, and gestural control? I am very tempted by this conclusion; indeed, I am inclined toward the idea that in the context of fiction at least, VR is a mere extension of the media that might be used as props in games of make-believe, rather than the representational or metaphysical revolution it is often touted to be. What is distinctive of VR videogames follows from the modes of presentation of their fictions, and how these alter the appreciative and interactive activities required to engage with their fictional worlds: particularly, the sense of presence afforded by stereoscopic depictions, and the sense of bodily engagement encouraged by gesturally controlled fictive props.

Notes

1. Charles Sanders Peirce formalizes this conceptualization of virtual as, "A virtual X (where X is a common noun) is something, not an X, which has the efficiency (virtus) of an X" (Peirce, 1935: 261).
2. A video of the technology can be seen here: www.youtube.com/watch?v=Qxu_y8ABajQ
3. Meeting this condition does not yet show that in such cases the user really sees the depicted object, however, as for Cohen and Meskin, this condition, though necessary, is not by itself sufficient for such seeing.
4. I note that this understanding allows a limited reconciliation of my position with Chalmers' observations that functionalist and causal accounts of perception imply the reality of virtual objects (Chalmers, n.d.). In the case where VR is used

to mediate an interaction with real objects such as balls, these functionalist arguments have precisely this implication because these VR objects simply are means of perceiving real objects. And yet in the case of VR fictions this is not the case, because the VR data structures in these cases are props in games of make-believe where the depiction is not employed to document real objects. Again, VR considered as a media phenomenon, rather than as a metaphysical one, has fictive as well as non-fictive uses.

5. Many other self-involving fictions involve a representational embodiment of the appreciator, a familiar instance being the “minis” commonly used in games of *Dungeons & Dragons* to represent player-characters, non-player-characters, and monsters. The extent to which these cases differ to the situation in videogames varies, and largely owes to the media variations seen in videogames, including the developments in VR that are the concern here.

References

- Aarseth, Espen. (2007). “Doors and Perception: Fiction vs. Simulation in Games.” *Intermediality: History and Theory of the Arts, Literature and Technologies, Playing 9* (Spring): 35–44.
- Chalmers, David. (2003). “The Matrix as Metaphysics.” In *Philosophers Explore the Matrix*, edited by Christopher Grau, 132–176. Oxford, UK: Oxford University Press.
- . (n.d.). “The Virtual and the Real.” Unpublished manuscript.
- Cohen, Jonathan, and Aaron Meskin. (2004). “On the Epistemic Value of Photographs.” *The Journal of Aesthetics and Art Criticism* 62 (2): 197–210.
- Gaut, Berys. (2010). *A Philosophy of Cinematic Art*. Cambridge: Cambridge University Press.
- Heim, Michael. (1993). *The Metaphysics of Virtual Reality*. Oxford: Oxford University Press.
- . (1998). *Virtual Realism*. Oxford: Oxford University Press.
- Lopes, Dominic McIver. (2001). “The Ontology of Interactive Art.” *The Journal of Aesthetic Education* 35 (4): 65–81.
- Meskin, Aaron, and Jon Robson. (2012). “Fiction and the Fictional Worlds of Videogames.” In *The Philosophy of Computer Games*, edited by John Richard Sageng, Tarjei Mandt Larsen, and Hallvard Fossheim, 210–217. Dordrecht: Springer.
- Minsky, Marvin. (1980). “Telepresence.” *Omni Magazine* 2: 45–51.
- Peirce, Charles Sanders. (1935). *The Collected Works of Charles Sanders Peirce: Volumes IV and V*, edited by Charles Hartshorne and Paul Weiss. Cambridge, MA: Belknap Press.
- Robson, Jon, and Aaron Meskin. (2016). “Video Games as Self-Involving Fictions.” *The Journal of Aesthetics and Art Criticism* 74: 165–177.
- Stanton, Richard. (2015). *A Brief History of Video Games*. London: Robinson.
- Tavinor, Grant. (2009). *The Art of Videogames*. Malden: Wiley-Blackwell.
- . (2011a). “Videogames as Mass Art.” *Contemporary Aesthetics* 9.
- . (2011b). “Virtual Worlds and Interactive Fictions.” In *Truth in Fiction*, edited by Frank Lihoreau, 223–244. Heusenstamm, Germany: Ontos Verlag.
- . (2017). “What’s My Motivation: Interpretative Performance in Video Games.” *The Journal of Aesthetics and Art Criticism* 75 (1), Winter: 23–33.
- Velleman, David J. (2008). “Bodies, Selves.” *American Imago* 65: 405–426.
- Walton, Kendall L. (1984). “Transparent Pictures: On the Nature of Photographic Realism.” *Critical Inquiry* 11 (2): 246–277.
- . (1990). *Mimesis as Make-Believe*. Cambridge, MA: Harvard University Press.

11 Videogames and Gendered Invisibility

Stephanie Patridge

1. Introduction

Over the past several years, feminist criticisms have made their way into the larger public discourse about videogames. This heightened awareness of feminist criticisms began with the harassment of feminist videogame critics like Anita Sarkeesian by those who aim to resist the supposed illegitimate incursion of so-called social justice warriors (or SJW for short) into videogame criticism. In 2012, Sarkeesian began a Kickstarter campaign to support the development of a series of videos called *Tropes vs. Women in Video Games* that examines the depiction of female game characters. Videos in this series, the first of which was published online in 2013, examine a range of feminist issues including the limited range of body types of female characters compared to their male counterparts (Sarkeesian, 2016a), a tendency to rely on a “damsel in distress” or “save the princess” plot device to motivate male protagonists’ actions (2013a, 2013b), and a tendency to portray female villains in a way that “demonizes femaleness itself” (2016b). As the result of the Kickstarter campaign, Sarkeesian was the subject of anti-feminist backlash that often took the form of harassment. In a particularly notable example, a videogame called *Beat Up Anita Sarkeesian* in which players bloody an image of Sarkeesian was developed and shared online (Sterling, 2012). In 2014, things took a notable turn for the worse for women in games. Under the guise of an attempt to clean up supposed bias in game journalism, female videogame critics (including Sarkeesian) and developers were subject to what has been described as “an on-line harassment campaign” organized under the hashtag #GamerGate (Hathaway, 2014). At the height of Gamergate, feminist game critics and developers were regularly subjected to several harassment tactics, including sea-lioning (repeatedly demanding proof for a claim), dog piling (overwhelming someone with harassing tweets), doxing (publishing someone’s personal information, such as their phone number, address, and social security number online), and on rare occasions swatting (calling a local police department to report a live situation so as to trigger the deployment of a SWAT team to the target’s house) (Sinders, 2015). It was a notably bad year for women in videogames, and the public noticed.

Despite the fact that issues at the intersection of gender and videogames have made their way into the public consciousness, feminist philosophers and philosophers of videogames have largely ignored such issues.¹ The goal of this essay is to contribute to the feminist understanding of videogames by identifying and critically examining several related lines of feminist criticism of videogames. These arguments, which I refer to as “invisibility arguments,” are commonly found in feminist videogame research in the social sciences, and in popular videogame criticism online. Common to all invisibility arguments is the charge that videogames systematically underrepresent female characters and misrepresent them as passive, in need of saving, and as hypersexualized. Since (most) academic invisibility arguments and their popular counterparts take slightly different forms, they each warrant a distinct focus in their own right. To this end, I first identify, outline, and criticize academic invisibility arguments, which I divide into what I call first- and second-generation invisibility arguments. Second, I identify, outline, and criticize popular invisibility arguments. I then argue that both academic and popular invisibility arguments fail on empirical grounds. So, going forward we should work to produce more cogent empirical data, and work to develop invisibility arguments that are independent of at least some of the empirical data that popular invisibility arguments rely upon.

2. Methodology: Feminism and Intersectionality, Trans-Inclusivity, and Gender Non-Binary

Before I begin, a few words about methodology are in order. This is a piece of feminist philosophy of videogames. As such, its goal is to help end the subordination of females in videogame contexts. For this reason, I’ll often employ binary gender terms such as “male” and “female.” However, this way of proceeding invites the following challenges. First, we might worry that there is nothing common to all females, and to the extent that feminist philosophy does not recognize this fact, it marginalizes and alienates some females, for example, females of color.² Though I disagree that there is nothing common to all females—for example, all females share general concern about the impact that sexism has on their ability to be self-determining—I agree that feminist philosophy should also attend to intersectional issues. For that reason, I will keep my eye not just on general gendered representational issues, but also issues related to race.³ If videogames are doing better with respect to gendered representation, but these gendered representations skew white, I think that this is an issue not only for anti-racists but also for feminists.⁴ Second, one might challenge that feminist philosophy’s reliance on binary gender categories like “male and female” illegitimately presumes (and so reinforces) a gender binary that alienates and marginalizes trans people including trans women.^{5,6} For my part, I think that Katharine Jenkins (2016) is right to employ a dual notion of the gender concepts. On her view, we should follow Sally Haslanger (2012) in thinking that gender terms are class

terms that function to impose a social hierarchy on individuals. However, Jenkins recommends that we also see these terms as having another function, one of gender identity. So, to be a female on Jenkins' view is to either be classed as such, or to identify as such (or both). That is, gender terms like "man," "woman," "male," and "female" have a dual function, to impose a social hierarchy on individuals and to allow individuals to identify with a particular gender (assuming that this individual's gender identity legitimately tracks the class function). So, when I use the term "female" in this essay, it will often be in the classing sense, because I will be reading representations and game mechanics in light of how they fit or fail to fit our contingent gendered social hierarchy. This should be a concern for all individuals who identify as females or whom are identified as such, as well as for those who are gender fluid. Moreover, it should be a concern for anyone who is interested in issues of justice. Further, I think that feminists would do well to keep in wider gender issues that are relevant for trans people. So, though the primary focus of the essay is on female subordination in our shared expressive culture, I'll also contextualize them alongside some relevant trans issues (but I make no claim to being exhaustive here, as such a task would require a different focus).

3. Academic Invisibility Arguments

While feminist philosophers have largely ignored videogames, there is a growing body of feminist social science research that focuses on them. Much of this research focuses in some way on a representational claim that is key for all invisibility arguments, both popular and academic. In what follows, I divide academic invisibility arguments into what I call first-generation and second-generation arguments. First-generation arguments aim to establish the baseline claim that videogames systematically misrepresent and underrepresent females. These first-generation representational claims are then widely cited by advocates of second-generation invisibility arguments in the social sciences that aim to show that consuming videogames harms players in various ways.

3.1. *First-Generation Academic Invisibility Arguments*

In the most recent first-generation invisibility study, Williams et al. (2009) analyze the 150 top-selling videogames from 2005 to 2006 and find that just over 10% of primary, playable humanoid characters, and just under 15% of humanoid characters overall, were represented as female. Earlier first-generation research is roughly consonant with this finding. Dietz (1998) focuses on the 33 most popular Nintendo and Sega Genesis games and finds that 60% of games with human characters lacked females altogether. Heintz-Knowles et al. (2001) focus on the 70 top-selling videogames across six platforms from January to May 2001, and find that 73% of characters are

represented as male, 17% as female, while only 12% of playable characters overall are represented as female. Dill et al. (2005) look at the 20 top-selling PC videogames from 1999 and find that 70% of the primary characters are represented as male, while only 10% are represented as female. They also find that 55% of secondary characters overall are represented as male, while only 31% are represented as female (Dill et al., 2005). And, Downs and Smith (2010) analyze 60 top-selling games from 2003 and find that male characters were represented 86% of the time, and female characters were represented 14% of the time (Downs and Smith, 2010).

Things appear to be even worse representationally for females of color. Dill et al. (2005) and Williams et al. (2009) both find that characters in their data set are overwhelmingly white, and non-Hispanic. So, those very females who, in the actual world, are subjected to systematic, intersectional oppressions, that is, along race, gender, and racio-gender dimensions, are rendered even more invisible than are white females in videogame worlds.

Moreover, two of the aforementioned studies also find that videogames systemically misrepresent females in ways that are troubling. For example, Downs and Smith (2010) find that female characters in their data set are more than ten times more likely than male characters to be depicted either as partially or fully nude. And Heintz-Knowles et al. (2001) find that female characters in their data set are more than twice as likely to wear revealing clothing as male characters are. Following Paul Taylor's (2016) work in race theory, we might cast this tendency to misrepresent females as over-sexualized as another way of rendering them invisible in the sense that we do not see them as they actually are, but as we stereotypically see them. Instead, in videogames worlds we *mis-see* females as distorted through the lenses of sexism and white supremacy. So, videogames render females invisible by radically underrepresenting and misrepresenting them.⁷

3.2. *Some Problems for First-Generation Invisibility Arguments*

Despite the seeming cumulative weight of the first-generation invisibility arguments that we've considered thus far, they are nevertheless open to several objections. To begin, it is worth cautioning that first-generation representational studies focus exclusively on popular PC and console games rather than PC and console overall. So, the best that we can say is that best-selling PC and console systematically render females invisible, not that videogames do.⁸ Still, even if we are comfortable with this more limited inference, there is a more significant challenge for our baseline representational data, namely the most current of the first-generation studies focuses on games that were released between 2005 and 2006. So, at best it seems that we can say with some confidence that over a decade ago popular videogames suffered from a crisis of female invisibility.

And, there is at least some reason to think that videogames overall have made progress when it comes to gender representation in the ensuing

decade. In 2016, several prominent videogame critics noted just such an improvement. In an article entitled “Lara Croft Has Company: More Female Heroes Appear in Big-Budget Games,” *New York Times* videogame critic Justin Porter (2015) identified several AAA games, which were subsequently released in 2016 and 2017, that include a female primary playable character. These titles are *Horizon Zero Dawn*, *ReCore*, *Rise of the Tomb Raider*, and *Mirror’s Edge Catalyst*, all of which require players to play exclusively as a female; *Dishonored 2*, which allows players to play either as a male or as a female; and *Assassin’s Creed Syndicate*, which requires players to play back and forth between twin assassins, one who is male and one who is female. In an article entitled “It’s Trendy to Put a Woman in Your Big-Budget Videogame” on the feminist pop culture site *The Mary Sue*, videogame critic Maddy Myers (2015) adds *Fallout 4* and *Splatoon 2* to Porter’s list—both games allow players to play either as female or as male. And, we can add a few more: *Gravity Rush 2* and *Uncharted 4: The Lost Legacy*,⁹ both of which have a single playable female character; *NieR: Automata*, which requires players to play as female, and then incentivizes them to replay the game first as a male and then as a different female character; *Battlefield 1*, which has a number of protagonists that players must play, one of whom is female; and *Overwatch*, *The Division*, *FIFA 16*, *Call of Duty: Black Ops III*, and *Mass Effect: Andromeda*, all of which allow players to play as female.¹⁰

Further, three of the games mentioned above require players to play as a female of color (*Mirror’s Edge Catalyst*, *Uncharted 4: The Lost Legacy*, and *Battlefield 1*), five allow players to play as a female of color (*Splatoon 2*, *Fallout 4*, *The Division*, *Overwatch*, and *Mass Effect: Andromeda*), and two are anime-style images that come out of Japanese design studios (*Gravity Rush 2* and *NieR: Automata*). The remaining six require players to play as a white character (*Horizon Zero Dawn*, *ReCore*, *Rise of the Tomb Raider*, *Dishonored 2*, *Assassin’s Creed Syndicate*, and *Call of Duty: Black Ops III*).¹¹

Adding to this, a recent study claims that the tendency to sexualize females in videogame representations is on the downturn. Lynch et al. (2016) randomly selected 20 games from each year between 1983—the first year that a playable, humanoid female character is released—and 2014. The result is a total of 571 games that have playable female characters. Lynch et al. find that there is a pattern of higher sexualization of female characters between 1991 and 2006, but that this is followed by a decrease in sexualization between 2007 and 2014.¹² Thus, they conclude that the widespread, overt sexualization of females is on the decline. In an interview, Lynch surmises that this promising trend is partly due to feminist criticisms of the representational content of videogames having an impact on game design.¹³

Based on the two observations made above—observations that indicate a possible increase in female protagonists in AAA games, including a possible marginal increase in female protagonists of color, and a decrease in their

overt sexualization—we might be tempted to conclude that while videogames used to have a significant male-female gender gap, things have substantively improved at least on these fronts in recent years. And, given the spotlight that Gamergate has placed on videogame companies in recent years, we might think that we have reason to believe that they will continue to do so.

Still, it is worth noting that while the growing list of games with a female protagonist compiled above adds some strength to the thought that videogames are improving with respect to gender, this sort of non-systematic list cannot ground such inferences. Conclusions about the trend of female representations, including the trend away from sexualizing female characters, require further research. So, feminists who are interested in issues of representational inclusion with respect to gender would do well to continue to produce cogent representational data that examines the representational state of the medium, including race and ethnicity data, without which we do not have an accurate picture of how females in general are treated representationally.

Further, the representational data that invisibility arguments rely on ignore characters who do not fit neatly (or at all) into a gender binary. This is so for two reasons. First, characters that are not clearly represented as female or as male tend to be thrown out of the data sets. This leaves us with no idea what percentage of humanoid characters are trans in the wide sense of the term that I deploy here. Second, characters are evaluated only on their representational features, which leaves them unable to identify a character's gender identity status when it does not match that character's socially identified/imposed gender without attending to narrative. And at least some videogames may complicate gender in hopeful ways that would not be picked up in the studies as they are structured. For example, though *Splatoon 2* asks players to play either as a male or a female, it allows players to change gender at will. And *Assassin's Creed: Syndicate* has a secondary trans man character, Ned Wynert. Researchers should expand their gender categories, look more carefully to game mechanics, and focus more widely on representational features like voice and narrative features to get a more accurate picture of the gendered landscape of videogames.

3.3. *Second-Generation Academic Invisibility Arguments*

As I said earlier, second-generation invisibility arguments tend to cite first-generation invisibility arguments as the primary motivation for conducting research that aims to show that consuming videogames that render females invisible, either by failing to represent or by misrepresenting them, harms players. Of course, the challenges noted above for the representational data redounds to second-generation invisibility arguments to the extent that they rely on first-generation representational data to motivate their research programs and to draw moral inferences about videogames in general. Still,

second-generation arguments can avoid this worry by eschewing more general invisibility claims altogether, and instead focus narrowly on showing that consuming individual games that render females invisible is morally troubling because of its deleterious causal effects even if it turns out that videogames in general are not guilty of such invisibility.

For example, Yao, Mahood, and Linz (2010) find that men who play videogames that have sexualized female characters indicate a greater likelihood of sexually harassing females compared to males who played games without such characters. Behm-Morawitz and Mastro (2009) find that females who play a game as a sexualized female character report significantly lower self-efficacy (that is, belief that one could achieve a goal) compared to females who play as a nonsexualized female character or men who played as either character type. They also find that both males and females who play as a sexualized female character have less favorable attitudes toward females' cognitive abilities. And, Fox and Bailenson (2009) find that males and females who encountered a stereotype-confirming virtual woman in an immersive virtual environment reported higher levels of sexism and rape myth acceptance than those who encountered a stereotype-defying virtual woman.

Despite its attractiveness, taken even as a whole, second-generation invisibility research fails to meet the standard advocated by A. W. Eaton (2007) in her highly influential, and to my mind correct, essay "A Sensible Antiporn Feminism." Here Eaton recommends that feminists interested in advancing harm-based arguments should adopt an epidemiological model, which relies on studies that have large, variable populations, that have been sufficiently replicated, that make allowances for the reality of multiple causal factors, and determine if and for how long the effect manifests itself in the real world. Second-generation invisibility research just is not there yet. This research is largely unreplicated, most often relies on survey data, doesn't allow for multiple causal factors, and relies on relatively small, relatively homogenous populations. So we'll need more and better data to determine what to make of baseline representational claims, and claims about the harms of playing games that render females invisible.

4. Popular Invisibility Arguments

Having claimed that first and second-generation academic invisibility arguments require further research, I'd like to turn to popular invisibility arguments, those found in online videogames journalism. Popular invisibility arguments share a common thought with academic ones, namely that females are systematically underrepresented and misrepresented in videogame worlds. However, popular versions of invisibility arguments assume this as matter of common sense. So the weaknesses of the first-generation representational data considered earlier also weaken popular versions of invisibility arguments. Still, popular versions of invisibility arguments are worth pursuing in their own right in part because they seem aimed at a

particular sort of counterargument that I call the *argument from a consumerist model of videogame design* or the *consumerist argument* for short.¹⁴

4.1. *Popular Invisibility Arguments and the Consumerist Challenge*

The sort of consumerist arguments that I have in mind here grant that videogame characters skew male, even significantly so, but point out that this is at least partly determined by the fact that the target audience for videogames are young, cisgender, straight males. Since videogame companies are in the business of selling videogames, the thinking goes, videogames do not so much suffer from female invisibility as they are the result of an attempt to cater to the taste of a target market.

