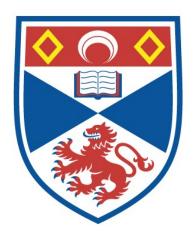
FROM IMMERSION TO UNDERSTANDING : AN ESSAY ON VIRTUAL ART AND AESTHETIC COGNITIVISM

Colin Troesken

A Thesis Submitted for the Degree of MPhil at the University of St Andrews



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From Immersion to Understanding: An Essay on Virtual Art and Aesthetic Cognitivism

Colin Troesken



This thesis is submitted in partial fulfilment for the degree of

Master of Philosophy (MPhil)

at the University of St Andrews

September 2022

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Abstract

This dissertation argues against a cognitive devaluation of virtual art. By cognitive devaluation, I am referring to the charge that an art-kind is less artistically valuable than other art-kinds due to it lacking cognitive merits. I argue against this devaluation with three related arguments. The first argument says that virtual artworks can communicate perspectives which are conducive to understanding. I develop this argument by appealing to the standard features of virtual art, as well as to influential thoughts about the cognitive value of other art-kinds, especially literature. The second argument says that the cognitive value of a virtual artwork can sometimes count towards the artistic value of that artwork when appreciating that cognitive value requires appreciating the artistic success found within that artwork. The final argument shows that virtual art is not cognitively pernicious in any relevant sense, as is sometimes thought. If successful, these arguments jointly show that there is no good reason to devalue virtual art relative to other art-kinds on cognitivist grounds.

Chapter 1: Introduction

Within critical practice, virtual artworks are subject to a *cognitive devaluation*. ¹ This dissertation argues against that devaluation. A cognitive devaluation holds that a specific art-kind (virtual art in this case) is less artistically valuable than other art-kinds due to lacking cognitive merits. Presupposed by a cognitive devaluation is the view that the cognitive (roughly meaning epistemic) merits of artworks can count towards the artistic value of an artwork. The most notable cognitive devaluation of virtual art is evident in our talk of videogames. Here is an example from Roger Ebert (2010a; 2010b):

[F]or most gamers, videogames represent a loss of those precious hours we have available to make ourselves more cultured, civilized and empathetic.

I don't know what [gamers] can learn about another human being [by playing videogames].

Another example comes from Johnathan Jones (2012):

There needs to be a word for the overly serious and reverent praise of digital games by individuals or institutions who are almost certainly too old, too intellectual and too dignified to really be playing at this stuff.

Here is a final example from Nathan Robinson (2022):

But people who are—and I realize this sounds snobby—*uncultured*, by which I mainly mean raised on video games, might not notice the difference between an "NFT" of an ape and an actual beautiful piece of physical artwork.

Note that in each of the quotes presented, there is explicit mention of a cognitive impoverishment experienced by those who engage with videogames. I argue against this devaluation, holding that there is no principled reason that virtual art is less cognitively valuable than other, more established, art-kinds.

The thesis I advance is what I call *virtual cognitivism*, and it holds two commitments. The first *epistemic commitment* is that virtual artworks can be cognitively valuable, or meaningfully communicate some cognitively valuable resource. The second *artistic commitment* holds that this cognitive success can count as an artistic value of certain virtual artworks. Virtual cognitivism is a species of a broader family of views: *aesthetic cognitivism*. Aesthetic

¹ As I will explain in a moment, virtual art refers to a suite of art-kinds including videogames, virtual reality documentary, augmented reality pieces, and some interactive films.

cognitivism holds analogous commitments to virtual cognitivism, although the commitments of this family of views are neutral with respect to art-kind. ² To be clear, cognitivists typically do not hold that cognitive value is essential to artistic value, but rather that cognitive merits can be one of many kinds of constituent values of art. Moreover, they do not argue that every audience of a cognitively valuable artwork will experience cognitive gain, but rather that in correctly appreciating a cognitively valuable artwork, those audiences will appreciate some cognitively valuable content which the work successfully articulates.