For those who are inclined to reject the *consumerist argument* out of hand, it is worth pointing out that its advocates can admit that some gendered representations in videogames are sexist (however we make out the evaluative part of this charge). For example, an advocate of the consumerist model might agree that certain games, like the notorious game *RapeLay* in which players are to stalk and rape a mother and her two daughters, are sexist; either because they are expression of sexist attitudes toward females on the part of their designers, or, as I have argued elsewhere, because they express these attitudes independent of what their designers intend (Patridge, 2011), or because they contribute to sexist attitudes in subtle and collective ways (say by affirming messages that we received in our larger culture about the proper value and role of females, including where they stand on a social hierarchy). The consumerist argument as I have formulated it only claims to weaken the inference that we might otherwise be tempted to draw on the basis of the representational data (or commonsense thinking about the representational landscape). If the stories are told for young males, then we'll expect young males to more often be the protagonists of such stories and for these stories to cater to their interests.

4.2. *Popular Invisibility Arguments and Demographic Data*

While this demographic assumption has an air of common sense, popular invisibility arguments point to demographic data produced by the Entertainment Software Association (ESA) that seems to cut against it. The ESA produces yearly reports, the first of which was produced in 2009, that purport to give the videogame industry a window into facts about videogame players, including their gender identity and age. According to the first report in 2009, individuals who identified as female were over 40% of videogame players (Entertainment Software Association, 2009). Though these percentages fluctuate year by year, they have remained within a 10% range, between a low of 38% and a high of 48%, over the past decade.¹⁵ Further, according to the 2016 report, females are 40% of most frequent game purchasers. And, women 18 or older are 31% of players, while males under 17

are only 17% (Entertainment Software Association, 2016). If this data is to be believed, then it seems that the consumerist argument is undermined because it relies on a false demographic assumption about who plays videogames. This ESA data is regularly cited, both in the media and in feminist videogame research, to support the demand for more representational inclusivity in videogames, and more diversity in the videogame industry. If girls are playing games at relatively high rates, then, it seems the representational data that we see cannot be merely owed to the fact that videogames are for boys. At the very least, the picture of a “typical gamer” that emerges from this data, feminists claim, is more complicated than our commonsense thinking about who the average player is.¹⁶ However, it is worth noting that the ESA data provides us no information on racio-ethnicity or sexual orientation, nor does it provide data on transgender players.

For example, in “Women Are Half of Video Gamers, So Where Are the Female Video Game Characters?” Alyssa Rosenberg (2013) cites the ESA data, which shows that “45% of the entire game playing population are women and they comprise 46% of the most frequent videogame purchasers.” Despite this, she claims, “[f]or some reason, rationality and the profit motive don’t seem to apply to women and people of color when it comes to the entertainment industry.” In “Tackling the Terrible Sexism in Video Games: Women Are Portrayed as Sexual Playthings or Victims of Violence,” Sarah Gray (2014) writes, “[a]dult women make up the largest demographic of gamers, according to a new study released by the Entertainment Software Association.” However, “the video game industry has not caught up with these numbers: Sexism runs rampant. From the way female gamers and actresses are treated, to the actual representation of women in video games—if there are women in the game at all—certain video games perpetuate a culture of misogyny and sexism.” And these sorts of demographic responses to a sort of consumerist argument remain a common refrain in online game journalism. Karen Ho (2016), in a recent piece titled “No Female Hero? Nintendo’s Choice for Legend of Zelda a ‘Missed Opportunity,’ ” cites a Nintendo executive who, in defending Nintendo’s decision to not include a female primary character in the new installment of the hugely popular *Zelda*, says, “If we have Princess Zelda as the main character who fights, then what is Link going to do?” As part of her criticism of Nintendo’s reasoning, Ho writes, “Women are now a significant portion of the gaming community. The 2015 report of the Entertainment Software Association (ESA) said women represent 44 per cent of game players in the United States, and make 41 per cent of purchases.”

Further, it is not uncommon to see academic researchers combine first-generation invisibility data with the ESA data. For example, in her essay “Femininity,” Carrie Heeter (2014) combines the sorts of representational data we see in the social sciences with the demographic data that tends to show up in popular invisibility arguments in ways that suggest that the representational problems of videogames cannot be explained by mere

demography. And Fox and Tang (2014) do the same in their article “Sexism in Online Video Games: The Role of Conformity to Masculine Norms and Social Dominance Orientation.”

4.3. *Some Worries for ESA’s Demographic Data*

ESA’s demographic data, however, is controversial. For example, on message boards there are ongoing, sustained discussions amongst players who are suspicious of the ESA data, mainly because it cuts against their commonsense notions of who is playing AAA games.¹⁷ The main worry seems to be not that the ESA data is itself flawed, but that it is too coarse to support invisibility arguments. Specifically, the thought is that females play different sorts of games, so-called casual games, from the ones that form the basis of our representational data, mainly popular AAA games, which tend to be mid- or hard-core games.¹⁸

Over the past decade there has been a substantive increase in mobile gaming, so much so that the Casual Games Association (2017) predicts that by the end of 2017 34% of all videogame revenue will come from smartphones¹⁹ and by 2020 over half will come from mobile gaming (MacDonald, 2017). Since mobile platforms tend to support casual games, it is highly likely that significant numbers of players are playing casual games. And, it is common for those who are suspicious of the ESA data to suggest that females represent a large percentage of videogame players here because they tend to play casual games.

Still, some might be tempted to dismiss the thought that the ESA data reflects females as casual game players because they think that it represents an unreasonable skepticism of the demographic data that is undergirded, in part, by overt sexism or even implicit gender bias, that is, males tend to play “hard core” games, while females tend to play “casual” games. And, thoughts like this have prompted some game critics, philosophers, and theorists to reject the term “gamer” altogether in part because it has a pernicious gender connotation.²⁰ While I too suspect that gender biases undergird some such attempts to undermine the demographic data, and you could clearly see this on message boards in 2014 in the aftermath of Gamergate, the tone of these online debates has changed somewhat. The objections are less overtly sexist, and take aim mostly at the data. And, Gamergaters often claim that their criticisms of feminists like Anita Sarkeesian is due to her playing fast and loose with this sort of data, and not with her underlying feminism.

Further, we might be suspicious that this sort of skepticism is based on an underlying dismissal of casual games as “not serious games.” While this might be a common underlying assumption, our objector need not imply that casual games are less important or serious. We might even cite Jesper Juul’s (2010) thoughtful defense of casual games, in which he points out that many who play casual games want these games to be fairly challenging, and that they do not *play* them casually.

But, it is worth reminding ourselves that the objection that we are considering here need not be based on pernicious gender stereotypes nor an illegitimate dismissal of casual games. It is certainly possible to be earnestly skeptical of the data here. For example, in 2014, the *Wall Street Journal* reported that videogame company executives attribute the increase in female players that we see in the ESA demographic data—it spiked in 2015 to 48%—largely to “a surge” in casual, mobile gaming (Grundberg, 2014). And, it is clear that the ESA does not sufficiently operationalize the concept “videogame” so that we know what sorts of games females tend to play.²¹ So, I think that those who rely on the ESA data to support feminist arguments should answer these sorts of objections head-on rather than dismissing them.

Given all of this, in order to know if we can directly head off the consumerist counterargument that is our focus here, it seems that we’ll have to know if females tend to play different sorts of games than males. Stephanie Llamas, Senior Analyst at SuperData, attempts to rebut this sort of skepticism about the ESA data. She reports that “over 50% of American PC [players] are women. In fact, women are the largest gaming demographic for PC role-playing games (54%) and they represent almost 40% of MMO and digital console [players]” (Llamas, 2014). And so, she concludes, the common thought that females are “just casual [players] is empirically false” (Llamas, 2014). That may very well be true. But the question that we are after here is not “Are women ‘just casual’ players?” but “Do women play casual games in higher numbers than men, and AAA games in lower numbers?”

Unfortunately, Llamas’ data is inadequate to help settle the issue. Adding to this skepticism, Geoff Zatkin, co-founder of EEDAR, a company dedicated to providing research into videogames for the videogame industry, recently claimed that, worldwide, females are 55% of mobile players.²² And a recent study of 270,000 videogame players conducted by Nick Yee and Nicholas Ducheneaut further supports this sort of skepticism. They found that about 80% of their sample identified as male, about 19% as female, and 1% as other.²³ Interestingly, their data set skews mid-/hard-core: 68% of players identified as mid-core, and 21% as hard-core. A further finding of this study is that females in their data set play at least some casual games at much higher rates than males do. They found, for example, that 69% of those who report playing match-three games, for example, *Candy Crush* and *Bejeweled*, are female (Yee, 2017).

Still, as Yee and Ducheneaut admit, their data suffers from self-selection bias: it was collected via a voluntary, online survey that was promoted by the technology site *Ars Technica*, and by players who shared it on social media sites like Facebook and on message boards on sites like Reddit. This might lead us to suspect that the data set skews young and male. To begin, the data set likely skews to players who invest significant amounts of time sharing information about games and reading about games online. We might think that this sort of player skews toward young males more than

players do overall in part because of the amount of time necessary and in part because of the significant amount of sexism that is to be found online in this niche world. Adding to this, those who would see themselves as the proper subject of such a study, for example, those who identify as gamers, are more likely to answer it. So, if females tend to dis-identify as hard-core players, for example, as gamers, then they might be disinclined to participate in these sorts of studies. Again, we might suspect that the sexism of these worlds leads to disaffiliation. (I'll return to these issues at the end of this chapter.) So, it is not clear if this very intriguing study gives us a more accurate map of the gendered demography of videogame players. Moreover, it seems that such data is not forthcoming because researchers do not seem to have a clear idea of how to gather this sort of fine-grained data that isn't subject to this sort of self-selection effect (Yee, 2017).

However, there is some reason to think that the casual game developers treat females as a significant player base in the casual games market. We can see this in recent data on gender representation in casual games, which stands in marked contrast to our motivating representational data that focuses on popular mid- and hard-core games. Wohn (2011) looked at a random selection of 200 downloadable games from the top five online distributors of casual games and found that 77% of the human primary characters are represented as female. Moreover, this study finds that "there was no significant association between gender and sexual portrayal" (2011: 203). Though, here we do have information on racio-ethnic identity of characters, and 94% of primary characters were represented as white (2011: 201). So, overall videogames may not have a significant gender gap, though they do have a significant racial and racialized-gender gap. Moreover, if the critics of our motivating demographic data are right and females tend to play casual games on their computer or smart phone, and it is (young) males who primarily play the sort of games that are the subject of our motivating representational study and the list of games with female protagonists that I provided—mid- and hard-core AAA games—then it seems that the consumerist argument comes back into play. If males are playing AAA games at higher rates than the ESA data might suggest, then an advocate of the consumerist counterargument might respond that we have a morally and politically non-troubling justification for this.

5. Concluding Thoughts

What should we conclude from all of this? First, it seems that there may be no female/male gender gap in videogames overall, because a significant number of primary, playable characters are female in the casual gameworld. Still, what little contemporary representational data we have indicates that there likely is a representational gender gap in AAA mid- and hard-core games. Further, there is likely a substantive racio-ethnic gap in videogames overall, as well as a racio-gender gap. And, there is likely a substantive

gender gap in that videogames tend to reflect the assumption of a male-female binary with respect to gender. As I argued earlier, those of us who are interested in videogames and gender should work to ensure that we have better data so that we can adequately determine what the gendered landscape actually looks like, a landscape that includes race, trans characters, and some things I have not touched on here such as body type and ability.

Further, assuming that the more fine-grained demography that we considered in the previous section does in fact provide a more accurate picture of females players, I suggested at the end of the section that we might think that the consumerist argument comes back into play. That is, if males are playing AAA games at higher numbers than females, then assuming that this explains at least the representational gender skewing that we see toward males, it seems that invisibility arguments that pair the ESA data and the representational data that are the focus of this essay are flawed.

So, if feminists want to argue for gender, racio-gender, and trans inclusivity in AAA games, as I do, then I think it might be best to do it on different grounds. In closing, I'd like to suggest two lines of argument here. First, I think that we should ask why it might be that males tend to play AAA games in greater numbers. While I'm not prepared to argue the point here, we might think that it is owed primarily to the fact that they have been designed, all along, with the assumption that young males are the target audience. For example, the first playable female character does not arrive on the scene until 1981 with the release of the arcade game *Ms. Pac-Man*. And, though the first playable, humanoid character, a male, is developed in 1976, Atari's *Outlaw*, the first playable female humanoid character isn't developed until 1983, Atari's *Dishaster*. We might think this is so because the industry itself is young, white, and male. According to the International Game Developers Association's "Annual Game Developer's Satisfaction Survey from 2015" (2015), "the prototypical game industry worker/developer [is] a 32 year old white male with a university degree who lives in North America and has no children." Survey respondents were 75% male, 22% female, and just over 2% trans. If this is an accurate picture of the gendered landscape of those working in the industry, it looks like females are significantly underrepresented, though transgender folks may not be—at least not in the United States, where 0.6% of the population currently identify as trans (Flores et al., 2016). Further, 67% of respondents identified only as "white/Caucasian/European," 9% as East Asian, 7% as Hispanic/Latino, and 3% as black/African/African-American (International Game Developers Association, 2015). According to the 2015 United States census, however, 61.3% of citizens identified as white non-Hispanic, 13.3% as black, 5.6% as Asian, and 2.6% as two or more (United States Census Bureau, 2016). So the racial disparity is most significant amongst black/African-American, the gender disparity is most significant amongst females, and so we can infer that in the United States black/African-American females suffer from the greatest overall disparity. Finally, we might think that the larger videogame

community signals to players that straight, white, cisgender males are the legitimate target audience for AAA games. This might be thought to be so because videogames are part of a wider social practice that includes blogging, commenting on message boards, facts about the gender makeup of developer teams, trade fairs and conventions, social norms of game play, in and out of game behaviors, and game criticism. These worlds, however, report significant amounts of sexist, transphobic, homophobic, and racist activities. For example, female players are routinely subjected to sexual harassment in videogames, and recently researchers have begun to show that in-game sexual harassment of females (unsurprisingly) leads females to withdraw from games (Fox and Tang, 2014). Moreover, as I mentioned at the outset of this essay, high-profile women like Anita Sarkeesian who speak out about perceived sexism in games are subjected to online harassment campaigns designed to silence them and drive them out of the gaming community. No doubt, this works.

Second, we might follow Taylor (2016: 48) in seeing female invisibility itself as “a form of denial or disregard.” In support of this claim, it seems that part of what is wrong with the sort of invisibility identified in the first generation of feminist invisibility research, which I think we will see substantiated in further research, is that it is consonant with how sexism has manifested and continues to manifest itself globally. Namely, that male perspectives are seen as universal, objective, and valued, while female perspectives are seen as non-universal, subjective, and devalued. As Sally Haslanger (2012) has worked to show us, gender is contingently hierarchical in this way, and this is part of how gender oppression is manifested and maintained in the real world. So, either with or without the addition of the sorts of harm-based arguments that invisibility arguments in the social science advocate, I think that the normative conclusion, that female invisibility in videogames is a bad thing and ought to be addressed, can be sustained.

Whichever line of argument is most fruitful, it is clear that thinking about videogames as moral and political objects requires thinking of them as contextualized in their wider social practice. This context is one that allows us to see them as they are, that is, as cultural objects that are embedded in a sexist, homophobic, transphobic, and racist framework; a framework that should inform the representations that we find in videogames, both individual representations and representations in general, in a way that makes them more pernicious.

Further, it is worth pointing out that while a more systematic examination of the sorts of gender issues that are at stake in this essay will help us to see the underlying gender ideology of videogames, it will not tell us everything we want to know about videogames and gender ideology. For example, we’ll want to know what sorts of narrative roles female characters tend to serve. What about transgender characters? What about black females? Do such characters, as the prominent feminist videogame critic Anita Sarkeesian sometimes suggests, tend to play passive narrative roles

or act as motivations or rewards for male characters—say, as a “princess” to be saved? Further, it would be helpful to know the answer to questions that are relevant to transgender identity: for example, do games allow players to change their character’s gender mid-game? Do they allow differently socially gendered bodies to be paired with different gender scripts? Are there trans characters at all? Clearly, there is quite a bit of work to do for those of us interested in the intersection between gender ideology and representation in videogames just to get baseline representational data. Finally, it is worth asking a more fundamental question posed by cultural technology critic Leigh Alexander (2016), namely whether representational inclusion in the form of the sort of gendered visibility that we’ve considered here is enough. Or if instead what we should aim for is a revolution (though not an elimination) in the kinds of power fantasies that are commonly offered in videogames—think paradigmatically here of shooters, fighting, and war games. Genuine gender inclusivity may very well require a radical rethinking of the sort of imaginative possibilities that videogames offer players. Obviously, there is much more work to do here.

Notes

1. There are a few exceptions, e.g., S. Patridge (2011); C. Havstad and I. M. Jahng (2008); and C. Oritgitano (2015). And, a few essays deploy feminist arguments but do so to resolve the so-called “gamer’s dilemma,” e.g., N. Levy (2002); C. Bartel (2012); and S. Patridge (2013).
2. For an overview of this debate, see A. Carastathis, “The Concept of Intersectionality in Feminist Theory,” *Philosophy Compass* 9, no. 5 (2014): 304–314.
3. Still, I don’t think that race is the only intersectional issue that feminists should focus on. But, for the purposes of this paper, I’ll focus primarily on gender, and race and gender.
4. For example, in a world where roughly 50% of videogame characters are females (including playable ones) and they tend to not be hypersexualized, and characters of color are appropriately represented (I leave the details here unanalyzed, because, as a global phenomenon it is not clear what the right representational data is with regard to race), but females of color tend to be underrepresented, we’d rightly worry about issues of representational justice—for females of color.
5. Here I follow GLAAD in using “transgender” as an umbrella term to refer to individuals who identify as a gender other than the one that they were assigned at birth. See, “GLAAD Media Reference Guide-Transgender,” www.glaad.org/reference/transgender.
6. For an overview of this debate, see Mari Mikkola, “Feminist Perspectives on Sex and Gender,” in *The Stanford Encyclopedia of Philosophy*, edited by Edward N. Zalta (Stanford, CA: Stanford University, 2011).
7. I say “as a whole” here to note that the claim that is currently under consideration is only that videogames suffer from crisis of invisibility. Nothing that has been said so far establishes that any individual (or entity) is thereby to be blamed. This philosophically rich issue would take me too far afield.
8. I thank Jon Robson for this point.
9. *Uncharted 4: The Lost Legacy* is DLC (downloadable content) that signals a shift in the *Uncharted* series from Nathan Drake to a protagonist who is a female of color. I recognize that there are other DLC that allow players to play

- as female for games whose main content has a male protagonist, but tracking that is beyond the scope of this project as it stands. See, for example, E. Makuch, "Uncharted Dev Says Character Diversity Just as Important as Graphics and Gameplay," *Gamespot*, July 14, 2016, www.vg247.com/2017/03/28/uncharted-the-lost-legacy-had-to-be-big-to-give-it-more-room-to-breathe/; www.gamespot.com/articles/uncharted-dev-says-character-diversity-just-as-imp/1100-6441800/; www.gamesradar.com/uncharted-4-single-player-dlc-just-debuted-at-playstation-experience-and-it-stars-chloe-and-nadine/
10. Some might notice that I've left *Virginia*, a game where players play as an African-American female, off the list. I've done this because it is an indie game, albeit one that won a BAFTA.
 11. For more on gender and race selection mechanisms, see Patridge (2016).
 12. In a conversation with Ann Fisher on *All Sides*, Lynch speculates that the increase in sexualization is due to the transition from 8-bit to 3-D graphics, which lead male game designers to want to design hypersexualized female bodies, <http://radio.wosu.org/post/tech-tuesday-hacking-during-election-portrayal-women-video-games-and-virtual-reality> (accessed January 20, 2018).
 13. Unfortunately, this study does not provide us fresh insight into the tendency for games to feature females, or characters that do not fit neatly into a binary gender system, as it eliminates games without female characters from its data set, and only tracks characters that are clearly represented as female. Further, it provides no additional information on racio-ethnic features of female videogame characters.
 14. I say "seem" here because videogames journalism is mostly in short form, and doesn't spend much time spelling out arguments. Given the shape that popular invisibility arguments take, it seems that they are designed, in part, to head off a consumerist objection.
 15. In 2014, for example, the ESA reported that 48% of players were female (ESA, 2014), but in 2016 it reported that only 41% were female (ESA, 2016). Notably, 2014 is the year of Gamergate.
 16. According to the Pew Research Center, those who identify as male and those who identify as female report playing games at all in equal numbers. See M. Duggan, "Gaming and Gamers," *Pew Research Center: Internet, Science & Tech*, December 15, 2015, www.pewinternet.org/2015/12/15/gaming-and-gamers/. This study is not widely cited in the popular media.
 17. See, for example, this thread on Reddit, which is representative of the sorts of critical conversations that players have about the ESA data www.reddit.com/r/truегaming/comments/2xa9a5/gender_and_computer_game_players_who_seems_to/
 18. The terms "mid-core" and "hard-core" when applied to videogames are notoriously fuzzy. Here I just mean them to stand in contrast to casual games, where the difference is in how long it takes to complete a game. If a game takes very little time to complete so that players are incentivized to play multiple times in a day, it is casual. If playing the game is sufficiently long to disincentivize multiple players, it is mid- or hard-core.
 19. Casual Games Association, "Casual Games Sector Report," 2017, <https://issuu.com/casualconnect/docs/ccnewzoospringreport-pages?e=2336319/6014071>, p. 9 (accessed January 20, 2018). In 2015, PC games and mobile games were very close in total revenue (\$6.3 and \$6.18 billion), console games were a close third at \$4 billion in revenue. See also J. van Dreunen, "PC Trumps Mobile, Console in Booming \$61bn Digital Games Market," January 26, 2016, www.gamesindustry.biz/articles/2016-01-26-pc-trumps-mobile-console-in-booming-usd61bn-digital-games-market and J. Gaudiosi, "Mobile Game Revenues Set to Overtake Console Games in 2015," *Fortune*, January 15, 2015, <http://fortune.com/2015/01/15/mobile-console-game-revenues-2015/> (accessed January 20, 2018).

20. See, for example, game critic Leigh Alexander's (2014) rejection of the term "gamer" and Brandon Sheffield's piece "Let's Retire the Word 'Gamer,'" *Gamasutra*, May 15, 2013, www.gamasutra.com/view/news/192107/Opinion_Lets_retire_the_word_gamer.php (accessed January 20, 2018).
21. I owe this way of putting the point to Dr. Michelle Acker.
22. See Zarkin's talk at GDC17, www.gdcvault.com/play/1024054/Awesome-Video-Game-Data (accessed January 20, 2018).
23. See, "Notes on the v2.4 Sample," *Quantic Foundry*, <http://quanticfoundry.com/v24-sample/> (accessed January 20, 2018) for a report on their demographic findings. The most common terms used to describe "other" were "agender, gender-fluid, genderqueer, transgender, and non-binary (in that order of frequency)." This is an important shift away from thinking of gender merely in terms of a male/female binary. Interestingly, Yee reports that those who selected "other" for gender identification tended to align more with female game-motivational preferences. I hope that this is only the beginning of videogame data that moves beyond the male/female binary.

References

- Alexander, Leigh. (2014). "'Gamers' Don't Have to be Your Audience: 'Gamers' Are Over." *Gamasutra*, August 28, 2014, www.gamasutra.com/view/news/224400/Gamers_dont_have_to_be_your_audience_Gamers_are_over.php
- . (2016). "It's Time for a New Kind of Power Fantasy." *How We Get to Next*, November 29, 2016, <https://howwegettonext.com/its-time-for-a-new-kind-of-power-fantasy-a5ff23b2237f> (accessed May 8, 2017).
- Bartel, Christopher. (2012). "Resolving the Gamer's Dilemma." *Ethics and Information Technology* 14 (1): 11–16.
- Behm-Morawitz, Elizabeth, and Dan Mastro. (2009). "The Effects of the Sexualization of Female Video Game Characters on Gender Stereotyping and Female Self-Concept." *Sex Roles* 61 (11): 808–823.
- Carastathis, Anna. (2014). "The Concept of Intersectionality in Feminist Theory." *Philosophy Compass* 9 (5): 304–314.
- Casual Games Association. (2017). "Casual Games Sector Report," <https://issuu.com/casualconnect/docs/ccnewzoospringreport-pages?e=2336319/6014071> (accessed January 20, 2018).
- Dietz, Tracy L. (1998). "An Examination of Violence and Gender Role Portrayals in Video Games: Implications for Gender Socialization and Aggressive Behavior." *Sex Roles* 38: 516, 425–442.
- Dill, Karen, Doug Gentile, William A. Richter, and Jody C. Dill. (2005). "Violence, Sex, Race and Age in Popular Video Games." In *Featuring Females: Feminist Analysis of the Media*, edited by Ellen Cole and Jessica Daniel, 115–130. Washington, DC: American Psychological Association.
- Downs, Edward, and Stacy L. Smith. (2010). "Keeping Abreast of Hypersexuality: A Video Game Character Content Analysis." *Sex Roles* 62: 721–733.
- Duggan, Maeve. (2015). "Gaming and Gamers." *Pew Research Center: Internet, Science & Tech*, December 15, 2015, www.pewinternet.org/2015/12/15/gaming-and-gamers/ (accessed January 20, 2018).
- Eaton, Anne W. (2007). "A Sensible Antiporn Feminism." *Ethics* 117: 674–715.
- Entertainment Software Association. (2009). "2009 Sales, Demographic, and Use Data: Essential Facts about the Computer and Video Game Industry," www.org.id.tue.nl/IFIP-TC14/documents/ESA-Essential-Facts-2009.pdf (accessed January 20, 2018).
- . (2014). "2014 Sales, Demographic, and Use Data: Essential Facts about the Computer and Video Game Industry," http://www.theesa.com/wp-content/uploads/2014/10/ESA_EF_2014.pdf (accessed January 20, 2018).

- . (2016). “2016 Sales, Demographic, and Use Data: Essential Facts about the Computer and Video Game Industry,” <http://www.theesa.com/wp-content/uploads/2016/04/Essential-Facts-2016.pdf> (accessed January 20, 2018).
- Flores, Andrew R., Jody L. Herman, Gary J. Gates, and Taylor N. T. Brown. (2016). “How Many Adults Identify as Transgender in the United States?” *The Williams Institute*, June 2016, <https://williamsinstitute.law.ucla.edu/wp-content/uploads/How-Many-Adults-Identify-as-Transgender-in-the-United-States.pdf> (accessed January 20, 2018).
- Fox, Jesse, and Jeremy N. Bailenson. (2009). “Virtual Self-Modeling: The Effects of Vicarious Reinforcement and Identification on Exercise Behaviors.” *Media Psychology* 12: 1–25.
- Fox, Jesse, and Wai Yen Tang. (2014). “Sexism in Online Video Games: The Role of Conformity to Masculine Norms and Social Dominance Orientation.” *Computers in Human Behavior* 33: 314–320.
- . (2016). “Women’s Experiences with General and Sexual Harassment in Online Video Games: Rumination, Organizational Responsiveness, Withdrawal, and Coping Strategies.” *New Media and Society*, <http://journals.sagepub.com/doi/10.1177/1461444816635778> (accessed January 20, 2018).
- Gaudiosi, John. (2015). “Mobile Game Revenues Set to Overtake Console Games in 2015.” *Fortune*, January 15, 2015, <http://fortune.com/2015/01/15/mobile-console-game-revenues-2015/> (accessed January 20, 2018).
- Gray, Sarah. (2014). “Tackling the Terrible Sexism in Video Games: Women Are Portrayed as Sexual Playthings or Victims of Violence.” *Salon Magazine*, August 26, 2014, www.salon.com/2014/08/26/tackling_the_terrible_sexism_in_video_games_women_are_portrayed_as_sexual_playthings_or_victims_of_violence/ (accessed January 20, 2018).
- Grundberg, Sven. (2014). “Women Now Make Up Almost Half of Gamers.” *The Wall Street Journal*, August 20, 2014, www.wsj.com/articles/gaming-no-longer-a-mans-world-1408464249 (accessed January 20, 2018).
- Haslanger, Sally. (2012). *Resisting Reality*. Oxford: Oxford University Press.
- Hathaway, Jay. (2014). “What Is Gamergate and Why? An Explainer for Non-Geeks.” *Gawker*, October 10, 2014, <http://gawker.com/what-is-gamergate-and-why-an-explainer-for-non-geeks-1642909080> (accessed January 20, 2018).
- Havstad, Joyce C., and Iris M. Jahng. (2008). “The Legend of Feminism.” In *The Legend of Zelda and Philosophy: I Link Therefore I Am*, edited by Luke Cuddy, 233–246. Chicago, IL: Open Court.
- Heeter, Carrie. (2014). “Femininity.” In *Routledge Companion to Video Game Studies*, edited by Mark J. P. Wolf and Bernard Perron, 373–379. New York: Routledge.
- Heintz-Knowles, Katherine, Jennifer Henderson, Christina Glaubke, Patti Miller, Mccrae A. Parker and Eileen Espejo (2001). *Fair Play? Violence, Gender and Race in Videogames*. Oakland, CA: Children Now.
- Ho, Karen K. (2016). “No Female Hero? Nintendo’s Choice for Legend of Zelda a ‘Missed Opportunity’.” *The Globe and Mail*, June 16, 2016, www.theglobeandmail.com/technology/no-female-hero-nintendos-choice-for-legend-of-zelda-a-missed-opportunity/article30496305/ (accessed January 20, 2018).
- International Game Developers Association. (2015). “Developer Satisfaction Survey: 2015 Summary Report,” September 2, 2015, https://c.yimcdn.com/sites/www.igda.org/resource/collection/CB31CE86-F8EE-4AE3-B46A-148490336605/IGDA%20DSS%202015-SummaryReport_Final_Sept15.pdf (accessed January 20, 2018).
- Jenkins, Katharine. (2016). “Amelioration and Inclusion: Gender Identity and the Concept of *Woman*.” *Ethics* 126: 395–396.
- Juul, Jesper. (2010). *A Casual Revolution*. Cambridge, MA: MIT Press.

- Levy, Neil. (2002). "Virtual Child Pornography: The Eroticization of Inequality." *Ethics and Information Technology* 4 (4): 319–323.
- Llamas, Stephanie. (2014). "Why All Gamers Matter," October 28, 2014, www.superdataresearch.com/blog/why-all-gamers-matter/ (accessed January 20, 2018).
- Lynch, Teresa, Jessica E. Tompkins, Irene I. Van Driel, and Niki Fritz. (2016). "Sexy, Strong, and Secondary: A Content Analysis of Female Characters in Video Games across 31 Years." *Journal of Communication* 66: 564–584.
- MacDonald, Emma. (2017). "The Global Games Market Will Reach \$108.9 Billion in 2017 with Mobile Taking 42%." *Newzoo*, April 20, 2017, <https://newzoo.com/insights/articles/the-global-games-market-will-reach-108-9-billion-in-2017-with-mobile-taking-42/> (accessed January 20, 2018).
- Makuch, Eddie. (2016). "Uncharted Dev Says Character Diversity Just as Important as Graphics and Gameplay." *Gamespot*, July 14, 2016, www.gamespot.com/articles/uncharted-dev-says-character-diversity-just-as-imp/1100-6441800/ (accessed January 20, 2018).
- Mikkola, Mari. (2011). "Feminist Perspectives on Sex and Gender." In *The Stanford Encyclopedia of Philosophy*, edited by Edward N. Zalta. Stanford, CA: Stanford University Press.
- Myers, Maddie. (2015). "It's Trendy to Put a Woman in Your Big-Budget Videogame." *The Mary Sue*, December 28, 2015, www.themarysue.com/women-in-games-so-trendy/ (accessed January 20, 2018).
- Oritgitano, Catlyn. (2015). "'The Cage Is Somber' a Feminist Understanding of Elizabeth." In *Bioshock and Philosophy: Irrational Game, Rational Book*, edited by Luke Cuddy, 38–48. Chichester, UK: Wiley-Blackwell
- Patridge, Stephanie. (2011). "The Incurable Social Meaning of Video Game Imagery: Making Ethical Sense of Single-Player Video Games." *Ethics and Information Technology* 14 (4): 303–312.
- . (2013). "Pornography, Ethics, and the Gamer's Dilemma." *Ethics and Information Technology* 15 (1): 25–34.
- . (2016). "Gender Inclusivity in Video Games," presented at the American Philosophical Association: Pacific Division Meeting, Seattle, WA.
- Porter, Justin. (2015). "Lara Croft Has Company: More Female Heroes Appear in Big-Budget Games." *New York Times*, December 28, 2015, www.nytimes.com/2015/12/29/arts/lara-croft-has-company-more-female-heroes-appear-in-big-budget-games.html?_r=0 (accessed January 20, 2018).
- Rosenberg, Alyssa. (2013). "Women Are Half of Video Gamers, So Where Are the Female Video Game Characters?" *Think Progress*, June 12, 2013, <https://thinkprogress.org/women-are-half-of-video-gamers-so-where-are-the-female-video-game-characters-638d91515cbf> (accessed January 20, 2018).
- Sarkeesian, Anita. (2013a). "Damsel in Distress (Part 1) Tropes v. Women." *Feminist Frequency*, March 7, 2013, <https://feministfrequency.com/video/damsel-in-distress-part-1/> (accessed January 20, 2018).
- . (2013b). "Damsel in Distress (Part 1) Tropes v. Women." *Feminist Frequency*, May 28, 2013, <https://feministfrequency.com/video/damsel-in-distress-part-2-tropes-vs-women/> (accessed January 20, 2018).
- . (2016a). "All the Slender Ladies: Body Diversity in Video Games." *Feminist Frequency*, September 1, 2016, <https://feministfrequency.com/video/all-the-slender-ladies-body-diversity-in-video-games/> (accessed January 20, 2018).
- . (2016b). "Sinister Seductress." *Feminist Frequency*, September 28, 2016, <https://feministfrequency.com/video/sinister-seductress/> (accessed January 20, 2018).
- Sheffield, Brandon. (2013). "Let's Retire the Word 'Gamer'." *Gamasutra*, May 15, 2013, www.gamasutra.com/view/news/192107/Opinion_Lets_retire_the_word_gamer.php (accessed January 20, 2018).

- Sinders, Caroline. (2015). "That Time the Internet Sent a SWAT Team to My Mom's House." *Boingboing*, June 24, 2015, <http://boingboing.net/2015/07/24/that-time-the-internet-sent-a.html> (accessed January 20, 2018).
- Sterling, Jim. (2012). "New Game Invites Players to Beat Up Anita Sarkeesian." *Destructoid*, June 7, 2012, www.destructoid.com/new-game-invites-players-to-beat-up-anita-sarkeesian-230831.phtml (accessed January 20, 2018).
- Taylor, Paul C. (2016). *Black Is Beautiful: A Philosophy of Black Aesthetics*. Malden, MA: Wiley-Blackwell.
- United States Census Bureau. (2016). "Quick Facts," www.census.gov/quickfacts/table/PST045216/00 (accessed January 20, 2018).
- Van Dreunen, Joost. (2016). "PC Trumps Mobile, Console in Booming \$61bn Digital Games Market," January 26, 2016, www.gamesindustry.biz/articles/2016-01-26-pc-trumps-mobile-console-in-booming-usd61bn-digital-games-market (accessed January 20, 2018).
- Williams, Dmitri, Nicole Martins, Mia Consalvo, and James D. Ivory. (2009). "The Virtual Census: Representations of Gender, Race, and Age in Video Games." *New Media and Society* 11: 815–834.
- Wohn, Donghee Yvette. (2011). "Gender and Race Representation in Casual Games." *Sex Roles* 65: 198–207.
- Yao, Mike Z., Chad Mahood, and Daniel Linz. (2010). "Sexual Priming, Gender Stereotyping, and Likelihood to Sexually Harass: Examining the Cognitive Effects of Playing a Sexually-Explicit Video Games." *Sex Roles* 62 (1): 77–88.
- Yee, Nick. (2017). "Beyond 50/50: Breaking Down the Percentages of Female Gamers by Genre," January 19, 2017, <http://quanticfoundry.com/2017/01/19/female-gamers-by-genre/> (accessed January 20, 2018).

12 Games and the Moral Transformation of Violence

C. Thi Nguyen

1. Introduction

I have laid a particularly savage trap for you. I know exactly what you're trying to do to me. I have been watching your fumbling attempts to attack me—you've been shifting your troops to the right, clumsily trying to flank my position. But I have, in fact, deceived you—I have feinted with two of my soldiers, letting them slip into your view, while keeping my real strength hidden. When you charge into what you think should be an empty, undefended alleyway, I catch you in a crossfire; I destroy your troops and thrill at the momentary sense of absolute dominance, achieved through deceit, manipulation, and a precisely placed use of overwhelming force.

The game is *Laser Squad Nemesis*, a multiplayer squad-based game of tactics by Julian Gollop—a spiritual sequel to his beloved early *X-COM* games. It is a vicious game of outthinking and outmaneuvering, of controlling information and masking one's intent. Many matches end with one opponent's plans smashed, their troops shattered. It is a wonderful game—sharp-edged, intense, complex, and open to great cleverness on the part of the players. But, though computer games have made some significant inroads lately, in their attempt to gain some cultural legitimacy, competitive games like *Laser Squad Nemesis* are rarely mentioned in the academic literature on games. The tendency has been, instead, to prefer games that are contemplative or serene, philosophically minded, or open-ended and creative (Frasca, 2003; Konzack, 2009; Flanagan, 2013; Sicart, 2014; Sharp, 2015). And such noncompetitive games are certainly valuable. But such viciously oppositional games such as *Laser Squad Nemesis* are capable of doing something special for us—something peculiar and rather miraculous. Such games can be a kind of social technology, which can convert competitive impulses and violent acts into something pleasurable and good.

The approach to questions of game ethics in this chapter is somewhat unorthodox compared to the current conversation. Much depends on which ruling framework one approaches games from. Analytic aesthetics and game studies, for example, has largely focused on computer games, and often treated them as a kind of text or representational artifact (Nguyen, 2017b).

This tends to focus game ethics discussions on the moral status of graphical representations of violence, and how players participate in the fictional violence (Waddington, 2007). This topic has been well handled elsewhere, and I will not discuss it here (Tavinor, 2009; Young, 2014). Others have argued for the moral usefulness of games by pointing out their capacity to convey morally worthy content. Mary Flanagan and Ian Bogost have both praised games that function as representational critiques of real-world systems, such as, for example, free-market capitalism (Bogost, 2010; Flanagan, 2013). Miguel Sicart has argued that games can be good as instigators of ethical reflection; they represent ethically difficult situations, such as killing, in a morally interesting or provocative way (Sicart, 2009a, 2009b). Surely these are all viable ways in which games can provide moral and cultural value, but they are all somewhat familiar. I would like to explore a different avenue, which focuses on a unique capacity of games. I argue that games can be morally useful not simply as communicative vessels for moral ideas but as engines of moral conversion. Games can convert opposition and violence into something good.

This chapter focuses on the morality of *actual actions* performed by players toward other players—the moral status of our attempts to beat, vanquish, or utterly humiliate our competition. As Jesper Juul suggests, videogames can usefully be thought of as half-real—half of the game experience is fictional, and the other part is actual (Juul, 2005). When I play the multiplayer shooter *Team Fortress 2*, I only fictionally shoot other soldiers, but I actually win or lose to another player. What, then, is the moral status of my interfering with and obstructing my opponents' attempts to win, and what sort of person am I for blocking their quests to win, for thrilling in the destruction of their plans and hopes? My answer will be this: when the circumstances are right, I am doing them a favor, and giving them exactly the experience of a struggle that they wish. But the right circumstances will turn out to be exceedingly specific, and often quite difficult to achieve.

2. Competition, Violence, and Harm

Are we doing something bad to our opponents in a competitive game? Obviously, players are trying to make their opponents lose. But competitive games exist on a spectrum of hostility. The best way to understand this is to look at various notions of violence and harm, and consider the ways in which we might do something that is rather violence-like and harm-like in games. Keep in mind that I am focused here not on the graphical representation of violence—say, the fact that my avatar fictionally shoots my opponent's avatar in the head—but the degree to which I am doing real violence to the opposing players themselves, by destroying their plans.

Let's start with what I take to be a standard and rather minimal account of violence, that I hope will be acceptable to all, and which skirts the finer points of the philosophical debate that do not matter for this chapter.

Violence, let us say, is the intentional attempt to directly inflict harm on another. By “directly inflict,” I mean that the harm is the primary intent of my action, and the direct result of my action, rather than merely a known side effect. Much, then, turns on what we mean by harm. Some theories of harm are more demanding, such as Matthew Hanser’s, in which one is harmed if one loses a basic good—a general resource for supporting all sorts of action—like one’s eyesight, or hands, or income (Hanser, 2008). But there are looser definitions of harm, based in autonomy, like Seana Shiffrin’s, in which harm is any condition that generates a significant chasm between one’s will and one’s experience (Shiffrin, 1999).¹

Obviously, if we conceive of harm in its strong senses—as requiring grievous bodily injury or the loss of a basic good—then most games do not involve inflicting harm or doing violence as a part of normal intentional play. But if we conceive of harm in the weaker sense—as any chasm between one’s will and one’s experience—then many games involve doing violence. I am directly and intentionally inflicting a gap between my opponent’s will and their experience. In chess, basketball, multiplayer shooters such as *Medal of Honor*, and some massively multiplayer online role-playing games such as *EVE Online*, I am usually acting to truncate the other players’ plans and frustrate their intentions. Let me distinguish, then, between “strong violence,” which requires the infliction of harm in the strong sense, and “weak violence,” which requires the infliction of harm in the weak sense. (I find the use of the term “violence” in the weak sense to be perfectly sensible, and compatible with recent work in feminist theory and critical race theory. However, if one objects to the use of the term, one may feel free to substitute some other term, such as “opposition,” for my references to “weak violence.” The claim of the transformative moral powers of games will still hold.) Thus, barring a few largely illegal and inhumane examples of the blood sport variety, games do not involve doing strong violence to another player, but often involve doing weak violence to the other player.