Three forms of skepticism face virtual cognitivism, all of which I will argue against. The first form of skepticism is that virtual art lacks the resources to be as cognitively valuable as other art-kinds. Perhaps you might think this is the case because of the limitations of computers, or because of their interactive features only allowing for overly simplistic and quixotic stories. The second skepticism is that virtual art's artistic goals are incompatible with cognitive pursuits. Aiming to provide the user with an artistically rich interactive and immersive experience might seem at odds with learning about the real world and other people. The final skepticism is that virtual art is cognitively pernicious due to its standard features. Virtual art invites audiences to make decisions and have experiences from discrepant perspectives from their own. As a result, we might worry that these perspectives begin to encroach on the user, leading them to make immoral or poorly considered decisions.

Those knowledgeable on the history of legitimization of novel art-kinds know that this sort of cognitive devaluation is nothing new, especially for what Noël Carroll (1998) calls "mass art." Virtual art is subject to similar devaluations that faced rap music, comic books, and television. Whereas prose and poetry can expand the mind, these novel art-kinds are at best a waste of time. However, some believe that at their worst, these novel art-kinds are cognitively dangerous and dispose those who engage with it to commit morally transgressive acts. So, like these other art-kinds, virtual artworks have been subject to policy disputes and public outcry, with many parents concerned about the media their children are consuming, and politicians lobbying to enact regulations on the sale of virtual artworks. Despite this, a tempting thought is that the cognitive devaluation of virtual art is simply something that will be resolved over time,

² I refer to what is sometimes called the "aesthetic commitment" of cognitivist theories of art as the "artistic commitment." I do this to draw a clear distinction between aesthetic value and artistic value.

as those who grew up with virtual artworks will likely recognize that there is nothing especially pernicious about them. In fact, they might see virtual art as an indispensable resource for our educative practices.

Tempting as that thought might be, the cognitive devaluation of virtual art is not as defeasible as that thought would suggest. Of course, the question of art's cognitive benefits and harms is far older than the 20th century. Alexander Nehemas (1988) reminds us that these cognitive devaluations of popular arts have their origins in Plato's criticism of poetry in *Republic* Book X. Plato thought that poetry disturbed the emotions of those who enjoyed it, corrupting their cognition in the process. Stemming from this cognitive corruption, Plato believed that our responses to ordinary scenarios would inappropriately resemble our responses to the scenarios found in poetry. Because Plato thought that the representations found in poetry only bore a shallow resemblance to the objects they represented, there was no knowledge to be found in poetry. Contemporary worries surrounding the cognitive import of virtual art greatly resemble Plato's concerns. Moving forward a few thousand years, Plato's charge that poetry corrupts our emotions and warps our cognition is repeated almost verbatim by those who are pessimistic about virtual art.

The significance of defending virtual cognitivism is not just showing that interactive and immersive artworks can meaningfully communicate cognitive content. By taking this cognitive devaluation seriously, we allow for a serious discussion of the artistic and societal importance of virtual art. Virtual art can, on my account, meaningfully engage our lives in ways that extend beyond the works themselves. We can then explore the tools and mechanisms virtual artists have at their disposal to not only improve our understanding of those around us, but also the ways those mechanisms can change our perspective on the world, for better and for worse.

Here is the road map going forward. The remainder of this chapter introduces the major concepts utilized in the dissertation and provides an overview of the arguments in the remaining chapters. Section 1 offers a working definition of virtual art. Section 2 briefly discusses the history of cognitivist theories of the arts and articulates where my virtual cognitivism fits into the literature. Section 3 further discusses the pessimism that virtual art faces with regards to its effects and defends the importance of acknowledging and rebuking that pessimism.

Chapter 2 defends the claim that virtual art can be cognitively valuable. The defense suggests that virtual art's cognitive value can come from its ability to immerse users in a wide range of perspectives, and invite comparisons between these perspectives. I argue that this counts as a cognitive merit because it allows users to feel the pull of what is valued in each perspective, and gain a better understanding of why certain objects are valued within differing perspectives.

Chapter 3 advances the view that virtual art's cognitive value can count towards its artistic value. I present two reasons why this is the case: one is that in appreciating the artistic merit manifested in virtual artworks, we appreciate it as both an artistic and cognitive success; the second is that it is a convention of our artistic evaluations that cognitive merits can count as artistic merits. I argue that these reasons hold for virtual art, as well as domains which are neutral to art-kind membership.

Chapter 4 rebukes an objection to virtual cognitivism. The objection, made in the spirit of the moral panic surrounding virtual media, holds that there is a *pro tanto* reason to devalue virtual art. The reason in question is that appreciating virtual artifacts requires a cognitively detrimental attitude towards the artwork. I argue that if such an attitude exists, then that attitude ends up being the same mechanism that makes some virtual artworks cognitively valuable. Thereby, the attitude in question is not necessarily epistemically pernicious.

1.1. Virtual Art

The category of "virtual art" is occasionally made reference to, but it is not apparent what that category amounts to.³ Here, I will clarify exactly what I mean by "virtual art." Put simply, virtual art is art which is *interactive, immersive*, and *computer-based*.⁴ I take a "computer-based" artwork to be something like what Katherine Thomson-Jones (2019, Sections 1.3-1.4) calls a "digital artwork." To borrow Thomson-Jones's vocabulary, a digital artwork is one whose production and presentation is reliant on a computer. The definition of *interactive art* has

³ Grau (2002), Popper (2005).

⁴ This list of features of virtual art is borrowed and adapted from Heim (1998, p.6) and Chalmers (2017, p.3). Both authors are aiming to describe the standard features of virtual reality artifacts. However, I think the list of features they offer can be adapted to fit other sorts of virtual artifacts. To be precise, they are both operating with a conception of immersion that focuses on *perceptual* immersion, while I am operating with a different conception as will be explored in Section 2.4.

received a considerable amount of debate, although I adopt the definition owed to Dominic Lopes (2009, p. 36). Lopes says that "a work of art is interactive just in case it prescribes that the actions of its users help generate its display." Note, not all computer-based artworks are interactive, and vice-versa. Stephanie Strickland's hypertext poem "slippingglimpse" is certainly computer-based, but it is not interactive as the audience of the poem are not prescribed any role in generating it. Conversely, Barbara Smith's performance piece "Feed Me" has the audience feed the artist food of their choice. In allowing the audience to aid in generating what was displayed in the performance, the work is interactive, but is not computer-based.

Before discussing immersion, I will quickly clarify some terminology relating to interactive artworks. When discussing interactive art, one must be careful to distinguish between the work simpliciter and instances of the work. Instances of the work refer to individual displays, or series of pictures, generated by an individual set of choices from a user or users. The work simpliciter is the entire range of possible displays as well as the algorithm which generates those displays. This range of possible displays is sometimes called a "display-type," and I will follow suit.⁵ To be clear, non-interactive computer-based works also have a "display-type," but that display-type is fixed such that the same display is always generated regardless of when or where the work is instantiated. Conversely, interactive artworks have flexible display-types in that there is variability as to the possible display which is instantiated. A final note on vocabulary is that, following Lopes, I refer to an audience of a virtual artwork as "users."