There is, however, a peculiar, bracketed sense in which strong violence and strong harm occur in games. In many games, I act to deprive my opponent of basic in-game resources. In chess, I slowly deprive my opponent of pieces, which are the in-game basic resource for action. In *Starcraft*, I aim to deprive somebody of in-game agents and resources for the production of more agents—the in-game equivalent of a body. Obviously, this isn’t violence done to the other player. But it is a conceptual and phenomenological relative of strong violence—it offers the predatory pleasures of gradually destroying your opponent’s in-game ability to act. So: games offer the ability to do weak violence to another player, and something akin to strong violence to the opponent’s in-game agential stand-in.

Some might object to my use of the term “violence” here, preferring, perhaps, “competition.” But “violence” is more conceptually appropriate for the particular cases I’m talking about. “Competition” is a much broader term. Many track-and-field events, like the discus throw, are paradigmatic

of competition but involve minimal weak violence. At most, a discus thrower is trying to block a single willing of their competitor—the competitor’s will to win. But a discus thrower need not even be thought of as doing weak violence, since weak violence requires that the harm be the intentional object of the act. A discus thrower may only be intending to do her best, or to win the medal; the competitor’s loss may only be a known side effect. Note that a discus thrower need not reflect on the plans of her opponents; she may clear her mind of all thoughts of other competitors and focus only on her own shot. This is why, I suspect, it is so strange to think of track-and-field competitors as “opponents.” Think, also, of wine and cooking competitions—we compete, but I can immerse myself in my own culinary efforts, with barely a thought to yours. Compare this to games like chess and *Starcraft*, where a significant amount of my efforts are spent predicting and frustrating the plans and actions of my opponent. Players of such games bury themselves in blocking the will of their opponents. Weak harm, then, is often the primary intent and direct result of player actions.

It will be useful here to distinguish between various degrees of oppositionality in competitive games. First, there are *merely competitive games*, in which there is no direct opposition to any sub-plans of opponents, other than their plan to win. Wine competitions, sprint trials, and trying to beat the high score on a single-player videogame all count here. One can play such a game wholeheartedly without blocking, or even considering, an opponent’s in-game plans or desires. It is, for example, entirely possible to compete without knowing that you are competing—such as when I secretly nominate your essay for an essay competition, or secretly time your 100m dash for the *Guinness Book of World Records*. Thus, one can compete while engaging in no weak violence whatsoever. And even if one does engage in weak violence, one can only do so in a rather minimal way. In merely competitive games, there is only a lone opponent willing that’s up for blocking: the will to win.

Then there are *oppositional games*, where players actively try to block a rich variety of their opponent’s particular in-game plans, actions, and desires. I cannot play such a game with you without making your failure the direct object of my intentions. We can also distinguish between two subtypes of oppositional games (or at least establish the endpoints of a continuum). In some games, such as soccer, we seem to be attempting to frustrate opponents’ aims, acts, and plans, but not primarily acting to attack their basic resources for action. Let’s call this category *interference games*. On the other hand, in games such as chess and *Starcraft*, one is not only acting to frustrate an opponent’s particular acts, one is attacking the basic in-game resources for another player’s actions—taking away the opponent’s pieces, destroying the opponent’s in-game economy, and so on. Let us call these *destruction games*. Destruction games are the ones that feel particularly predatory—the ones where I can satisfy my desire to cut away at my opponents, and reduce them to a state of utter helplessness. Note that

board games and videogames are usually better at offering the pleasures of destruction than sports, since they offer us a package of practical abilities slightly abstracted from the player's own. Consider the sports in which the body is directly involved, and where the in-game resources are subsets of the player's bodily resources—such as soccer, basketball, or football. In order to attack my opponent's basic resources in these sports, I would have to attempt to do them long-term bodily harm. But videogames and board games permit us a destructible agential stand-in, with its own abilities and resources.² When I take your knight, I reduce your basic in-game resources, but leave you unharmed. We can then allow a player the joys of the dismemberment of another's basic resources without actually requiring them to, in fact, dismember the other person.

So: all oppositional games, including interference games, can satisfy the desire to truncate another's actual will and do weak violence to the player. Destruction games also offer the satisfaction of destroying another's basic resources for action—through the use of an agential stand-in, whose practical affordances are modifiable and destructible. In destruction games, I am doing strong violence to the in-game agential stand-ins, and weak violence to the other players, by blocking their plans. Are interference play and destruction play morally wrong?

3. A Suitsian Framework

In normal life, even weak violence is, by and large, bad. I will argue that, when conditions are right, it is not only permissible, but actively good, to engage in such weak violence in games. Thus, the moral valence of weak violence can be transformed in games. But the proper conditions for transformation are difficult to achieve; they are certainly not guaranteed by the mere fact that we are playing a game. The transformation is fragile and finicky. It is not, as some have suggested, an automatic consequence of game-play, but rather something of an achievement.

The account I offer is built on the bones of Bernard Suits' analysis of games, with substantial modifications. We can start with what he calls the "portable version" of his definition: that playing a game is voluntarily undertaking obstacles for the sake of the activity they make possible (Suits, 2014). The point of playing basketball isn't simply to get the ball through the hoop, for I could do that easily by showing up at night to an empty court with a ball and a ladder. The point is to attempt to do it within the very particular constraints allowed by the rules of basketball. In Suitsian game-playing, players have a very peculiar motivational relationship to a game's goals. The goals we pursue in the game—baskets, kills, game dollars—are not the same as our purpose for playing. Simply passing the ball through the hoop isn't, in itself, valuable to me—if it were, I could just show up after hours with a ladder and have at it. Instead, we take on certain goals and certain obstacles, to create a particular activity of struggling.

Suits contrasts game-playing with what he calls “technical activity” (2014: 37). Technical activity is what we do in everyday practical life—we are pursuing some independently valuable end, and we take the most efficient means to that end. Suitsian game-playing is not like that. Game-playing always involves pursuing a goal, but our relationship to that goal can be quite peculiar. For one thing, we adopt inefficient means to those ends.

A caveat: many have argued against Suits’ analysis for being inadequate to natural usage—that it cannot capture all cases of games. I think this is absolutely right, and have argued elsewhere that there are at least two different ways of playing games—one Suitsian, and the other something very much like what we do with fictions (Nguyen, forthcoming). Suits thought that his account was a complete account of what it was to play a game; on that point, I think he is wrong. Furthermore, I am not arguing that moral transformation is available for all Suitsian play. Moral transformation is possible only for one particular motivational subtype of Suitsian play. Moral transformation is not an automatic consequence of game-playing, but the result of a very specific attitude, combined with the right external circumstances.

But to make out the argument we need to dig into the details of Suits’ full, and significantly less portable, analysis. For Suits, game-playing is a very particular relationship between goals, rules, and motivations. First, in every game, there is a state of affairs that a player is trying to achieve. We can describe this state of affairs independently of the means of achievement; Suits calls this the *prelusory goal*. In golf, this is getting the ball into a little cup. Then there are the *constitutive rules*, which restrict the means available to the player while pursuing the prelusory goal. Constitutive rules always prescribe inefficient means to the prelusory end. In golf, we are told to get a ball in a hole, but only by hitting it with a very specific sort of stick from far away—we cannot, for example, simply pick up the ball and walk it over. The *lusory goal*, then, is achieving the prelusory goal within the means specified by the constitutive rules (Suits, 2014: 50–51). The lusory goal in golf is getting the ball in the cup by starting from far away and hitting it with a stick, in as few strokes as possible.

But the most important part of game-playing is the intentional state—what Suits calls the *lusory attitude*. The lusory attitude is taking up these restrictive rules just because they make possible the activity—because I want to act inside those constraints (2014: 45). That is, I take on the rules of basketball and the prelusory goal of basketball, not because getting balls through hoops is independently valuable, but because I want to be playing basketball. To put it all together:

To play a game is to attempt to achieve a specific state of affairs [prelusory goal], using only means permitted by rules [lusory means], where the rules prohibit use of more efficient in favour of less efficient means

[constitutive rules], and where the rules are accepted just because they make possible such activity [lusory attitude].

(Suits, 2014: 43)

But why do we want to engage in the activity of struggling against those obstacles, through those inefficient means? Suits' account permits a variety of answers.³ One answer is that we care about the lusory goal—winning. Professional players might be playing for money,⁴ Olympic athletes may be playing for national glory, high school athletes may be playing for social status, and some people simply like to win. Let's call that *achievement play*. Another possibility is that we do it for the value of the activity itself. I could be doing it because the activity helps me to develop skills, or keeps me fit, or lifts my mood, or just because I like the experience of struggling itself. Let's call that *striving play*. Both kinds of players wish to bring the activity into being, but for different reasons. The striving player wishes to be engaged in the activity, whereas as the achievement player wishes to win at the activity.⁵ And it is possible to be interested in both, to varying degrees—I suspect that most real-world players are somewhere on the motivational spectrum between the two. But let's start by considering the purest cases. Even if they turn out to be something of a psychological ideal, it will be a first step toward understanding more motivationally mixed players.

Achievement play and striving play involve varying degrees of indirectness in the relationship between player and in-game goals. Suitsian play always involves, to some extent, taking up what we might call *disposable ends*. Disposable ends aren't attached to our enduring ends in any normal way. If I race for fitness, and take, as my prelusory goal, crossing a certain finish line, it doesn't matter to my enduring interests if I actually cross that finish line. The enduring benefits for me are independent of my actually crossing that finish line; I need only temporarily adopt an interest in crossing the finish line, and discard that interest after I've gotten my running in. For both striving players and achievement players, the prelusory goal is not desirable in and of itself. We can tell because players have little interest in the prelusory goal outside of the game. I don't go around with a ladder to basketball courts in the middle of the night. And if the prelusory goal were desirable in and of itself, then players wouldn't place extra obstacles in the path to that goal. So, for all Suitsian play, the prelusory goal is taken up as a disposable end—we take it up as an end for a moment, and then put it away afterwards. But for the achievement player, the disposability of ends is confined to the prelusory goal. Achievement players care about the lusory goal—about winning—non-disposably. It is either an enduring end itself, in the case of the intrinsic achievement player, or a means to an enduring end, as in the case of an extrinsic achievement player—like the professional poker player, who plays to win, and wins to make money.

But for the striving player, both prelusory and lusory goals are disposable, and profoundly so. The striving player takes up an interest in the winning for

the sake of the activity of struggling. The striving player's game-playing activity is practically inverted, through and through. In normal technical activity, we take the means for the sake of the end. But in striving play, we take up the ends for the sake of the means—we take up the goal of winning, for the sake of going through a particular struggle to win. A striving basketball player adopts, temporarily, the goal of wanting to win at basketball for the sake of having that particular struggle—dodging and weaving and passing and dunking. But it doesn't matter to them if they win; they have only adopted an interest in winning, temporarily, for the sake of the struggle. I don't care, outside of basketball, about my win-rate. But I temporarily take up an interest in winning, because I love the experience of being engaged in a dramatic, challenging, absorbing struggle. Note: this is surely not true of all basketball players. It is a feature of some players, not of basketball. Achievement and striving are orientations in the player, and not features set by the game.⁶

Crucially, there is no moral transformation of violence for achievement players. The achievement player cares disposably about the prelusory goal, but cares enduringly about winning. When I block the achievement player, when I snatch victory from his grasp and destroy all his chances of winning in one fell, cruel swoop, I have directly interfered with his pursuit of something he genuinely and enduringly values. So I have done violence, in the weak sense, to the other player.

But consider, instead, a striving player. When I interfere with her attempt to win, I am only keeping her from achieving a disposable end. And since she took up that disposable end solely for the sake of having a certain kind of struggle, then my interference is actually a kind of cooperation. In doing violence to her in-game agency, I have also helped her full self to pursue her enduring interests. It is the peculiar motivational structure of striving play, then, that makes the moral transformation of violence in games possible. Games can take actions that are, in the bracketed context of gameplay, violent, and make them, in the larger context of life, helpful. This is because for the striving player, the interests of the temporary in-game agency are distinct from the interests of the full agent. Thus, when conditions properly align, acts of weak violence done to the in-game agent, in the game, are transformed into helpful acts to the full agent.⁷

We can use this discovery to resolve a question from the philosophy of sports over whether competitive games are zero-sum or productive. The worry is that competitive games might turn out to be complete wastes of time, since the value of one side's win is always cancelled by the value of the other side's loss. The above analysis provides an answer: the productivity of game-playing depends on whether the players involved are achievement players or striving players. A competition between achievement players will be zero-sum, but a competition between striving players could turn out to be productive.

This account permits a complete moral transformation of violence only when all players involved are pure striving players. This may, for some

people, seem something of an idealization. But even if one thought it a rare motivational setup, my argument would still show that it was worthwhile, and worth cultivating. Notice, also, that the account permits mixed motivations, and would provide correspondingly mixed transformations. If we are mostly striving players, but still care slightly about winning, then our game violence is mostly, but not completely, up for moral transformation. Thus, somebody who was skeptical about the possibility of pure striving play might still grant that it was worthwhile to approach, as a limit point.

But perhaps the reader is skeptical about the possibility of any striving play whatsoever, and thinks that the only motivational state possible for gameplay is achievement play. If that were true, then the goal of game-playing would always be to maximize wins. But consider the complicated relationship many of us have to winning. In the game, we do all that we can to bring about the win. But out of the game, we often do quite a bit of work to make it harder on ourselves to win. We seek harder and harder opponents. When I get too good at a particular board game, my entire board game group gets quite bored, and I must search out a new one that I won't win so very often.

A sensitive skeptic might add that the goal of an achievement player would be to maximize *worthwhile* wins—the harder the opponent, the better. But that position predicts a very particular relationship to difficult opposition. If I were such an achievement player, then I would seek out difficult opponents only if I thought I could likely beat them, or if playing them would improve my skills sufficiently so that I would win more often in the long run. But that is not how many of us operate at all—we welcome hard opposition even if we are likely to lose, so long as the game is interesting. I am willing to take on an opponent who will almost surely beat me, in a game I will never play again, if it seems like the playing will be interesting or entertaining.

Crucially, the striving skeptic here cannot explain actions in which I might hold myself back from long-term improvements that might increase my win-rate, for the sake of the game-playing experience. Suppose that I am, at the moment, extremely well-matched in skill with my wife at our favorite board game, *1830: The Game of Railroads and Robber Barons*—an extremely complicated game involving investing in and managing railroad corporations, manipulating the stock prices in those corporations, and occasionally looting them and dumping them on minority stockholders.⁸ Suppose I am home on summer break, and I happen to have the time to read through the thousands of articles and online forum threads about 1830 strategy and opening gameplay. If I read them, I would surely win every time, and easily, too. And I know, furthermore, that she will never read those articles, because that sort of thing always seems a bit too much like work to her. It seems very sensible to me to hold back from reading those articles, for the sake of continuing to have our very satisfyingly even games. If one believed only in achievement play, then one would have to think that

what I was doing was rather insane. If the only reason to play games was to win, then surely I should read those strategy articles. The monomaniacal achievement theorist would, to explain my actions, have to say that I was failing to achieve the goods of the game, and kowtowing to extrinsic non-game goods, like the goods of social harmony. But that doesn't seem right at all. My wife is resilient and doesn't mind losing—she knows she's far better than me at most life skills, in any case. She is genteel of spirit, and wouldn't mind continuing to play with me, even if I kept winning. I am choosing not to read strategy games, not for her sake, but because *I am interested in a good gaming challenge*, and that challenge will disappear if my skill rises too much. Only striving play can explain my decision here with any integrity to my actual reasons for acting, and the phenomenology of my interest in gaming.

4. Contingency and Fit

To put the parts together: weak violence is the direct infliction of a gap between will and experience. In striving play, we take on disposable ends for the sake of an activity of struggling. In fact, since we take on not only disposable ends, but a different set of abilities, we might even say that in games we take on a temporary practical agency. In-game violence is, then, still violence in a sense—it is violence targeted toward the temporary in-game practical agent. It is bracketed violence. But the same action is, outside of those brackets, a good and helpful act, for it contributes to the ends that really matter: the out-of-game agent's enduring interest in the activity of struggling. If I acquire an interest in winning only because I enjoy the experience of struggling, then it doesn't actually matter, in the end, if I actually win or not. And your violence toward me is transformed when it actually increases the quality of my struggle.

Let's call this the *structural* account of the moral transformation of violence in games, because it depends on both achieving a certain motivational structure, and it depends on particular arrangements of game design and player psychology and ability. This makes the moral transformation a rather finicky achievement. It doesn't just happen when we agree to play—we must get the right game and the right opponents.

To understand the particular qualities of the structural account, let's compare it to other accounts of the morality of opposition from the philosophy of sport. First, consider Steve Weimer's contractualist view of sports morality. Weimer also argues for the possibility of a moral transformation in games. But for Weimer, the sole mechanism by which that transformation occurs is through our mutual consent. Says Weimer: when you and I agree to a boxing match, what we have actually done is formed a contract, where you agree to attempt to strike me, in return for my attempts to strike you. We each enter into that contract to have an opportunity to develop our own excellences—it is an exchange of services. We are agreeing to be something

like biological gym equipment for each other. Thus, when I strike you, I am doing something actively good—I am fulfilling my contractual obligations to you (Weimer, 2012).

Notice that Weimer's view results in a binary transformation, and a notably un-finicky one. Either we have consented to our contract, in which case all our in-game attacks are good, or we have not, and all our in-game attacks are bad. But this view seems to me to miss many of the moral intricacies of gaming. Suppose, for instance, that I thoroughly enjoy humiliating novices. I like to find particularly cocky ones, get their consent to have a game, and then proceed to crush and humiliate them. I know ahead of time that they won't enjoy it, but I pick the ones who are arrogant enough, or brittle enough in their self-esteem, that they won't be willing to resist my challenge. Or: imagine that I know my spouse to despise any board game that involves lying and manipulation. I am in a nasty and spiteful mood, and I propose a game of *Diplomacy*, which involves precisely such despicable social manipulations, knowing that she will never back down from a challenge, and proceed to make her miserable for the rest of the night. Under Weimer's view, in both these cases I am doing something good in the game—I am fulfilling my obligations. But it seems to me that I am clearly doing something wrong, despite having obtained their consent. It would have been even worse if I hadn't gained their consent, but even with the consent, I'm doing something quite terrible when I continue to humiliate the novice, or push onwards in that game of *Diplomacy*.

On the other hand, by my account of moral transformation, the value of oppositional striving games does not reduce entirely, or even largely, to the fulfilling of contractual obligations. Rather, it comes from players *actually attaining the kind of activity they value*. And achieving that is a delicate affair. First, it often involves skill matching. In most games, striving is only desirable when the challenge is of appropriate difficulty. There is very little of interest for most people in crushing a newbie, or being utterly destroyed by a vastly superior opponent. Second, it requires a psychological fit between player and game. Each of us has different reasons to want striving activities, and different sorts of striving activities that we value and enjoy. I simply do not have the speed to play *Starcraft 2* at a competitive level—attempting to do so is simply miserable—but the analysis of decision trees in chess is always delicious to me. My spouse despises games in which one lies to the face of another player; I find them utterly delightful.

Third, the design of the game itself matters. Various forms of game design can be better or worse at achieving specific types of struggling. Chess, basketball, *Magic: the Gathering*, *Starcraft 2*, and *Team Fortress 2* are designed such that in-game violence tends to create very interesting or satisfying sorts of challenges. Dribbling around a guard in basketball; escaping from a diabolical fork in chess; dodging gunfire and lobbing a grenade at just the right moment in *Team Fortress 2*—these are the sorts of challenges and struggles that many of us value and enjoy. On the other hand, we can imagine any

number of very bad game designs for moral transformation: an insult contest, where we try to insult one another until one of us cries; a whipping contest, where we whip each other until one of us passes out. (Perhaps there are a small number of people psychologically constituted such that those are good game designs, but for most, not so much.)

Since my account depends on actually achieving a specific sort of valued struggle, the transformation of violence into something valuable isn't guaranteed by merely consensually entering into a game. Rather, the positive value is achieved only when all these factors go right—when the game design is good and fits the psychological profile of the players, and the players fit each other in skill. Thus, whereas Weimer's view puts the entire responsibility for moral transformation in the contractual transaction between the players, my view is one of *distributed* responsibility. The game designer, the matching system, the attempt to find an appropriate game/player match, all contribute to the success or failure of the moral transformation.⁹ The motivational stance of striving play makes the moral transformation possible; it is details of game design and player fit that actualizes that possibility.