Immersion is the only concept mentioned which does not enjoy a standard definition. I will explain this in more detail later in Section 2.4, but for now I offer my own definition of immersive art. An artwork is immersive iff it mandates that the user take a cognitive attitude (belief, imagining, alief, etc.) of presence in, and preoccupation with, the depicted contents of the work. If I am immersed in *The Climb*, a VR rock climbing simulator, I take an attitude of being present in the work's depictions, such that I can say "I climbed that mountain." When I say that a user is "preoccupied with" the depicted content of the work, I mean that phenomena outside of the depicted content is not particularly salient within the user's phenomenology. For example, in

⁵ The term "display-type" in relation to interactive art is owed to Dominic Preston (2014), although it received important modifications from Katherine Thomson-Jones (2021, pp. 90-93) which I adopt. Put simply, Preston believes that interactive artworks have multiple display-types, while Thomson-Jones argues that interactive artworks only have one display-type.

The Climb, users typically have a virtual reality headset and controllers. However, because users are immersed in the work, they do not give much focus to the headset and controllers *per se*, instead focusing on climbing the virtual mountain.

There is a wide variety of art-kinds nested within the broad heading of "virtual art." Videogames are the paradigmatic instance, but there are also VR films (documentary and fiction), augmented reality, certain instances of net art, and some interactive films. Many, but not all, of my examples will be videogames. In particular, they will largely be videogames with a strong narrative component. My admittedly narrow selection of examples is primarily a division of labor. I do think that other kinds of virtual artworks can have cognitive merit, but I want to focus on a relatively specific set of works so as not to lose focus. If you are wondering why I am not claiming to defend the cognitive value of just videogames, it is because I am interested in the virtual-specific features of these artifacts, as opposed to their ludic elements. In using the category of "virtual art," I make it clear that I will largely be avoiding talk of ludic or game-specific features of these pieces. Talk of games here would certainly overwhelm my project. My interest is in the virtual-specific features of these pieces, specifically their interactive and immersive features.⁶

A final note, virtual art is made in virtual media. Virtual media are sets of practices which govern the creation and reception of virtual artifacts. A key thing to note is that not all these artifacts are *artworks*. VR Chat, videoconferencing software, and some smart glasses are all cases of virtual artifacts, but they are not virtual artworks. I am concerned entirely with virtual artworks, and I will only speak of virtual media in relation to artworks. This raises the question of "what is an artwork?" which I thankfully do not need to answer. Whatever your preferred definition of art is, I am concerned with that art which is created in virtual media.

1.2. Virtual Art and Cognition

The question of art's cognitive potential is a perennial question in analytic aesthetics, dating back to the ancient quarrel between Plato's pessimistic worries of the harms of poetry and Aristotle's optimism about the universal truths that tragedy could impart. Today, the debate has

⁶ You might think that the cognitive devaluation of videogames is directed at them *qua* games, not *qua* virtual art. I think both modes of devaluation are occurring.

evolved significantly, with two broad challenges facing any cognitive theory of art. First, how can we reconcile the fact that art, especially art-fiction, does not seem to explore reality, but rather the imagination. The idea of some artifact being an engagement with imagination is *prima facie* incompatible with that same artifact manifesting a profound understanding of reality. Second, how can the cognitivist acknowledge art as a partly cognitive endeavor when it lacks many of the elements of more explicitly cognitive pursuits such as science and philosophy.

Since the initial debate between Plato and Aristotle, literary fiction and prose has often been presented as the gold standard for art's cognitive potential. This is likely not only due to their longstanding establishment within education, but also due to the interesting philosophical questions specifically raised about the cognitive value of literary fiction. However, some philosophers have developed sophisticated cognitivist theories about specific art-kinds outside of literary fiction, including film, poetry, and conceptual art. My goal here is to offer a cognitivist theory of virtual art, as will be presented in Chapters 2 and 3.

I am not the first to develop a cognitivist theory of virtual art. Most recently, Alexandre Declos has developed a position he calls *videogame cognitivism*, which is narrower in scope than what I aim to present here, as its title suggests. In his paper, Declos lays the foundation for what a cognitivist theory of videogames ought to look like. In line with many recent cognitivist theories of art, Declos thinks that cognitivist theories of videogames should focus on the potential for videogames to communicate an advanced *understanding* to their users, as opposed to imparting truths or knowledge.⁷ He is specifically enthusiastic about the possibility for videogames to enrich or displace the ways users characterize the world and others, what we might call the user's *perspective*.

Declos's theory is quite promising, and I expand on many of his initial thoughts in Chapter 2. Namely, I agree that the epistemic success of virtual artworks is best cast as being a communicated *understanding*. Likewise, I think the cognitive potential of virtual art is found in its ability to provide users with new perspectives on various subject matters, which is conducive to them better understanding that subject matter. However, Declos's initial account is admittedly

⁷ I will explain more about what this distinction amounts to in Chapter 2. Put simply, *understanding* and *knowledge* are two species of epistemic success, where the former is traditionally understood as *non-propositional* and the latter is traditionally understood as *propositional*.

incomplete. Firstly, by nature of his project, he does not expand on his cognitivist theory beyond exploring the possible ways a cognitivist theory of videogames can be formulated. More importantly, however, his videogame cognitivism is conceived purely as an *epistemic* problem about the cognitive import of videogames. As previously mentioned, what is at stake in cognitivist theories of art is the *value* of art or a specific art-kind. Therefore, a cognitivist theory of virtual art better speak to the value of virtual art *qua* virtual art.

Conceiving of virtual cognitivism as a question about the value of virtual art is the best way we can directly respond to the cognitive devaluation of virtual art. In responding to that cognitive devaluation, we are invited to explore the standard features of virtual art and elaborate on the artistic potential of those features in manifesting artistically relevant cognitive content. Without exploring the artistic claim of virtual cognitivism, not only would the cognitivist struggle to respond to the cognitive devaluation, but the cognitivist would be unable to say much of anything about the artistic potential or appreciative grounds of virtual art, leaving virtual art underexplored as an art-kind. In Chapter 3, I hope to explore that artistic potential by paying special attention to the standard features of virtual art, and arguing that the cognitive value of virtual art can arise because of artistic success.

What sorts of obstacles do a cognitivist theory of virtual art face? In addition to the challenges that a cognitivist theory of any art-kind must meet, here are three examples of the sorts of obstacles virtual cognitivism faces, all of which I will answer in Chapters 2 & 3. One critic might worry that the computer-based status of virtual art is reason to be skeptical of both the cognitive and artistic potential of virtual art. Another critic might say that because virtual art is *interactive*, any apparent cognitive success manifested by the virtual artwork is really due to the cognitive success of its user. The critic would suggest that the cognitively valuable property of a work's instance is counterfactually dependent on the decision of a user. If that cognitively valuable property is the result of the user's decision, then it is difficult to conceive of it as a value of the artwork. Finally, a critic could charge that because of the *immersive* status of virtual art, users are not in a good position to recognize the cognitive import of virtual art. Immersion, by my definition, requires preoccupation with the contents of the virtual depiction. If a user is truly immersed in a virtual artwork, then it does not seem as though they should be deliberating matters external to the work's contents. Thereby, any apparent cognitive import of virtual art is

in tension with the attitude of immersion. All three of the challenges can be met through a better understanding of the artistic capacities of virtual art, as will be explored in Chapters 2 & 3.

1.3. Pessimism About Virtual Art

Arguing for virtual cognitivism is not sufficient to argue against the cognitive devaluation of virtual art. In addition to showing that virtual artworks can be cognitively valuable in an artistically relevant way, I ought to show that there is no *pro tanto* reason that virtual artworks are less cognitively valuable than artworks made in other mediums. There is an underexplored position that does believe that virtual artifacts are, in some sense, cognitively pernicious due to the nature of their medium. In order to show that virtual artworks ought not to be devalued relative to other art-kinds, this pessimistic position needs to be argued against.