Next, consider Robert Simon's account of cooperation in sports. The apparent competition in games, says Simon, is actually a kind of cooperation; the players are helping to develop each other's excellences. This, to my mind, gets something wrong about the phenomenology of oppositional play. Simon's account requires an intention to cooperation, through and through. We do have such interactions, where we constantly focus on the development of the other players—but we call those training, and not actually playing the game.¹⁰ Game-playing is something different. There, we submerge ourselves in our alternate practical identity. I don't have to keep my opponents' well-being in mind. I can simply give myself, within the limits of the game, to trying to thwart all their in-game plans, and trust to the game design and the player match to transform the in-game violence into something good. In my view, we can *psychically offload* cooperation, and trust to the externalities of the system to do the transformation for us. The moral transformation of violence in games is thus phenomenologically layered. We find others and agree to play for the purpose of having a valuable struggle; we may even do it with an entirely cooperative and social spirit. But in the game itself, we can submerge ourselves in our temporary practical agency and give ourselves over to the attempt to destroy our in-game opponent, trusting, in the larger scale, to the game itself, and the appropriate match we have found, to convert the violence into something valuable. Thus, the layered, transformational nature of the structural account allows for something that Simon's straightforwardly cooperative model does not—the ability of games to allow us to indulge our impulses toward violence, to lose ourselves temporarily in the predatory delights of dismemberment, and trust to an external system to do the transformation for us.

5. Disposable Ends and Re-Signification

We might call Simon's and Weimer's views ones of voluntarism about moral transformation in games—that is, the transformation depends solely on the mental acts of the players. Another branch of voluntaristic theories have arisen in debates over whether there is or is not a magic circle of play—that is, as Johan Huizinga suggested, that there is a specially bounded space of play, which is morally separated from normal life (Huizinga, 1955).¹¹ Jaakko Stenros has argued that the magic circle is best conceived of as an explicitly negotiated social contract to uphold certain norms of play—an agreement to treat the in-game events as separated from the world (Stenros, 2012: 15). In a similar move, Annika Waern suggests that one of the essential elements of gameplay is that it occurs in a social frame in which actions are re-signified—that is, the meaning of a violent act changes in the game context (Waern, 2012: 5–9). Both their accounts are useful, and in many respects compatible with my structural account. But these voluntaristic accounts are also not complete in and of themselves. They do not adequately capture the way in which the agency of moral transformation is distributed across actors, game design, and community structure. Stenros' and Waern's accounts concern how players consciously maintain the boundary and achieve the transformation through some sort of effort of will—they either accept a norm about how they are supposed to behave, or they accept a system of re-significations. The structural account is broader and includes extra-mental features that contribute to the moral transformation. It concerns how features of design, structure, and alignment can *automatically* transform in-game violence into something desirable, independent of the mental maintenance of such boundary.

Waern's view concerns only those cases where what's at issue is the meaning of the act. For example, if I poke you in a certain way, the social frame of the game adds the meaning that I have gained a point. But such re-signification can't work on brute realities—as Waern notes, it won't work on, say, getting hurt or exhausted. But under my view, if I engage in a mixed martial art battle precisely because I want a certain intense experience involving pain and frustration, it isn't a re-signification of the meaning that's done the moral transformation, it's that the rules of the game and their fit with my own psychological inclinations are such that your in-game violent acts toward me are interesting, enjoyable, or valuable.

Similarly, Stenros' account depends on our coming to an agreement and psychologically enforcing the separateness of the game from normal life. The transformation I describe doesn't depend on, nor is it wholly guaranteed by, such agreement and psychological enforcement. Imagine that I have a work colleague who is unpleasant and belligerent. He constantly attacks my character and the quality of my work with much viciousness, but I am obliged to take lunch breaks with him. I come up with a clever plan—I suggest that we play some pickup basketball during our lunch breaks instead

of talking over lunch. His aggression and hostility are thus transformed into something much more pleasant and useful for me—not by his intention nor his agreement, but simply by the design of the game itself. He need not agree to any norms of impermeability; in fact, he may take the game as another opportunity to humiliate me, and treat my failures in the game as more ammunition to criticize me outside the game. But still, the game itself can transform his in-game violence without his intentionally supporting that boundary. Notice, though, how the structural account precisely captures what can get transformed and what doesn't. Stenros' account depends on a psychological capacity of the player: I must, through force of will, maintain this impermeability, and refuse to let what happens in the game morally matter outside the game. But note what is actually likely to get transformed in such a case. Suppose my nasty colleague continues to viciously try to block my shots, and at the same time viciously trash-talk me with a constant stream of harangues about my character failings. His intentions may be equally nasty in both cases, and I have equal motivation to attempt to re-signify his actions. But motive, by itself, is insufficient. The reasons why the shot-blocking is transformed cannot be confined to intentions and acts of will, for he intends to hurt me just as much with both, and I have equal reason to wish to not be hurt. If moral transformation occurred through a simple act of will—through a decision to re-signify—then I ought to re-signify all his actions. But I cannot. It is external factors of game design and fit that explain the differential transformation. The moral transformation of shot-blocking has to do with the particular arrangement of rules about dribbling, shooting, and guarding.

Compare, for example, the significant morally transformative powers of basketball with those of dodgeball. Here is how we played dodgeball in my elementary school: a circle forms, and the people on the outside hurl balls at the people on the inside. If anybody on the inside gets hit, they're out, and join the outer circle. At least on my playground, all the unpopular kids dreaded dodgeball, because the design leads to no transformation of beligerence. The bullies would point out their targets, scream insults, and then hurt them in a hail of rubber balls. It's just as humiliating and painful to be hit with a rubber ball hurled at your head inside the game as out. Compare this to how my vicious co-worker is forced to behave toward me in basketball—movements of guarding, blocking, dodging, all of which are much more entertaining to me than if we left his viciousness to his own devices. It is the rules of basketball, and not just a mental act of re-signification by the players, that makes basketball such a potent instrument of moral transformation.

What Stenros, Waern, Simon, and Weimer all leave out is the moral importance of game design and social structure. By focusing on the mental acts of the players, they leave out the moral contribution of the game designer. These writers are representative of a general focus, in the philosophy of play and the philosophy of sport, on the activity of the player.

I agree with them to an extent—the motivational state of striving is a necessary prerequisite for moral transformation. But my account is significantly more technological, and socio-structural, than theirs. The design of the game, and embedded social features of the community of play, play a crucial role.

6. Conclusions

Suits' analysis revealed a possibility, which I have expanded on—the possibility that in games, players can take up disposable ends, and temporary practical identities, for the sake of an activity of struggling. Striving play makes possible a moral transformation of in-game violence. First, my attempts to thwart my opponent's plans and intentions are not bad, because they are directed toward disposable ends. Second, those attempts may be good, because they help create a certain desirable struggle for my opponent. Thus, games are capable of delivering something of a moral miracle, transforming in-game acts of violence into something good.

This moral transformation is a rather delicate affair. What's more, it is most definitely a moral transformation, and not some moral neutralization or separation. Interplayer in-game violence occurs not in some magically separated space, but firmly in this world, and is a way of either helping or harming another player. Games are not lacunae in the moral domain; they are, instead, simply useful moral tools. Furthermore, the transformation I describe is structural, distributed, and technological. It is not dependent on a simple consent or a mental act of re-signification for its efficacy—the responsibility for successful transformation depends on a large number of features, including good game design, good psychological fit, and good player fit. The moral miracle of games is not simply a mental act of the player; it is a technological achievement that also depends on the skill of the game designer and the arrangement of the gaming community.

Notes

1. My account here is intended to be a usefully simplified gloss of Allan Back's account of violence, which is: a forceful action, done intentionally by an agent, of a type of action that tends, or intends, to reduce the freedom or the genetic fitness of those affected by the action, where the actor is morally responsible for that action (Back, 2004: 222–224). Note that Back's account, by including attempts to reduce the freedom of another as violent acts, opens itself to the more permissive readings of "violence."
2. Jon Robson (personal communication) suggests that some physical games, like snooker, may also count as having a destructible agential stand-in. But notice these are precisely the games where my agential resources are mediated by some other physical object, like my snooker balls.
3. This point is often confused, which Suits himself may invite. For a discussion of game-playing for the intrinsic value of the activity, see Suits' discussion of how game-playing could constitute a utopia (2014: 149–160).

4. Some have found Suits' view on professional game-players confusing. Suits clearly indicates that professional game-players fit his definition (2014: 129–140). A professional basketball player is taking up the rules of basketball, in order to be playing basketball. That is enough to meet the definition. He leaves open whether or not the professional is playing basketball for the love of the game, for pride, or to make money by winning. So long as their interest is achieved by winning *at basketball*, rather than simply passing the ball through the hoop, they are playing a Suitsian game.
5. As the examples should make clear, this is a different distinction than the one between intrinsic and extrinsic values. The distinction between achievement versus striving play concerns where in game-playing value accrues; the distinction between intrinsic versus extrinsic play concerns whether that value is instrumental or final. One can be engaged in extrinsic achievement play (for the value of the money or fame that will come from winning) or be engaged in intrinsic achievement play (because one simply values winning). One can be engaged in extrinsic striving play (for the sake of fitness from the activity, or the therapeutic emotional effects of absorbing activity) or in intrinsic striving play (for the intrinsic value of the struggle itself).
6. A recent survey of 90,000 board gamers indicated that the “need to win” was the most common primary motivator for men (at 12.8% of survey respondents), but only the fourth most common primary motivator among women, and merely the ninth most common in non-binary gender gamers (out of 11 possible motivations). The “need to win” is also much more common in younger players (Yee, 2017). I don't take this data to be philosophically decisive, however.
7. I will offer in Nguyen (forthcoming b) a fuller exploration of the intricate relationship between the full agent and their temporary in-game agency.
8. Francis Tresham, the designer of 1830, would go on to create the board game Civilization. Between 1830 and its kin and Civilization, he is generally thought to be the inventor of the tech tree in gaming (Woods, 2012: 40).
9. For an extended discussion of this point, and substantive recommendations for the design of gaming communities, especially around online multiplayer games, see (Nguyen and Zagal, 2016).
10. A fuller version of the exchange between my view, Weimer's, and Simon's occurs in Nguyen (2017a).
11. I offer a fuller treatment of the history of the magic circle debate in Nguyen (2017b).

References

- Back, Allan. (2004). “Thinking Clearly about Violence.” *Philosophical Studies* 117 (1/2): 219–230.
- Bogost, Ian. (2010). *Persuasive Games: The Expressive Power of Videogames*. Cambridge, MA: MIT Press.
- Flanagan, Mary. (2013). *Critical Play: Radical Game Design*. Cambridge, MA: MIT Press.
- Frasca, Gonzalo. (2003). “Simulation versus Narrative.” In *The Video Game Theory Reader*, edited by Mark J. P. Wolf and Bernard Perron, 221–235. New York: Routledge.
- Hanser, Matthew. (2008). “The Metaphysics of Harm.” *Philosophy and Phenomenological Research* 77 (2): 421–450.
- Huizinga, Johan (1955). *Homo Ludens. A Study of the Play Element in Culture*, trans. by R.F.C. Hull. Boston, MA: Beacon.
- Juul, Jesper. (2005). *Half-Real Video Games between Real Rules and Fictional Worlds*. Cambridge, MA: MIT Press.

- Konzack, Lars. (2009). "Philosophical Game Design." In *The Video Game Theory Reader 2*, edited by Mark J. P. Wolf and Bernard Perron, 33–44. New York: Routledge.
- Nguyen, C. Thi. (2017a). "Competition as Cooperation." *Journal of the Philosophy of Sport* 44 (1): 123–137.
- . (2017b). "Philosophy of Games." *Philosophy Compass* 12 (8).
- . (forthcoming). "The Forms and Fluidity of Game Play." In *Suits and Games*, edited by Thomas Hurka. Oxford: Oxford University Press.
- . (forthcoming b.) *Games: Agency as Art*. Oxford: Oxford University Press.
- Nguyen, C. Thi, and Jose Zagal. (2016). "Good Violence, Bad Violence: The Ethics of Competition in Multiplayer Games." *DiGRA/FDG '16: Proceedings of the First International Joint Conference of DiGRA and FDG*, www.digra.org/digital-library/publications/good-violence-bad-violence-the-ethics-of-competition-in-multiplayer-games/ (accessed January 20, 2018).
- Sharp, John. (2015). *Works of Games: On the Aesthetics of Games and Art*. Cambridge, MA: MIT Press.
- Shiffrin, Seana Valentine. (1999). "Wrongful Life, Procreative Responsibility, and the Significance of Harm." *Legal Theory* 5 (2): 117–148.
- Sicart, Miguel. (2009a). "The Banality of Simulated Evil: Designing Ethical Gameplay." *Ethics and Information Technology* 11 (3): 191–202.
- . (2009b). *The Ethics of Computer Games*. Cambridge, MA: MIT Press.
- . (2014). *Play Matters*. Cambridge, MA: MIT Press.
- Stenros, Jaakko. (2012). "In Defence of a Magic Circle: The Social and Mental Boundaries of Play." In *Proceedings of DiGRA Nordic 2012 Conference: Local and Global—Games in Culture and Society*, www.digra.org/wp-content/uploads/digital-library/12168.43543.pdf (accessed January 20, 2018).
- Suits, Bernard. (2014). *The Grasshopper: Games, Life, and Utopia*, 3rd ed. Peterborough: Broadview Press.
- Tavinor, Grant. (2009). *The Art of Videogames*. Oxford: Wiley-Blackwell.
- Waddington, David I. (2007). "Locating the Wrongness in Ultra-Violent Video Games." *Ethics and Information Technology* 9 (2): 121–128.
- Waern, Annika. (2012). "Framing Games." *Proceedings of Nordic DiGRA 2012*, www.digra.org/wp-content/uploads/digital-library/12168.20295.pdf (accessed January 20, 2018).
- Weimer, Steven. (2012). "Consent and Right Action in Sport." *Journal of the Philosophy of Sport* 39 (1): 11–31.
- Woods, Stewart. (2012). *Eurogames: The Design, Culture and Play of Modern European Board Games*. Jefferson, NC: McFarland.
- Yee, Nick. (2017). "The Primary Motivations of Board Gamers: 7 Takeaways." *Quantic Foundry*, <http://quanticfoundry.com/2017/04/27/board-gaming-motivations/> (accessed June 14, 2017).
- Young, Garry. (2014). *Ethics in the Virtual World: The Morality and Psychology of Gaming*. Abingdon, UK: Routledge.

13 Videogames and the “Theater of Love”

Mark Silcox

Romantic love, according to both common sense and the lore of pop songs, isn't the sort of thing you can get better at just by thinking about it. This widely known caveat hasn't stopped philosophers from antiquity to the present day from writing extensively about the subject. But in doing so, they have tended to be extremely equivocal about the prospect of arriving at any secure conclusions. It is of more than merely dramatic significance that the most romantic encomium to love in any of Plato's dialogues is delivered by an infamous scoundrel to a roomful of drunks (Plato, 2006). And it is not by any means anomalous that Hegel, that most thoroughgoing of rationalists, exalts love in his early writings on the grounds that it is something like the *opposite* of reason (Hegel, 1948).¹

This willingness to acknowledge the hopelessness of their own inquiries represents a rare instance of what one might describe as systematic *playfulness* from some figures in the Western tradition most revered for their sobriety and seriousness. The best explanation for this, I shall argue here, is that romantic love and gameplay are in fact two relatively trivial variants of the same fundamental type of human activity. These two subspecies of human endeavor are, furthermore, so closely entwined when it comes to the disruptive effects they can have upon both one's normal systems of motivation and one's sense of personal identity, that to classify any work of art conjunctively as *both* a game *and* a romance comes about as close as one can in aesthetics to a purely conceptual error.

I shall make my case for this claim slightly indirectly, by first trying to figure out what it would take for a videogame to qualify as also belonging to the genre of romance. This will turn out to require a careful examination of why and when game designers and players might come think of particular games as seeming romantic in nature. It will also require some careful thought about what is essential to (or at least most reliably characteristic of) the romance genre more generally, and what specific types of aesthetic experiences its most avid consumers expect it to deliver. What I shall try to show is that in a certain very important if perhaps very slightly esoteric sense, videogames simply *cannot* also be true romances, and that even strong appearances to the contrary must be dismissed as illusions. I shall then go on to

draw some broader conclusions about the relationship between romance and gameplay, comparing my own views along the way with a fascinating alternate take on the subject provided by Ronald de Sousa.

In his monumental study *Designing Virtual Worlds*, legendary software and game designer Richard Bartle defends a simpler but similar-sounding claim to the one made above (Bartle, 2004). “Romance,” he claims, “doesn’t work for virtual worlds.” The main reason that he gives for this is starkly unequivocal. “Sex does,” he claims, “but . . . if you start out with the former, you rapidly end up with the latter” (2004: 41).

What Bartle means by “virtual worlds” is just the multi-user virtual environments created by old-fashioned MUDs, more recent MMORPGs, and other similar types of games that simulate a shared real-life or fantasy environment. Such “worlds” provide a background against which gamers may interact via gameworld avatars, but they are also *persistent*, in the sense that they might continue to exist and develop even when nobody is interacting with or within them (2004: 1). Here, however, I shall begin by discussing the slightly broader category of digital media that will also include single-user games in which players interact only with bots or NPCs. Later on, I’ll take a look at some other digital media that perhaps lie just outside the boundary of what we’d normally classify as games—so-called “social” and “casual” platforms such as Facebook and Tinder, through which interaction between users at least seems to serve partly non-ludic purposes.

As a matter of historical fact, dozens of computer games have at least been *marketed* as romances in the relevant sense. The fact that they’re a relatively rare phenomenon is doubtless attributable to the fact that the market for videogames has for most of the genre’s history (though less so now than formerly) been adolescent males. Bartle is not, of course, suggesting that romance games are a logical impossibility, only that they’re unlikely to succeed at what they’re supposedly designed to do. But at least a significant subset of the aforementioned games has not been utterly unredeemable artistic failures. A few, in fact, have attracted some modest esteem from critics and consumers who aren’t even normally into that sort of thing.² And although consumer appetite for *otome* and *bishōjo* games—boys’ and girls’ variations of the broader genre of so-called “dating simulators”—has never extended much outside of the Japanese market, it would surely be philistine to classify *all* of these works uniformly as doomed from their very point of conception. Furthermore, many players of MMORPGs and other multiplayer games have fallen very deeply and sincerely in love via the medium for communication and intimacy that these works provide.³ To the extent that such relationships might not have formed otherwise—without the chance they offered for gamers to frolic together as orcs on the fields of Azeroth or borrow each other’s virtual tractors in *Farm Town*—surely the games themselves deserve to be viewed as paradigmatically successful examples of true romance.

Something else a bit perplexing about Bartle’s pronouncement is that he does seem to exhibit a rather uncompromising puritanism about the thematic

separation between sex and romance. After all, most artworks traditionally classified within the genre of romance—both in the contemporary sense of the term that is associated with Nicholas Sparks novels, Meg Ryan films, and *Josei manga*, and in the slightly older sense associated with adventurous tales of chivalry and aristocratic courtship—are always at least a little bit about sex, whether explicitly or allegorically.⁴ In a genre from which most readers routinely expect such titillations, how exclusively sexy would a game or other artwork have to be in order to count as simply “not working”?

I think that a more subtle aesthetic analysis of what it is that distinguishes romance as a genre of storytelling outside of game design actually vindicates Bartle’s diagnosis. Videogames provide a perfectly adequate medium for the plausible *depiction* of romantic love, and it remains perfectly feasible for games with narrative content to successfully incorporate romantic subplots. They may, furthermore, be remarkably helpful as *instruments* of courtship or seduction. But they will rarely, if ever, succeed in fulfilling certain rather specialized additional criteria that would make them be suitable for classification within the romance genre.

What might make it especially difficult for videogames, from farfetched fantasies such as *The Witcher 3* and *Overwatch* to ostensibly more “realistic” works like *Grand Theft Auto* and *The Sims Online*, to achieve the same sorts of effects that can be brought about by any competently written Harlequin paperback? To answer this question, I shall need to come up with a plausible account of what distinguishes romantic fiction from other literary and artistic genres. I shall also need to talk a bit more precisely about what (if anything) about the nature of romantic love itself presents singular and distinctive challenges to game design.

Both videogames and tales of romance have often been denied art status altogether by critics and philosophers on the grounds that they are formulaic.⁵ Insofar as this criticism is directed at the use of specifically narrative formulae, it can only be taken so far, given the apparent possibility (according to at least some students of literature) of classifying *all* narratives, from *The Iliad* and *Infinite Jest* to Aesop’s fables and *Superman* comics, as instances of a small handful of recognizable patterns.⁶ But one characteristic that game designers do often seem to share with romance authors is a commitment to the idea that there is a highly specific set of elements that simply every properly told story must contain. During my own years of employment in the game industry, I was often struck by my colleagues’ unswerving dedication to the idea that absolutely all narratively coherent games must depict a “hero’s journey,” and that in order to do so, each must include episodes identifiable as “the call to adventure,” “the atonement with the father,” “the return of the elixir,” et cetera.⁷ The analogous phenomenon in the writing of romance fiction is the insistence upon principles of storytelling such as Lubbock’s Law (“the story is always written from the heroine’s point of view”), the Alphaman convention (the heroine’s suitor must be the “strongest male of the species”), and, of course, the absolute necessity of a

happy ending. From the 1930s onward, publishing houses such as Mills and Boon, Harlequin Enterprises, and Silhouette Books treated such principles as utterly inviolable in the advice that they gave to aspiring authors (Regis, 1993: 157–158).