Virtual artworks have long been subject to a pessimism about their cognitive impacts. Michael Hammel (2005, p.59) satirically writes "videogames are not art. videogames are dangerous!" Hammel's quote is in jest, but it captures a wider sentiment that is somewhat popular. Journalists and politicians have portrayed virtual artifacts as poor educators, warping the minds of those who engage with them. That sentiment is not given much in the way of serious attention, with many taking it to be the result of unwarranted prejudice. I think whether that sentiment deserves such attention is contingent on how one understands the claim. If the claim is "virtual artifacts cause epistemic harm," it does not attract much support. However, I think that understanding of the claim is a misrepresentation, and pessimists about virtual media are concerned with how users ought to engage with virtual art.

I take the pessimist to believe that correctly engaging with virtual art requires the uptake of some epistemically unfavorable position which is not required to engage with other art-kinds. This cognitively detrimental position might take the form of users adopting false beliefs or desires, such as a user coming to see violence as fun and desirable. While I will argue that this position is false, it is important to get a grasp on why this is the case. It turns out that exploring the pessimist position reveals something about the appreciative grounds of virtual art, illuminating its similarities and differences to other art-kinds, as I will show in Chapter 4.

Chapter 2: Cognitive Value and Virtual Perspectives

I will defend the *epistemic* claim of virtual cognitivism (VC) in this chapter. The epistemic claim holds that virtual artworks can communicate cognitively valuable resources to an audience. I argue that virtual art can communicate a suite of cognitively valuable perspectives and invite direct comparisons of those perspectives. In being immersed in an instance of a virtual artwork, audiences can get a sense of what is valued from a given perspective. Furthermore, in appreciating the virtual artwork as interactive, audiences can assess and weigh the values of each perspective through comparing them. Audiences can use this range of perspectives to gain a better understanding of some subject matter.

We proceed as follows. Section 1 argues against the longstanding view that art's cognitive value is *truth-apt*, whereas Section 2 casts art's cognitive merit as *understanding-conducive*. In Section 3, I introduce the notion of *perspectives* as being understanding-conducive resources which art can provide. With that groundwork laid, I take a brief aside in Section 4 to discuss the concept of *immersion*, as it will be key to discussing how perspectives manifest in virtual art. Section 5 explains how perspectives manifest in virtual artworks, and Section 6 explores some of the ways these perspectives are cognitively valuable. Section 7 argues that in appreciating the perspectives manifested in one virtual artwork, we appreciate them as a set of differing perspectives or a *perspective-range*. Section 8 responds to some objections.

Before proceeding, let me qualify the scope of this chapter's thesis. First, I am not claiming that *every* virtual artwork is cognitively valuable. I accept that there are many artistically successful virtual artworks that lack any cognitive merit, or do not have any cognitive aims whatsoever. Similarly, I am not claiming that every cognitively valuable virtual artwork is cognitively valuable in the way I describe here. Instead, I am merely elaborating on one of the many ways virtual artworks can be cognitively valuable. Lastly, I am not suggesting that every *instance* of a cognitively valuable virtual artwork need be cognitively valuable for the work *simpliciter* to be cognitively valuable.

2.1. Art & Epistemology Part I: Against the Knowledge Account

Before articulating how virtual art can be cognitively valuable, we should get clear on what we mean by an artwork being "cognitively valuable." One tempting thought is that an artwork is cognitively valuable if audiences *learn* from the artwork. This is not what cognitivists aim to defend, as it is plausible for subjects to learn from just about anything without the relevant artifacts being cognitively valuable. John Gibson (2008) asserts that subjects can learn about trees from their leaves, but that does not entail a cognitivist account of leaves, because leaves do not meaningfully communicate anything about trees.⁸ Recall that cognitivists are interested in the question of how cognitive merit can contribute to artistic value, so cognitivists look to the artwork itself, not the audience, as the site of cognitive success. If an artwork is cognitively valuable, then an artwork can be credited with an epistemic success, because there was intentionality behind that success. 9 That is not to say that the cognitive value of the artwork is autonomous from its audience. Ordinarily, cognitivism holds that the cognitive value of art is one of the many constitutive values of art, and audiences recognize those values when they correctly interpret and appreciate those works. If the audience has the ideal resources to successfully appreciate the work, then they can incorporate that cognitive value into their everyday epistemic pursuits.

The aforementioned claims are generally accepted by all cognitivists, but there is still a question about what the content of art's cognitive value is. Typically, cognitivists fall into one of two broad categories: those who see the content as *knowledge* (propositional knowledge, knowledge-how, knowledge by experience, etc.) and truth-apt, and those who endorse a non-propositional approach, typically seeing art's cognitive value as being *understanding-conducive*. I endorse the latter view, but before defending it, I will say a bit about why I am hesitant to endorse the former view. ¹⁰

⁸ For a similar point, see Gaut (2007, pp. 138-141).

⁹ By "intentionality," I am referring to something like the intentions of an implied author.

 $^{^{10}}$ The distinction being referenced is sometimes cast as being a distinction between "cognitivism" and "neocognitivism."

Knowledge-based approaches to aesthetic cognitivism argue that art can afford its audiences propositional knowledge. Propositional knowledge here refers to the standard analysis of knowledge as warranted true belief. The unifying idea behind all these views is that art can illuminate truths, such as the works of John Steinbeck communicating knowledge about what the Great Depression was like or the works of Virginia Woolf providing truthful insight into mental illness. Centrally, these views assert that these communications are truth-apt, meaning they affirm or deny that *p*. There is much to like in these accounts, although they prove difficult to defend, as I will now show.

Historically, this knowledge-based approach has faced several troublesome objections. Here are three noteworthy ones, the first two due to Jerome Stolnitz (1992). First, if aesthetic cognitivists are to champion knowledge as the relevant cognitive rewards of art, then they must reckon with the standard view that knowledge requires warrant. However, most art provides little in the way of warrant for the propositions it is said to imply. Stolnitz (p. 196) argues that art can advance many claims, and that while some of them might be true, artworks seldom delineate what is true and what is false in their depictions. In reading Dickens's *Bleak House*, I might come to correctly believe that there was a Court of Chancery in London. This is a fact, but my belief in this fact is not warranted by the artwork. Without any mechanism for artworks to delineate between what claims are warranted and which claims are not, then artworks lack what is thought to be a necessary condition for imparting knowledge.

Second, even if art can provoke warranted belief in a proposition, said propositions are typically trivial and widely known, so there is nothing distinct or interesting about the knowledge art is said to impart. Consider the insightful theses artworks are said to advance. Austen's *Pride and Prejudice* is said to teach its audiences that judgements based on first-appearances are often incorrect, and Orwell's *1984* is commonly interpreted as arguing that "totalitarianism suppresses the individual." These claims are not particularly novel and seem trivial as opposed to "insightful." There are a few ways to understand this claim. One way is from Stolnitz (p. 193-194) which is that unlike psychology or biology, there is no knowledge which art can *uniquely* impart. Another way is that the knowledge art is said to impart amounts to little more than banal truisms. In either case, the epistemic profundity of art does not live up to cognitivist promises.

Third, Lamarque and Olsen (1994) object that the novel and true propositions advanced by art are connected to the unique characters, scenarios, and aesthetic features of the work, and so art is inefficient at providing knowledge of the actual world and the human experience. The idea here is that when appreciating art, even if we are able to glean some claim made by the work, that claim is deployed in such a way that it is meant to organize and give significance to various features of the artwork. Appreciating that claim as removed from those artistic features of the work would be to cease to appreciate the artwork. However, in appreciating the claim as part of the artwork, its truth or epistemic merit becomes obscured by aesthetic features of the work. As a result, art appears to be inefficient as a source of knowledge.