I want to set aside the axiological question of whether the tendency to rely on these narrative formulae significantly devalues either romance or videogames as forms of art. There is obviously something to this charge, but of course there are also plenty of avant-gardist types producing innovative work in both fields, and lots of expectation-defying “indie” games and culturally subversive romances. Here I want to focus more upon what the function of these rules of artistic production might be. What psychological benefits (aesthetically significant or otherwise) does following them seem to provide for mainstream readers and gamers?

An accurate but unhelpful one-word answer to this question would be “escapism.” Gamers want to depart this mundane reality for worlds of fantasy, adventure, and improbable spectacle. Romance readers want to visit a world of reliably rewarded passion and redemptive human intimacy. Deeper differences become evident, however, when we try to decode this metaphor of escape a little more carefully. Because, of course, it *is* a metaphor—unless one subscribes to an especially weird form of dualism, one knows full well that the romance reader stays exactly where he is on the sofa after the book is opened, and that even the gamer immersed in a VR environment is still just lunging around her living room in giant goggles.

It seems to me that the reason why most of the sorts of formulae that constrain storytelling in videogames exist—at least, those games that exhibit any narrative structure at all⁸—is in order to get players to think and feel a certain way about their *avatars*. It is not M. Silcox, eager suburban gamer, who is called to adventure and returns with the elixir; it’s Cloud Strife, Super Mario, John Marston, or possibly even Pac-Man. By playing a game with gusto, Silcox will of course identify very strongly with each of these game protagonists. It is one of the widely recognized charms of well-made videogames that this process can at least partly overcome one’s imaginative resistance to seeing oneself as another. Shelby Moser has suggested videogames have the capacity to induce in gamers both “lower-level,” primarily affective empathy and “higher-level,” primarily cognitive empathy for their avatars (Moser, n.d.). And I have argued elsewhere that, assuming the plausibility of certain revisionary but defensible philosophical theories about the nature of the mind, one’s avatar might deserve to be counted as a proper part of one’s very self, for at least the time that it takes to play a game from start to finish.⁹ But even if these claims are plausible, there still remains a fundamental duality between player and game character that the mechanics of the game’s user interface, as well as constraints on the depiction of the character’s point of view, are bound to at least partially uphold.¹⁰

There are games that push this aspect of the medium to its limits by deliberately casting the players as an avatar with very few determinate human

characteristics. In the *Myst* series of games, for example (and especially during the beautifully enigmatic final scene of *Myst 2: Riven*), the player is represented in the gameworld as an utterly nondescript, featureless “Stranger” who enters the game from a dark void that exists between its fictional “worlds.” And in sandbox games such as *Garry’s Mod* and *Minecraft*, the player’s avatar enters the gameworld with no preset aims apart from those that are vaguely suggested by the distinctive quirks of its immediate surroundings. But even in the case of games like these, it seems to me that the way the player is forced to discover the sharp distinction between elements of the gameworld that are stable and those that are manipulable are bound to endow the avatar with a distinct persona (“block arranger” in *Minecraft*; “prop experimentalist” in *Garry’s Mod*).

The narrative formulae that I have described as constraints upon the authorship of romances are, in contrast, designed with the goal of getting readers to think and feel a certain way about *themselves*. In her enthralling sociological study of romance readers, Janice Radway observes that, when women who read romances are asked to elaborate upon the sense in which these stories offer the possibility of “escape,” their answers reveal that what they take this word to mean has decisively less to do with “identifying with a heroine whose life does not resemble their own” and more with an “act of denying the present” (Radway, 1991: 90). Something deeper than mere empathy, or even what some philosophers have characterized as *de se* imagining,¹¹ seems to be taking place here; it appears to be more like readers feel as though *they themselves* are undergoing the ordeals and triumphs these stories actually attribute to the heroine. Radway remarks upon the curious tendency exhibited by the archetypal romance reader to insist upon finishing (or at least “skipping to the ending”) of novels that she does not find particularly well written or enjoyable, on the grounds that “to cease following a story in the middle is to remain suspended in the heroine’s nightmare while she *is* the heroine” (1991: 70). About novels specifically involving rape scenes, one of Radway’s interviewees puts it this way:

I hate myself for reading them. But if I start it, I have to get myself out of there. So I have to read my way out . . . I have to finish it. But it leaves a bad taste in my mouth forever.

(1991: 71)

Critics of the romance genre have recognized this aspect of its effect on readers at least since Cervantes, who wrote *Don Quixote* both as a satire and as an ethical critique of the intrinsic tendency of chivalric romances to “disturb the understandings,” and to induce crises of identity, in even the most “ingenious and well-born gentlemen” (Cervantes, 1992: 486). As Cervantes’ omniscient narrator remarks early on in the book, the poor Don’s resolution to act out the remainder of his life as a knight-errant began

as a simple desire to "take pen in hand, and finish" one of the stories told by a favorite author (Cervantes, 1992: 26).

I shall have more to say later on in the present chapter about the extent to which it might be possible to change the human/computer interface in such a way as to allow for this type of "surrogate" fantasizing, while keeping the relevant interactions at least somewhat game-like. But to the extent that it is an essential feature of the romance genre to provoke this specific type of fantasy, it seems to follow that conventionally designed games—even those such as the examples mentioned earlier on that retain many of the superficial trappings of romance literature, and appeal to consumers within the same markets—would benefit from re-classification.¹²

To the extent that the readerly goal of cultivating a "surrogate" fantasy through the identification with romantic heroes and heroines can be understood as achievable, it becomes correspondingly difficult to distinguish the consumption of romantic narratives from the actual, real-life pursuit of romantic love for one's very own self. To what extent is merging one's very identity with that of a fictional character a fundamentally different process from the sort of "union" between lover and beloved that theologians, philosophers, and popular songwriters have so often described as a real-world possibility? I confess to a certain bemusement whenever this idea of a merging of personal identities is defended (by theologians, especially, in reference to the union of individual souls with God)¹³ in ways that make it seem to amount to something other than a metaphor for either mere physical proximity or the sharing of common interests and intentions.

These observations might seem to suggest that an adequate understanding of the relationship between the consumption of romantic artworks and real-life romantic love should lead one to the view that the latter is simply unachievable. Many critics of the genre, as well as certain sorts of pessimists about our fondest human aspirations, would probably regard this as the right conclusion to reach. In his essay "Love as Theater" (1991), Ronald de Sousa reaches exactly this conclusion, and makes the intriguing suggestion that the pursuit of romantic love is, in fact, best *replaced* with activities that he describes as being much closer to gameplay. De Sousa's ideas about the nature of play are somewhat outside of the philosophical mainstream, but some of the types of activities that he describes could clearly be facilitated through the use of digital media. By examining in fairly close detail how de Sousa defends his prescription, and noting certain very subtle oversights in his account, I shall be able to illuminate more clearly what I mean when I say that romance and gameplay are in fact variants of the same basic type of human activity.

De Sousa proposes that romantic love (which he carefully distinguishes from other types of love such as affection, friendship, and charity) makes "literally impossible demands, which must drive us either to simple self-deception or to some other, more sophisticated response" (1991: 478). But he also suggests that it would be needlessly alarmist to react to this

realization by simply purging ourselves of the natural human desire for romantic love. For

[a]lthough we cannot, by definition, live the impossible, we can sometimes represent it—as witnessed by art as diverse as the poems of Homer and the drawings of Escher. In that vein, the alternative I suggest is that we attempt to apprehend the unattainable realizations symbolized by the impossible demands of romantic love by *playing at love*—by conscious, mutually consenting representations or simulations of love.

(1991: 478)

These remarks commit him to an understanding of the relationship between love and play according to which some forms of the latter are best viewed as a kind of compensation for the frustrations involved in pursuing the former.

I think the de Sousa has hit upon an important near-truth about human psychology here. But his understanding of the mimetic relationship between romantic love and gameplay as fundamentally asymmetrical in character leads him to undervalue both activities. Why not suppose that romance is also itself a kind of substitute for gameplay? Perhaps it is even an activity that might register *as* a type of game to its practitioners, if only they were more self-conscious about it. De Sousa's subtle error in failing to address this possibility seems to me to be provocatively analogous to the view that I have just finished criticizing, namely that there could ever be a subgenre of games that also qualified as romances.

Why does de Sousa regard the goals of the romantic lover as being by their very nature unachievable? He invokes a wide range of literary and historical depictions of romantic love in support of his central claim that it is specifically the *consummation* of a romantic relationship that the ideal of romantic love makes impossible. "What all these legends and stories have in common," he claims, "is the connection of romantic love and death, irrevocable separation, or some other insuperable obstacle" (1991: 480). His diagnosis of the deep reason that lies behind the ubiquity of this trope is that such an achievement would be the attainment of some sort of union with an *object* that the nature of romance constrains us to view as being both the embodiment of a Platonic ideal, perfect in spite of its flaws, and as being an utterly unique particular entity, impossible to replicate. The very existence of such an object, de Sousa intimates, is a metaphysical impossibility. One's beloved would have to simultaneously exhibit the defining characteristics of both ideality and particularity: to be both a thing of this world and detached therefrom.

The deluded belief to which so many of us seem to be susceptible—however temporarily, grudgingly, or hopelessly—that such a paradoxical object *can* be attained need not necessarily be harmful to us. All that we need to do, claims de Sousa, is abandon what he calls "the religious attitude" toward romantic love, which makes us ashamed of the self-deception we

engage in when we pursue it. Having done so, and having thereby become self-conscious about the nature of our own romantic delusions, we will find ourselves able to become “aesthetes of love.” We will become committed to celebrating the very paradoxicality of romantic love via what he describes as “theatrical ceremonies.” Such observances would

consist in staging the erotic gestures of love with a view to pleasure and an aesthetic creation, or re-creation, of the poignancy of love. . . . Such ceremonies require some of the same qualities of art and of the best kinds of nonerotic love—integrity, honesty, intense attention; generosity, imagination, and a capacity to take pleasure in the pleasure of the other. It can therefore be demanding in the sense in which all aesthetic experiences can be demanding. Nevertheless it can remain primarily an aesthetic experience, a piece of theater, a form of play. This is because both parties agree to keep the experience of romantic love confined inside a kind of frame isolated from the rest of their lives and expectations.

(1991: 485)

Such activities, de Sousa suggests, will be more “civilized” than the sorts of pursuits traditionally associated with romantic love, insofar as they will “substitute the activity of the imagination for the grosser propensities which evolution has bequeathed us” (1991: 489).

Setting aside for the moment questions about the accuracy of de Sousa’s metaphysical characterization of the proper objects of romantic love, he is surely not wholly wrong that our well-being might often best be served if we tempered our appetite for romance with a healthy dose of irony and aesthetic detachment. And while the two principal real-life examples he provides of how people “confine” the experience of romance within a “frame”—one-night stands and encounters with prostitutes—strike me as ever so slightly off-putting, it is easy enough for anyone with a bit of experience playing LARPs, tabletop RPGs, or some of the more loosely moderated MMORPGs to think of others. Some of the most artistically ambitious live-action and storytelling games from the Nordic tradition (for example, Emily Care Boss’ *Romance Trilogy* and *The Beast* by Aleksandra Sontowska and Kamil Węgrzynowicz) are explicitly designed to give players the chance to act out courtship roles. Similar byplay amongst player-characters in “adult” tabletop games such as *Shadowrun* and *Unknown Armies* (and online analogues that attract mature audiences such as *World of Warcraft* and *Elder Scrolls Online*) is far from uncommon, though usually somewhat less thought out in advance. The online virtual world *Second Life* even contains its own enduringly popular red-light district. And finally, the real-life acting out of S&M scenes, a pastime de Sousa curiously never considers, surely combines most of the key salient elements from *all* of these other activities.

But how much would such forms of “play” really turn out to have in common with the paradigmatic examples of works from the romance genre? It’s tricky to speculate about the nature of aesthetic experiences that are largely hypothetical—de Sousa surely doesn’t mean that all or even most short-term sexual relationships work in the way that he describes here, and the types of games I’ve suggested as alternatives seem to be a somewhat acquired taste. But my suspicion is that there would be very little overlap. The element of role-playing and self-conscious contrivance introduced into the activity would make playing at being a lover feel a lot more like playing at being a hobbit or a giant robot than being a romantic hero or heroine.

I think that this observation points up a more basic flaw of de Sousa’s account of romantic love itself, which is the extent to which it relies upon the existence of an absolute separation between the purely “theatrical” activity of *playing* at this sort of love (which he endorses) and the “real thing” (which he regards as doomed to failure).

The best way to see where de Sousa’s account goes wrong is to compare what he says about the nature of the beloved object with a highly influential philosophical account of the ultimate objects of *all* gameplay. In his legendary treatise on games, *The Grasshopper*, Bernard Suits defines gameplay as “the voluntary attempt to overcome unnecessary obstacles” (Suits, 2014: 43). Part of what Suits means by this is that the sorts of accomplishments we tend to aim for in gameplay—kicking a ball between two poles on a sports field or reaching the kill screen on an arcade console—would under normal circumstances strike us as largely pointless and nugatory. They absorb our attention to the extent of being regarded as triumphs, however, when we make them more difficult to achieve in certain ways—say, by prohibiting carrying the ball, as in soccer, or by restricting access to the source code of a game like *Donkey Kong*.

It appears to strike de Sousa as just obvious that the romantic lover does not regard his goal of consummation as being nugatory in anything like the way that the goals of games come across in Suits’ characterization. But of course, capturing the king doesn’t *seem* inconsequential to the chess master when she is pondering her next move, any more than sexual congress, marriage, or other romantic intimacies present themselves to the ardent lover. Yet, interestingly, while coming to regard one’s progress through the twenty-two levels of *Donkey Kong* as a matter of indifference would probably cause one to lose the game more quickly (though Mario *himself* never tires upon learning that “our princess is in another castle”), the development of a similar degree of detachment toward an object of romantic love does not seem to have such a reliably destructive effect upon one’s efforts as a suitor. Some of the most insightful literary treatments of romantic love acknowledge this. “Bold lover,” says Keats, addressing the static image of some amorous swain carved on a Grecian urn,

never, never canst thou kiss,
Though winning near the goal yet, do not grieve;
She cannot fade, though thou hast not thy bliss,
For ever wilt thou love, and she be fair!
 (“Ode on a Grecian Urn,” stanza 2)

Here, what de Sousa refers to as “consummation” is treated as having determinately less value than an infinitely prolonged *approach* to the object of one’s love. The infamous protagonist of Kierkegaard’s *Seducer’s Diary* makes a closely similar point in a less uplifting way:

The more devotedness one can bring to erotic love, the more interesting. This momentary enjoyment is a rape, even if not outwardly but nevertheless mentally, and in a rape there is only imagined enjoyment; it is like a stolen kiss, something nondescript. No, if one can bring it to a point where a girl has but one task for her freedom, to give herself, so that she feels her whole happiness in this, so that she practically begs for this devotedness and yet is free—only then is there enjoyment.
(Kierkegaard, 2013: 57)

It’s the process by which one’s partner/victim is brought to the moment of choosing a “consummation” that has all the value, according to this approach; everything that happens afterward is anticlimax.

In neither games nor romance does one’s temporarily inflated sense of the importance of one’s ultimate goal come about as the result of self-deceit, exactly. Rather, it is a kind of voluntary partial inversion of how we are usually predisposed to think about the relationship between means and ends. Just as the gamer aims to complete the fictional mission so that she can undergo the experience of exploring the (virtual) dungeon, so does the online suitor try to get another user’s offline contact info so that she can have the experience of romantic success. Of course, the fact that such a piece of mental jujitsu often deserves to be classified as voluntary by no means implies that it is undertaken self-consciously. One knows that an agent has made a choice because one knows that more efficient means of reaching that agent’s given ends are available (and known to be such),¹⁴ not because of the existence of any singular decisive events that occur during the course of his or her inner life.

This is not to say de Sousa is entirely wrong to suggest that romantic love always requires a crucial element of self-deception. But I think the best way of understanding this aspect of romantic love is not as evidence that the goals of romantic love are intrinsically unfulfillable, and that the pursuit of love should therefore be replaced by merely simulative gameplay. Rather, it should be taken to imply that it is simply impossible to think of oneself both *as a lover* and *as a gamer*—even though the teleological structures of both activities are, in objective terms, fundamentally indistinguishable. Realizing this, we are provided with a deeper (though not fundamentally distinct) explanation than Bartle’s for why there could never be a well-delineated

romance genre of videogames—or at least of the sorts of games characterized by Suits’ definition. I shall provide a final piece of evidence for this hypothesis by taking a brief look at a type of computer-mediated human activity that qualifies as romance precisely because its status as game-like is irrevocably indeterminate.

In traditional computer and tabletop RPGs, fictional characters carefully developed by players to have complementary skills and personalities meet up in taverns and then head out into a diegetic world full of risk and uncertainty to seek out adventure and reward. On commercial dating websites such as eHarmony, Match.com, and OKCupid, users are paired off with potential romantic partners on the basis of data they’ve submitted about their abilities and preferences, with the hope of eventually meeting in “real life” (usually initially at a bar or restaurant) to partake in emotionally risky ceremonies of flirtation, seduction, courtship, and matrimony.

If the foregoing analogy comes across as slightly facetious, this is probably, in the first place, because the latter forms of human-computer interaction are never classified as games in popular conception. Few, I suspect, would be spontaneously inclined to describe them as such without either a palpable air of bitterness (“I thought she loved me, but she was just playing games”) or the adoption of certain retro-sounding idioms from 1970s pop psychology.¹⁵ But as the stylistic tropes and mechanisms of widely used social media get incorporated more and more into both online gaming and computer-mediated courtship, the line between them is bound to blur. This is especially the case in MMORPGs to the extent that gamers communicate “out of character,” and on dating websites when aspiring online seducers represent their “true” selves with imperfect frankness.

Still, there is doubtless at least something to be said for the intuition that somebody cannot count as playing a game if it simply never occurs to him that he might be and he would vigorously deny it if presented with the evidence. What is it, then, that makes online dating services seem so determinately—perhaps even paradigmatically—un-game-like to so many of their users?

I am inclined to think that the psychological phenomenon in question is best understood not in terms of the presence of any additional determinate feature but, rather, merely as the *absence* of a certain kind of second-order knowledge. Like the reader of romances who feels that she must finish a novel even when she has ceased to enjoy it, seekers of romantic love through matchmaking apps are so overwhelmingly earnest in the pursuit of their desires that there is simply no room left over in their psychic economy to remind themselves of the fundamental playfulness of the process itself. This is by no means meant to denigrate the relevant desires, nor should it be interpreted as suggesting that the rites of online courtship are somehow less valuably “authentic” than delightful “real-world” activities such as dancing a quadrille or mooching around singles bars. I have several friends, in fact, who have used these media as a stepping-stone to intensely stable,

affectionate, and committed long-term relationships. If the thought of such attachments forming between players of a hyperbolically violent MMORPG holds ever so slightly more charm to me, that is probably just the reflection of a philosopher’s prejudice in favor of the slightly more examined life.

In one of the most philosophically provocative and enigmatic passages of Suits’ *The Grasshopper*, the title character describes a “recurring dream” in which,

it is revealed to me—though how it is revealed I cannot say—that every-one alive is in fact engaged in playing elaborate games, while at the same time believing themselves to be going about their ordinary affairs.

(2014: 11)

When the grasshopper goes around in his dream informing people that their efforts at carpentry, politics, murder, and philosophy are really just games in disguise, they respond by simply “ceas[ing] to exist” (2014: 12). The implicit suggestion seems to be that all or most everyday purposive human activities were always already games from the beginning. If this really is the case, then perhaps, in a spirit of rationalism, we might wish that this fact will one day be made manifest to us, hopefully without the disastrous consequences the insect dreams about. But when it comes to romantic love—whether it be experienced intensely through real-life courtship or diffusely via narrative artworks—the lusory aspect of the endeavor is concealed from us to a far greater degree than that of any videogame during which one at some point must choose to press “play.”

Notes

1. In an early textual fragment he describes reason as that which “sharply opposes its determining power to what is determined,” whereas “love neither restricts nor is restricted; it is not finite at all” (1948: 304).
2. Xing Xing’s lovely 2000 point-and-click adventure game *The Legend of Lotus Spring* remains one of the most visually innovative games of the post-*Myst* era of commercial game design, as well as one of the only games that has ever made me cry. Other examples of “romance” games that have been widely well-received by critics include Infocom’s 1987 interactive fiction *Plundered Hearts* and PigeoNation Inc.’s 2011 “visual novel” *Hatoful Boyfriend: A School of Hope and White Wings*.
3. For a discussion of a somewhat legendary example from *Second Life*, see Coggburn and Silcox (2009: Ch. 1).
4. In the *Roman de la Rose*, a thirteenth-century epic-length poem that is one of the first works of Western literature to be unequivocally classifiable as a romance, the protagonist spends almost 200 lines trying to shove a wooden staff into a rose-bush between two pillars, in order to gain access to the eponymous flower within. The account the poet provides of his physical exertions while attempting this feat is not subtle. See Guillaume de Lorris and Jean de Meun (1980: 351–354).
5. Grant Tavinor has pointed out that videogames seem to belong in the much-maligned category of “mass art” on the grounds that, like action movies, TV

- series, and pulp thrillers, they appeal to audiences that are “untutored” apart from the preparation that they receive via “formulaic repetition” of easily recognizable tropes from these other genres (Tavinor, 2011). Noël Carroll discusses the formulaic nature of romance literature in considerable depth in (Carroll, 1994).
6. See, for example, Booker (2004).
 7. These terms have their source in Joseph Campbell’s hugely influential study *The Hero with a Thousand Faces* (2008) and Christopher Vogler’s *The Writer’s Journey: Mythic Structure for Writers* (2007).
 8. Discerning the boundary between narrative and non-narrative games is an extraordinarily difficult problem itself, of course. *Red Dead Redemption* certainly qualifies as narrative; *Pong* at least seems not to. But what about *Pac-Man*? Or Civilization? The question has provoked much of the most contentious debate in the philosophy of videogames, largely thanks to the influence of Grant Tavinor’s views, as defended in *The Art of Videogames* (2009). Rather than wade into this debate, I shall simply stipulate that I am only concerned with games that do tell stories. I, at least, find it impossible to imagine a type of game that did not qualify as a narrative, but about which the question “Is it a romance?” might still provoke dispute.
 9. See Cogburn and Silcox (2009: Ch. 1).
 10. The types of devices currently available for VR gaming (for example, the Oculus Rift, Google Cardboard, the Icaros) blur the line between self and avatar more effectively than anything that has preceded them. But until they are able to provide a means to utterly efface the transition from “real” world to gameworld, it seems to me that the boundary still holds. To the extent that one is prepared to countenance the possibility of thus-far merely hypothetical forms of VR gaming like those depicted in science fiction films such as Mamoru Oshii’s *Avalon* and David Cronenberg’s *Existenz*, the points made in what follows about the distinction between gaming and romance might start to lose some of their plausibility.
 11. See Kendall Walton (1990: 29) and Peter Alward (2006). To imagine a situation *de se* is to imagine oneself experiencing it, rather than just imagining certain claims about it as being true or certain objects within it as being a certain way. In the context of arguing against the idea that empathizing with fictional characters requires *de se* imagining, Alward remarks that, when a reader *seems* to take on the attitudes of a character in fiction, what is more likely to be going on is something like an inverse correlation between the reader’s reliance on the authority of the author and the incorporation of her own personality traits into her conception (or mental “simulation”) of the protagonist (2006: 456). This actually sounds closer to me to the sort of “denying [of] the present” that Radway associates with readers of romance.
 12. I am here perhaps rather cavalierly assuming that genre distinctions within the arts more generally are most felicitously drawn in terms of the effects that works can be expected to have upon their audiences, rather than on the basis of common stylistic tropes or aspects of marketing. Whatever the overall defensibility of this way of thinking about genre, it does seem to have a certain special plausibility with respect to the classification of specifically *interactive* artworks.
 13. See Bernard Blankenhorn (2015).
 14. This might be less obvious in the case of the user of online matchmaking apps, since a stereotype exists that many such present-day users only avail themselves of these services because of frustrations they’ve experienced at more traditional forms of courtship. But recent research suggests that both the stereotype and the phenomenon itself are quickly becoming less common. See the Pew Research Center’s 2013 report on “Online Dating and Relationships” (Smith and Duggan, 2013).
 15. See Eric Berne (1964).

References

- Alward, Peter. (2006). “Leave Me Out of It: *De Re*, but Not *De Se*, Imaginative Engagement with Fiction.” *The Journal of Aesthetics and Art Criticism* 64 (4): 451–459.
- Bartle, Richard. (2004). *Designing Virtual Worlds*. Indianapolis: New Riders Publishing.
- Berne, Eric. (1964). *Games People Play: The Psychology of Human Relationships*. New York: Grove Press.
- Blankenhorn, Bernard. (2015). *The Mystery of Union with God: Dionysian Mysticism in Albert the Great and Thomas Aquinas*. Washington: The Catholic University of America Press.
- Booker, Christopher. (2004). *The Seven Basic Plots: Why We Tell Stories*. London: Continuum.
- Campbell, Joseph. (2008). *The Hero with a Thousand Faces*. Novato, CA: New World Library.
- Carroll, Noël. (1994). “The Paradox of Junk Fiction.” *Philosophy and Literature* 18 (2): 225–241.
- Cervantes, Miguel de. (1992). *Don Quixote*, trans. Charles Jarvis. Oxford: Oxford University Press.
- Cogburn, Jon, and Mark Silcox. (2009). *Philosophy Through Video Games*. Abingdon, UK: Routledge.
- de Lorris, Guillaume, and Jean de Meun. (1980). *The Romance of the Rose*, trans. Charles Dahlberg. Hanover, NH: University Press of New England.
- de Sousa, Ronald. (1991). “Love as Theater.” In *The Philosophy of (Erotic) Love*, edited by Robert C. Solomon and Kathleen Higgins, 477–491. Lawrence: University of Kansas Press.
- Hegel, G. W. F. (1948). “Love.” In *Early Theological Writings*, trans. T. M. Knox. Philadelphia: University of Pennsylvania Press.
- Kierkegaard, Søren. (2013). *The Seducer’s Diary*, trans. Howard V. Hong and Edna H. Hong. Princeton: Princeton University Press.
- Moser, Shelby. (n.d.). “Me, Myself & My Avatar: Virtual Reality and Empathy.” Unpublished manuscript.
- Plato. (2006). “Symposium.” In *Plato on Love*, edited by C. D. C. Reeve, trans. Alexander Nehemas. Indianapolis: Hackett.
- Radway, Janice A. (1991). *Reading the Romance: Women, Patriarchy, and Popular Literature*. Chapel Hill: University of North Carolina Press.
- Regis, Pamela. (1993). *A Natural History of the Romance Novel*. Philadelphia: University of Pennsylvania Press.
- Smith, Aaron, and Maeve Duggan. (2013). “Pew Report on Online Dating and Relationships,” www.pewinternet.org/2013/10/21/online-dating-relationships/ (accessed March 18, 2017).
- Suits, Bernard. (2014). *The Grasshopper: Games, Life, and Utopia*, 3rd ed. Peterborough: Broadview Press.
- Tavinor, Grant. (2009). *The Art of Videogames*. Oxford: Wiley-Blackwell.
- . (2011). “Video Games as Mass Art.” *Contemporary Aesthetics* 9, www.contempaesthetics.org/newvolume/pages/article.php?articleID=616#FN8 (accessed July 20, 2017).
- Vogler, Christopher. (2007). *The Writer’s Journey: Mythic Structure for Writers*. Studio City, CA: Michael Weise Productions.
- Walton, Kendall L. (1990). *Mimesis as Make-Believe*. Cambridge, MA: Harvard University Press.

14 Pornographic Videogames

A Feminist Examination

Mari Mikkola

1. Introduction

Pornography and videogames have much in common: both are typically visual in some sense; they involve sizable markets and have gone from fringe activities to industrially produced and mass consumed ventures; they are considered as entertainment by some, but as morally insidious by others; and the content of both is frequently said to be somehow morally problematic, for instance, by containing violent scenarios that are also sexist and/or racist. From a feminist perspective, both are frequently claimed to objectify women and to glorify sexualized violence against women. Such arguments against pornography are by now well rehearsed and well known (Papadaki, 2015). As the popularity of videogames has increased, feminist gamers have begun making similar arguments: women in videogames are largely absent as active characters, and when they do appear they are highly sexualized extras to the gameplay.¹ Anita Sarkeesian is probably the most famous feminist gamer who has critiqued a number of highly popular videogames as sexually objectifying women. She defines such objectification as

the practice of treating or representing a human being as a thing or mere instrument to be used for another's sexual purposes. Sexually objectified women are valued primarily for their bodies, or body parts, which are presented as existing for the pleasure and gratification of others.

(www.youtube.com/watch?v=4ZPSrwedvsg, 5:07)

This understanding draws heavily on Martha Nussbaum's well-known view. For Nussbaum, objectification involves treating a person as an object, and such treatment involves seven possible features:

- *instrumentality*: treating a person as a tool for the objectifier's purposes;
- *denial of autonomy*: treating a person as lacking in autonomy and self-determination;
- *inertness*: treating a person as lacking in agency;
- *fungibility*: treating a person as interchangeable with other objects;

- *violability*: treating a person as lacking in boundary-integrity;
- *ownership*: treating a person as something that can be bought or sold;
- *denial of subjectivity*: treating a person as something whose experiences and feelings need not be taken into account.

(Nussbaum, 1995: 257)

Nussbaum's understanding of objectification has been widely used in feminist critiques of (at least some forms of) pornography. According to Sarkeesian, many of these features can be found in popular videogame franchises such as the *Grand Theft Auto* series, which makes such games problematic from a feminist perspective. Videogames and pornography seemingly share the feature of involving sexually objectifying depictions of women.

There is, however, a more obvious way in which some videogames are akin to pornography: in presenting sexually explicit or erotic material. In the United States, *Grand Theft Auto: San Andreas* was rated AO following release of the "Hot Coffee" mod, which allowed access to an additional mini-game containing crude depictions of sexual activities. Furthermore, entire genres of videogames are explicitly pornographic: *eroge* is a subgenre of Japanese videogames known generically as "anime." They do not just contain pornographic content; rather, the gameplay consists of explicit sexual activities that would not be amiss in a pornographic film. In this chapter, I will examine these types of explicitly pornographic videogames (PVGs). In short, the chapter asks: what (if anything) is problematic about them from a feminist perspective? One might think that if videogames like the *GTA* series are worrisome in objectifying women, the same is true of *eroge*. I will, however, argue against this and hold that *eroge* PVGs are problematic for a different reason.

The chapter begins by outlining what *eroge* is (section 2). I will then consider why objectification of women does not quite capture its problematic aspects (section 3). Next, I will consider an alternative explanation: that such PVGs infantilize women. However, I go on to argue against this suggestion as well (section 4). Finally, I will discuss what more plausibly undergirds the morally problematic aspects of *eroge*: that these games sexualize youth (section 5). Nonetheless, I will argue that we cannot morally condemn the genre as a whole on this basis.

2. What Is *Eroge*?

As mentioned, *eroge* is a type of Japanese PVG usually created in the *anime/hentai*-style. There is no set definition for gameplay, but most often it simply involves scenes of the player-character having or attempting to have a sexual encounter with other characters. Bluntly put, the gameplay consists of having or seeking to have sex. This is usually as a reward for successfully fulfilling some tasks, but not necessarily so—sexual activities can also be engaged in for their own sake. Gameplay is often in the style of

visual novels or dating sims (relationship simulating role-playing games). Other gameplay genres include different types of role-playing, mahjong, or puzzle games. While some games involve elaborate fantasy storylines (more on this shortly), there are notorious examples consisting of no “conventional” gameplay and involving mere simulations of sex. Probably the most infamous PVG of this kind is *RapeLay*, where the gameplay consists solely of a male character stalking and perpetrating sexualized violence against female characters, including adolescent girls. A *prima facie* less problematic example of an *ero*ge game is that of *Boob Wars*. Here is a description from an *ero*ge game review site:

By the beginning of the 22nd century, a strange phenomenon began to affect the cup sizes of women. Gone were the days of medium-sized chests, as women’s breasts began to split into only two sizes—A-cup and below, and E-cup and above. As a rift began to form between the two groups, they split into separate tribes—“Small Chests” and “Big Breasts”. The two tribes began to quarrel over what breast size was better, and a war which later became known as the “Boob Wars” broke out, embroiling the world in conflict. 87 years later, the war has begun to take its toll on the land and its people. The death toll continues to climb as a result of the hatred between the two tribes. . . . The secret organization of “Erorists”, known as Eagle, decides that it is time for the senseless war to end, by any means necessary. They summon their best Erorist Takamura Manabu—a man well-known for his ability to fuck women from dusk until dawn—and order him to seduce the Queen of the Flat Chests . . . and the Queen of the Big Breasts . . . in order to bring the conflict to a close. Having trained his body (and his cock) day and night, Manabu accepts this challenge of a lifetime.

(www.lewdgamer.com/2016/06/08/review-boob-wars-big-breasts-vs-flat-chests/. Accessed 31th of March 2017)

*Ero*ge PVGs typically depict female characters as childlike and naïve, with eyes that are overly exaggerated in size. Female characters are often dressed in sexualized ways (for example, wearing girls’ school uniforms, depicted as witches, princesses, fairies, or waitresses). In some gameplay, the players can themselves dress female characters in these ways. Female characters also frequently act like young girls: their voices are high-pitched; they are depicted as being easily frustrated and as throwing tantrums; and female characters often display a stereotypically childish temperament.

3. Objectification of Women

Why then might *ero*ge PVGs be problematic from a feminist perspective, if at all? One immediate answer is that they objectify women in a manner akin to the *GTA* franchise that (as some hold) contains pornographic depictions.

I will argue next that this does not quite capture why we should find *eroge* problematic.

As noted, objectification typically involves treating someone as something. But PVGs do not involve any actual people; rather, they contain cartoon depictions of creatures who are not even always obviously human beings. One might think that the objectification of objects and fantasy creatures is *prima facie* morally unproblematic (if possible at all), and it certainly raises no specific feminist issues. In this sense, PVGs depart from pornography: in its standard form, the latter involves actual human performers who are apparently treated in ways that celebrate and encourage the sexual objectification of flesh-and-blood women more generally. Now, we might respond that even if *eroge* does not always depict human beings, it depicts persons nevertheless. After all, the argument goes, being a human being is not equivalent to being a person. Humanity is about being an anatomically modern human, whereas personhood is about having a first-person perspective and psychological continuity (or at least the appearance of such continuity). Hence, one might claim, the problem with *eroge* is that non-human (apparent) persons are treated as sex objects. And we can understand this as a kind of objectification. For instance, Andrea Dworkin holds: “When objectification occurs, a person is depersonalized, so that no individuality or integrity is available” (2000: 30–31).

However, even if *eroge* is objectifying in this depersonalizing sense, this does not suffice to make it a target of feminist condemnation. This is because Nussbaum’s sense of sexual objectification that feminist critics of videogames rely on can be morally benign—for Nussbaum, some instances of sexual objectification can even be positive. Whether objectification is objectionable or not depends on the context in which it takes place. If objectification is symmetrical and mutual in that it is “undertaken in a context of mutual respect and rough social equality” (Nussbaum, 1995: 275) and “there is no malign or destructive intent” on the part of the objectifier (281), sexual objectification is morally benign. This is because under these conditions, Nussbaum holds, objectification does not violate the autonomy of the person objectified. If the context of *eroge* then is characterized by equality, mutual respect, and consent, sexually objectifying depictions of female characters are morally benign. Of course this raises a question about what the relevant context here is. Nussbaum herself is not particularly clear on this and characterizes the relevant context as “the overall context of the human relationship” (Nussbaum, 1995: 271). When thinking about the videogame context, we can identify at least three candidates: (1) the game space (*RapeLay* vs. *Boob Wars*), (2) the individual gamer’s space, and (3) the gamers’ societies at large (Japan vs. other nations). Let me elaborate.

First, depending on the game space, the objectified characters might still retain a claim to autonomous agency. This is precisely why the *GTA* franchise is apparently objectifying: what happens to the female characters in game space leaves them no room for autonomous agency. They are merely

sexualized throwaway extras that are quickly discarded, and often with extreme violence. However, whether an objectified characters' autonomy is violated or not depends on the specifics of the gameplay. It is at least arguable that in some *eroge* PVGs, like in *Boob Wars*, the female characters' autonomy is not violated; hence, the objectification found in the game space would be (following Nussbaum) benign.

Second, the individual gamer's social space or milieu can be thought to mitigate objectionable objectification found in game space, so that the objectification depicted will have no requisite behavioral effects. One recurrent claim feminist critics of pornography make is that pornography functions like subliminal advertising that shapes consumers' attitudes and actions, where women's objectification is the mechanism by which such conditioning takes place. One might say the same about *eroge* PVGs. However, imagine that the gamer's upbringing and family life have instilled in the gamer suitable critical capacities to appropriately reflect on and block the influence of *prima facie* problematic instances of objectification. This idea is akin to (the actual example of) progressive parents educating their children about the lyrics found in contemporary rap music, which are often deeply misogynistic and homophobic. Critically discussing with one's children the lyrical contents of music (or depictions found in videogames) may prevent those contents from insidiously shaping the immature consumers' views about women. The values and commitments individuals thus develop due to their particular upbringing and socialization can create highly individualized contexts, where the gamer will (correctly) identify and condemn problematically objectifying depictions of women, while at the same time being able to enjoy other aspects of gameplay (like the graphics used or technical skills needed to advance in the game). Bluntly put, upbringing can make individual gamers responsible consumers, which can block the influence that problematic objectification of women in game space might have had on individual gamers' behavior.

Third, the background social conditions may affect the context that determines whether objectification is benign. It is not uncommon for feminist critics of objectification to hold that were background social conditions characterized by gender justice and equality, incidental instances of objectification would be much less morally exigent. That is, sexual objectification is worrisome due to it taking place against a social background where women are structurally disadvantaged in many areas of life. As long as our social conditions are patriarchal and outright sexist, sexual objectification of women will be deeply problematic. But if such structural disadvantage were absent, sexual objectification would be incidental: we might find it distasteful, but not a grave moral concern from a feminist perspective. With this in mind, one might hold that depending on the background societal conditions within which gaming takes place, the moral character of objectification found in videogames differs. Although no current society is gender just, there are differences in how patriarchal they are. For instance,

we can look at how sexual assault legislation is formulated and practiced, among other measures. In societies with dismal legislation outlawing sexualized assaults and low conviction rates, one might claim that objectification of women in *eroge* PVGs is more morally pressing than in societies that have exemplary legal provisions. Admittedly, the assessment of whether the context (and the choice of the relevant context) can render objectification benign must be made in a piecemeal fashion. However, the upshot of this is that if the context can morally mitigate sexual objectification found in instances of *eroge*, objectification of women is not something that is intrinsically problematic about such PVGs. And so, a feminist condemnation of *eroge* PVGs on the grounds that the genre involves morally problematic objectification of women looks unlikely to succeed. In short, depending on the context, at least some *eroge* PVGs arguably involve benign objectification (like *Boob Wars*).

4. Infantilization of Women

Might there be an alternative way to cash out what makes *eroge* PVGs as a genre morally condemnable from a feminist perspective? Anti-pornography feminists typically argue that pornography harms women *as a group*. Pornographic materials harm women in playing a crucial role in their exploitation and oppression by depicting the abuse and degradation of women in endorsing and encouraging ways. Pornography *eroticizes* gender inequality. Depictions of women as childlike are conceivably part of this in that they play a part in making women's submissiveness and lack of authority over their bodies "sexy." With this in mind, let's explore next the view that *eroge* is problematic from a feminist perspective in endorsing and celebrating childlike depictions of women—in short, in infantilizing women.

We might consider Stephanie Patridge's (2011, 2013) "social incorrigibility argument" to expand on this idea. Although she does not develop this in relation to childlike depictions of women, Patridge's position can easily be adapted to it. On her view, appreciating and taking pleasure in inegalitarian sexual images of women is *per se* a moral failure because "the images themselves are morally problematic" (2013: 53). For Patridge, a conception of women as being for men's sexual delectation operates as a mechanism to undermine women's autonomy that contributes to their oppression. Hence, a person who appreciates and enjoys such images is "guilty of a kind of moral obliviousness: he fails to see the obvious social relevance of this imagery and what this [morally] requires of him" (Patridge, 2013: 53–54). What undergirds this is that inegalitarian sexual imagery has incorrigible social meanings. A meaning is incorrigible in that it is "exceedingly difficult to overturn" (Patridge, 2011: 308), and one cannot avoid moral condemnation by claiming that one did not intend to reproduce morally problematic meanings. Moreover, a meaning is social in that "it is explained by contingent facts about a particular social reality" (Patridge, 2013: 54). Patridge

considers the example of a cartoon depicting Barack Obama eating a watermelon. This cartoon is *per se* problematic even if it causes no particular harm to Obama and does not encourage further racialized harms. The cartoon is a racist insult and as such has a racist incorrigible social meaning: a meaning that is difficult to overturn, that cannot be defended by claiming that the cartoon was not intended to be a racial insult, and where its being an insult is explained by social and historical facts about US slavery and continued racial injustice. Racially and/or sexually inegalitarian imagery is an extension of racist and sexist social realities (2013: 55). Given their close proximity to our actual social realities, one could not have failed to see the incorrigible social meanings of the imagery, and so taking pleasure in their consumption is illustrative of a morally condemnable character—something has gone wrong with the consumer’s attitudinal response to the imagery. Therefore,

To insist that one’s imagination is one’s own private affair, detached from one’s own actual commitments and similarly detached from the contextual moral facts on the ground, amounts minimally . . . to the thumbing of one’s nose at a requirement of solidarity with the victims of oppression. This is an obvious vice of character . . . [and one is] guilty of being racially and sexually insensitive.

(Patridge, 2011: 310)

Elsewhere Patridge puts the point slightly differently: “there is something wrong with such individuals [who enjoy morally condemnable imagery], antecedently, otherwise they would be incapable of bracketing” requisite incorrigible social meanings (2013: 55). Bluntly put: a morally virtuous agent would not consume morally problematic imagery for the sake of pleasure.

In line with this, we can say that infantilizing *anime* depictions of women have an incorrigible social meaning. Depictions of women as childlike, fickle, immature, and incapable of making up their own minds (for example, in relation to sex) are extremely persistent, and women in “our” social realities are often viewed and treated as such: for example, just think about phenomena like mansplaining and how women are considered to lack credibility in many areas of life. And so, the argument goes, we can condemn *eroge* imagery in and of itself for perpetuating incorrigible social meanings that infantilize women, and we can critique those who take an attitude of sexual delectation toward such imagery. Something has gone wrong with the consumer’s attitudinal response to the imagery.

There is much that I find compelling about this line of thought—just think of someone who enjoys playing *RapeLay*. But what about less obviously problematic PVGs like *Boob Wars*? The gameplay and the plot are rather idiotic and adolescent, for sure, but we would probably not find a gamer who enjoys *Boob Wars* as morally reprehensible as someone who

enjoys *RapeLay*. And so, the morally criticizable features intuitively depend on the individual games—the genre of *eroge* does not seem to be problematic as a whole.

Furthermore, I am unconvinced that Patridge’s line of argument succeeds in showing that the depicted images are *per se* morally problematic (as she aims to). First, the morally problematic nature of some imagery ultimately hinges on the background social and historical conditions. For instance, the above-mentioned Obama cartoon would not be problematic were the historical and social facts otherwise. Hence, it does not seem that it is the surface *imagery* or what is depicted that is problematic; instead, it is the background social conditions that give meaning to the imagery that are to blame. Were the prior harmful social context absent, Patridge accepts, inegalitarian erotic and/or racist imagery might not be problematic. In this case, the defense of “It’s just a game!” from the players of *RapeLay* might be acceptable. Still, if background oppression plays a crucial role in our ability to critique certain *prima facie* problematic imagery, this does not allow us to critique the eroticized infantilizing imagery of women by looking at that imagery alone. The main target of critique becomes the background social conditions, not the game genre itself.

Second, the social incorrigibility argument ends up condemning those who find morally problematic imagery enjoyable. Taking pleasure in consuming morally reprehensible imagery shows that it is the *consumer* who is morally vicious because the individual is insensitive to actual oppressive social relations. However, this does not substantiate the view that there is something intrinsically condemnable about the imagery as such. In sum, then, a feminist condemnation of *eroge* PVGs on the grounds that they involve infantilizing depictions of women ends up condemning either the social context that renders such depictions incorrigible or the gamer who takes pleasure in such depictions. The videogame genre itself escapes condemnation just on the basis of depicting women in infantilizing ways.

5. Sexualization of Children

Above we looked at whether women’s objectification or their infantilization in *eroge* PVGs can ground a feminist condemnation of the genre. I argued that neither allows us to do so. The flipside of women’s infantilization might however do the job: namely, what is problematic about *eroge* is that its imagery sexualizes children and youth. This is an intuitively powerful argument against *eroge*, but in order to spell it out in more detail we must establish why sexualization of children in general is problematic. I am of course not questioning that it is; rather, the philosophical challenge is to show on what grounds. Doing so enables us also to elucidate what is problematic about *eroge* PVGs. I will approach this issue by examining why pedophilic digitally generated imagery (DGI for short) might be morally reproachable.

I take it as obvious that depictions of actual child sexual assaults are morally problematic. But why hold that virtual depictions of children and adolescents in sexualized contexts are also seriously problematic? After all, they do not involve assaults on any actual children. Neil Levy (2002) considers putative reasons to find pedophilic DGI harmful. First, viewing it may cause consumers to commit actual child abuse. Second, such materials may be used to groom children for abuse. Third, allowing pedophilic DGI may render laws against depictions of actual child sexual abuse unenforceable. Fourth, Internet pedophilic imagery may allow isolated potential perpetrators to contact each other, thus increasing the probability of actual child abuse. Levy, however, rejects all of these suggestions with the following counterarguments. To begin with, no reliable evidence supports a causal connection between viewing child sexual assaults (actual or virtual) and committing them. Furthermore, there is no strong evidence that depictions of adult-child sex make a difference to perpetrators' ability to groom children for abuse, as there are many other effective means to do so. Third, according to Levy, "there is every reason to think that if virtual child pornography is legal, pornographers will abandon production of actual images of children in favor of it. The price of producing virtual pornography is low and falling, so monetary incentives will play a part in encouraging this movement" (2002: 320). Finally, if Internet pedophilic imagery encourages users to contact each other, it is likely to arise out of Internet discussions among the like-minded, and not out of the viewed images themselves.

How plausible are Levy's rebuttals? I will discuss the first point in more detail shortly—but what about the others? We might grant the second evidential point, but the last two are less compelling. First, one might wonder about whether there would be so many like-minded people were Internet depictions of adult-child sex less prevalent. This is an empirical matter, but should suffice to convince us that Levy's rebuttal is not obviously compelling. Second, it is far from obvious that we have *every reason* to think that legalizing pedophilic DGI reduces non-digitally generated imagery. In fact, this is the case in the USA and Japan, but there is no robust evidence to back up Levy's claim (though admittedly finding good information and research on this matter is extremely difficult). Levy's view also assumes that pedophilic imagery is produced and distributed mainly for profit. Although it certainly generates revenue, it is hard to gain reliable figures on this. What is nevertheless clear is that producing imagery of actual child sexual abuse is cheap and requires hardly any technological know-how beyond camera use. Producing comparable digitally generated materials requires much more advanced skills and technological tools, which renders Levy's claim questionable. Furthermore, to assume that users would be satisfied with digitally generated imagery over images of actual abuse is far from clear. This presupposes that viewers are primarily interested in some sexual aspects of the imagery, which ignores the abusive side of the phenomenon.

What about the causal connection between viewing sexual imagery involving children (actual or virtual) and committing child sexual abuse? This is extremely difficult to show conclusively, although conviction statistics from the USA are somewhat instructive: those convicted of online visual-abuse (for possessing indecent images of children) have not generally committed contact-abuse, and those convicted of contact-abuse are not, generally speaking, users of (what legally would fall under) child pornography. Only a surprisingly small segment of offenders have committed both visual and contact-abuse. Instead, contact-abusers are much more likely to be heavy consumers of pornography with adult performers (Malamuth and Huppin, 2007). This suggests that there is no causal connection between viewing sexual imagery involving children and committing contact-abuse.

This might be too quick, however. Contact-abusers tend to be much more opportunistic and abuse children who are in close proximity to them (Malamuth and Huppin, 2007). In this sense, they may not have viewed sexual imagery of children to “whet their appetites,” but have rather taken advantage of events that have unfolded around them. Moreover, virtual-abusers might have gone on to commit contact-abuse had they not already been caught and convicted: moving from virtual-abuse to contact-abuse requires overcoming social taboos and restrictions, which may place barriers that merely slow down the causal story. With this in mind, Paul and Linz empirically tested the assumption that exposure can result in the “sexual abuse or exploitation of minors becoming acceptable to and even preferred by the viewer” (2008: 4). The researchers experimented with the popular genre of “barely legal” pornography that depicts adults over the age of 18 portrayed as being younger than 18 years of age.² Paul and Linz hypothesized that the primary conceptual associations barely legal pornography involves pertain to youth and sexual suggestiveness—associations that I take to be operative in the sexualization of children. If exposed individuals develop a network of associations and schemas that includes (i) eroticism and/or sexuality with (ii) youth, then viewers should come to associate sexuality with youthful depictions even when the depictions are *not* overtly sexual. That is, if viewing barely legal pornography results in exposed individuals coming to associate depictions of youth with sexuality even when the depictions are not overtly sexual, viewing barely legal pornography seemingly contributes to conceptual associations between youth and sexuality.

Paul and Linz tested five hypotheses, of which the following two are relevant for the current discussion:

Hypothesis 1: Compared to individuals exposed to control depictions, individuals preexposed to sexually explicit depictions of females who appear to be minors will be faster to recognize sexual words presented directly after sexually neutral images of female minors.

(2008: 6)

Hypothesis 5: Male participants exposed to barely legal sexually explicit depictions will be most likely to find the idea of sexually explicit content featuring minors as well as adult sexual interaction with minors more socially acceptable compared to females and those exposed to other forms of sexually explicit content.

(2008: 9)

They found support for Hypothesis 1 in that those exposed to barely legal pornography showed a stronger cognitive association between youth and sexuality than those exposed to materials with older-looking models. However, Paul and Linz found no support for Hypothesis 5: that exposed participants would subsequently find sexually explicit materials featuring actual minors or sexual interaction between adults and minors to be more socially acceptable or legitimate than participants pre-exposed to sexually explicit depictions with older-looking performers. And so (one might conclude) although barely legal pornography contributes to forming stronger cognitive associations between youth and sexuality, this is morally troubling only if such cognitive associations causally contribute to the acceptability of actual sexual abuse of children and adolescents. Since no support for the latter hypothesis was found, we should not find pornography that generates such cognitive connections morally problematic. Returning to the topic of *eroge*: while it may contribute to forming stronger cognitive associations between youth and sexuality, this is in and of itself not worrisome because such cognitive associations seemingly do not cause contact-abuse. Subsequently, the argument may go, sexualization of children in *eroge* is much less morally worrisome than one might pre-theoretically hold.

My contention is that this conclusion is too fast, though. One explanation for why Hypothesis 5 could not be confirmed is that there are strong inhibitors for adult-child sexual behavior. Sexual arousal may not lead to action, among other things, since social actors know the potentially serious social and legal repercussions of acting on their desires. Paul and Linz speculate that we may see disinhibitory effects *if* viewers are emotionally desensitized so that their feelings of anxiety and disgust decrease. After all, there is evidence that “repeated exposure to depictions that juxtaposed violence and sex resulted in diminished affective reactions and the tendency to judge behaviors such as sexual assault and domestic violence as less harmful to women” (Paul and Linz, 2008: 34). And so, it might be too quick to give up the causal thesis. Furthermore, desensitization occurs when, through a process of repeated exposure, one becomes habituated to a particular stimulus that initially evoked strong emotional or behavioral reactions (Gunter, 2002). So, although Hypothesis 5 was not confirmed, this may be due to the length of the experiment. As Paul and Linz put it, even though their study says little about the likelihood that exposed individuals will act on cognitive

associations formed, it would be inappropriate to reject a causal connection outright (2008: 35–36). This is because

[t]he first step in any intentional behavior . . . may be a cognitive consideration of performing that behavior. Therefore, exposure to any stimuli that makes the consideration of a particular behavior more likely to occur also seems likely to increase the probability that an individual will participate in that behavior.

(36)

Hence, although there is no conclusive proof of a causal connection between viewing child sexual assaults (actual or digitally generated) and committing them, support found for Hypothesis 1 undermines the claim that viewing such materials poses no moral or legal worries at all.

Might there be a way to morally critique sexualizing depictions of children, even if their viewing has not been shown to cause contact-abuse? Might there be ways to morally critique such imagery in and of itself? In order to explore this, consider a parallel between “deviant” fantasies and virtual imagery. If we can establish that there is something problematic about the former in itself, we might find a way to show that the same is true of the latter. John Corvino considers deviant or “naughty” sexual fantasies “*either imagined or acted out, [as] involving the eroticization of an activity that is itself morally wrong*” (2002: 214)—that is, such fantasies involve actively regarding morally vicious activities with sexual desire, which (in a sense) contaminates the fantasies and renders them morally vicious too. Now consider fantasies with sexualizing depictions of children.³ Insofar as pedophilic fantasies involve actively regarding a morally vicious activity with sexual desire, such fantasies would be morally vicious too. By extension, imagery that captures or mirrors such fantasies could be considered morally condemnable as well.

Although I find this argument pre-theoretically compelling, it does not yet quite suffice. Consider the same line of argument but replace the morally wrongful activity with some other purportedly wrongful activity. For instance, it is not hard to find people who consider BDSM, adultery, and non-heteronormative sex to be morally wrongful. Applying the above argument to (say) non-heteronormative sex, I suspect, would yield very different intuitive responses. This tells us two important things: in order for the argument to work, we must have some principled way to delimit morally wrongful sexual activities. Otherwise the determination of “deviant” fantasies is too much hostage to individual prejudices and cultural norms—something that we should surely aim to avoid. Moreover, in the case of pedophilic fantasies the work is done by pre-theoretical evaluative judgments about the wrongfulness of child sexual abuse and requisite sexualization of children. What might conceivably ground such judgments? An obvious answer is that

such activities take place against the children's will and under conditions where meaningful consent is impossible. In this case, what makes pedophilic fantasies and, by extension, imagery morally reproachable is that they involve non-consensual eroticization of children and adolescents: on one hand, they involve an inappropriate sort of co-opting of sexuality (co-opting that is non-consensual); on the other, the imagery involves eroticization of non-consent.

However, one might wonder what we should subsequently say about (so-called) "rape fantasies." If popular press is to be believed, such fantasies are extremely common among women. Should we not then also morally condemn large numbers of women for their sexual fantasies, which apparently also involve eroticization of non-consent? In other words, might the above line of argument prove too much and end up condemning something that should not be condemned? I think not and this example demonstrates a subtle, yet important, point about the content of sexual fantasies and imagery mirroring those fantasies. Rape is about non-consensual sex. Imagining *simulated* scenarios of non-consensual sex, however, is not the same as wanting to experience *actual* non-consensual sex. If those who entertain the former do not literally wish to experience non-consensual sex, they are not genuinely fantasizing about rape—they are fantasizing about simulations of rape. For instance, "rape play" in BDSM settings is far from non-consensual and has little to do with non-consensual sex as a form of sexualized violence (Hopkins, 1994). The point is that BDSM activities do not replicate genuinely problematic sexual activities, but rather simulate them. To elucidate: "Simulation implies that [BD]SM selectively replays surface [problematic] behaviors onto a different contextual field . . . [BD]SM participants do not rape, they do rape scenes" (Hopkins, 1994: 123). Importantly, simulation is recognized as such by the participants. But in actual sexualized violence, those attacked are not participants in their own violation. This again shows why "rape fantasies" are not fantasies about being raped—in actual cases, something is done to the attacked and they are not active participants in what is done to them.

The distinction between reproduction and simulation provides a useful tool with which to assess the morality of *eroge* PVGs too. In short, my contention is that if they involve fantastical simulations of sexualizing depictions of childlike persons (such as in *Boob Wars*), the games are not morally condemnable in and of themselves. Finding such games entertaining in virtue of the sexualizing depiction may be psychologically puzzling and many may find such pleasure-taking distasteful; but doing so would not be a sign of significant moral failure. Then again, if the game involves a reproduction rather than a simulation of a morally condemnable activity (such as adult-child sex or rape), it is morally wrongful *per se*. Of course, it might not always be easy to distinguish when a game involves simulation and when it involves reproduction, but the distinction nonetheless provides us tools with which to draw a principled distinction between different PVGs. In some

eroge PVGs sexualizing depictions of childlike persons involves a simulation of an inappropriate co-opting of sexuality, while other such games involve a reproduction of such co-opting. And one way in which we can judge the matter is, for example, whether some specific PVG involves depictions of childlike persons or creatures (like fairies) or whether it involves depictions that are clearly intended to be of actual children (like depictions of school girls). This has the upshot that as a genre *eroge* PVGs are not morally condemnable, although individual instances can be. A moral disapproval of *eroge* PVGs must take place piecemeal, and doing so cannot take place *a priori* and based on philosophers' intuitions. Rather, this requires empirical research methods more usually found in cultural and media studies.

Since instances of *eroge* PVGs can be subject to moral condemnation based on what they depict, this presents game designers with certain forward-looking responsibilities and duties. In short, they have a *prima facie* moral duty to take into account what sort of imagery of childlike persons and creatures the designed games put forward in order to avoid *reproducing* sexualized depictions of childlike persons. This may involve (for instance) game designers creating characters that are clearly fantastical, despite being childlike. Much more should be said about this, but the basic idea is simple: as producers, game designers should be committed to (if you like) responsible production practices. Iris Marion Young has termed such forward-looking responsibility a social connection model of responsibility (albeit not in connection to videogames): "finding responsible does not imply finding at fault or liable for a past wrong: rather, it refers to agents' carrying out activities in a morally appropriate way and seeing to it that certain outcomes obtain" (2011: 104). This kind of responsibility "derives from belonging together with others in a system of interdependent processes of cooperation and competition through which we seek benefits and aim to realize projects" (Young, 2011: 105). Insofar as videogaming is increasingly a part of our social coexistence, it should not be seen as an individual activity of "the lone gamer" (typically, an adolescent male), but rather an activity that increasingly shapes our practices of cooperation. In this sense, I submit, game designers share a responsibility to further practices that foster rather than undermine socially just coexistence, and this should put constraints on the products that come to the market. Although the prospects of a blanket condemnation of *eroge* PVGs are not good, I contend, this does not license an "anything goes" attitude to game design.

6. Final Considerations

In this chapter, I have considered whether a particular genre of explicitly pornographic videogames, *eroge*, is morally problematic from a feminist perspective. My answer in short is no: we cannot morally condemn the genre as a whole on the basis of it objectifying or infantilizing women. The most promising grounds to find the genre worrisome turn on *eroge* games sexualizing

youth. But even this does not allow us to condemn the genre, although it does provide tools with which to critique individual instances of the genre. Some philosophers may find this result unsatisfying. By contrast, I do not see this as being problematic. When dealing with a large and multifaceted phenomenon like videogames (or pornography), it is hardly surprising that drawing general conclusions about entire genres is near impossible. Rather than seeing this as a worry, however, philosophers should acknowledge real-world complexities and adjust our normative evaluations accordingly.

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Notes

1. For discussion, see Patridge (this volume).
2. “Teen” is one of the most popular search terms for Internet pornography. According to the 2015 Pornhub survey, it was the second most searched for term worldwide, “lesbian” being the first. Its popularity is also gendered: while it was only the ninth most searched for term for women, it was the second for men (after “stepmom” and followed by “milf” and “mom”). For more, see: www.pornhub.com/insights/pornhub-2015-year-in-review
3. Psychological research shows that “sexual interest or arousal in children is not confined to a ‘sick few’ ” (Malamuth and Huppin, 2007: 793). Significant numbers of male college students have self-reported such interest (around 20%), and studies using physiological indices of arousal put the figure as high as 70%. That said, Malamuth and Huppin stress that although “a significant portion of the male population demonstrates some pedophilic interests, this does not mean that all men so identified are likely to fit the clinical diagnosis of pedophilia” (793). This would require “recurrent, intense sexually arousing fantasies, sexual urges, or behaviors involving sexual activity with a prepubescent child or children (generally age 13 years or younger)” over at least a six-month period (793).

References

- Corvino, John. (2002). “Naughty Fantasies.” *Southwest Philosophy Review* 18 (1): 213–220.
- Dworkin, Andrea. (2000). “Against the Male Flood: Censorship, Pornography, and Equality.” In *Feminism and Pornography*, edited by Drucilla Cornell, 19–38. New York: Oxford University Press.
- Gunter, Barrie. (2002). *Media Sex: What Are the Issues?* Mahwah, NJ: Lawrence Erlbaum.
- Hopkins, Patrick D. (1994). “Rethinking Sadomasochism: Feminism, Interpretation, and Simulation.” *Hypatia* 9 (1): 116–141.
- Levy, Neil. (2002). “Virtual Child Pornography: The Eroticization of Inequality.” *Ethics and Information Technology* 4 (4): 319–323.

- Malamuth, Neil, and Mark Hupp. (2007). "Drawing the Line on Virtual Child Pornography: Bringing the Law in Line with the Research Evidence." *NYU Review of Law & Social Change* 31: 773–827.
- Nussbaum, Martha. (1995). "Objectification." *Philosophy and Public Affairs* 24: 249–291.
- Papadaki, Lina. (2015). "Feminist Perspectives on Objectification." In *The Stanford Encyclopedia of Philosophy* (Winter 2015 Edition), edited by Edward N. Zalta, <http://plato.stanford.edu/archives/win2015/entries/feminism-objectification/> (accessed January 20, 2018).
- Patridge, Stephanie. (2011). "The Incurable Social Meaning of Video Game Imagery." *Ethics and Information Technology* 13: 303–312.
- . (2013). "Exclusivism and Evaluation: Art, Erotica and Pornography." In *Pornographic Art and the Aesthetics of Pornography*, edited by Hans Maes, 43–57. Basingstoke: Palgrave-MacMillan.
- Paul, Bryant, and Daniel G. Linz. (2008). "The Effects of Exposure to Virtual Child Pornography on Viewer Cognitions and Attitudes toward Deviant Sexual Behavior." *Communication Research* 35 (1): 3–38.
- Young, Iris Marion. (2011). *Responsibility for Justice*. New York: Oxford University Press.

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