One can respond to these objections individually, and maintain that the cognitive value of art is truth-apt. Indeed, many productive responses to each of these objections has been offered. However, many of these responses end up restricting the scope of which art can be cognitively valuable. For instance, a popular response to the warrant objection often makes use of the idea that detailed realist fiction can impart knowledge, as there is warrant for believing many of the claims found in these works (Carroll, 2007). The warrant for believing these claims is generated by the normative constraints of writing realist fiction, which mandate that an author remain largely loyal to certain facts. However, that argument would suggest that the only cognitively valuable artworks are those of historical fiction or others with similar commitments to imparting truths. This is counterintuitive, as the epistemic success of artworks is typically said to relate to grander themes of morality, cultural norms, and inner conflict. Adopting a view which says the cognitive value of art is truth-apt would require restricting the scope of which artworks are cognitively valuable such that many of the artworks which are intuitively cognitively valuable are discounted. As such, I will not defend the knowledge-based approach to cognitivism.

Before continuing to my discussion of *understanding*-based cognitivist accounts, I want to consider a common defense of knowledge-based cognitivist accounts, as this defense will play a role later in this chapter. One common view is that even if art cannot provide us with outright knowledge, it can communicate truth-apt hypotheses. Audiences can take those hypotheses and test them out in the actual world, thereby confirming or denying the propositions contained in

¹¹ See Carroll (2002), Kieran (2005), Robinson (2005), Stokes (2007), Gaut (2007), and Gaskin (2013) for examples.

those hypotheses. In doing so, audiences are rewarded with knowledge through engaging with the hypotheses communicated by art. I think knowledge-based varieties of cognitivism which incorporate these sorts of defenses can be successful depending on the relevant object of inquiry. As I am concerned with the idea of perspectives in art providing insight into human psychology, I think that "knowledge" ends up being too restrictive for our purposes. Individual perspectives are uncontroversially unique to the individuals who hold them, so it does not seem as though an artwork can provide substantial justification for believing that their manifested perspective correctly resembles another individual's perspective.

2.2. Art & Epistemology Part II: The Understanding Account

In recent years, aesthetic cognitivists have moved away from discussing the cognitive value of art in terms of *knowledge* in favor of *understanding*-based accounts. ¹² These accounts typically hold that art's cognitive value cannot be expressed propositionally, instead arguing that artworks can enrich our previous beliefs, revise our conceptual resources, or provide new perspectives on various subject matters, all of which can further a subject's *understanding*. These views have come under criticism for not clearly articulating what they mean by "understanding," and so I will offer some explanation what it means for artwork's cognitive value to be *understanding-conducive*. ¹³

By understanding, I am largely referring to objectual understanding: a non-propositional epistemic achievement in which a subject is said to grasp a subject matter or topic. Propositional knowledge can still play a role in understanding of this sort, John's understanding of acoustics likely involves a suite of knowledge-why propositions which explain a variety of sonic phenomena. However, understanding goes beyond a subject holding these propositions, and entails grasping a systemic conception of some object. In understanding acoustics, John likely appreciates how these acoustic-related propositions cohere and connect, knows which propositions are most significant to the subject matter, and evaluates those propositions in light of each other. As understanding is holistic in nature, it comes in degrees, and occasionally the

¹² While the language of "understanding" has only recently been adopted, previous cognitivist accounts have alluded to such a view, notably Nussbaum (1990) and Graham (1997).

¹³ For criticism of the understanding-based accounts on the grounds of lack of clarity, see Lamarque (2006, pp. 128-130).

advancement of understanding involves the adoption of falsehoods. For instance, John likely adopts various models from physics to understand the subject matter of acoustics, and those models likely contain certain falsehoods or idealizations. As the discipline of acoustics advances, and those models are revised or replaced, John will likely revise his beliefs or conceptual resources in order to advance his own understanding. As it stands, however, those models aid John in framing his inquiries surrounding acoustics. When we say an artwork is conducive to understanding, we roughly mean that it aids in a subject's understanding of some subject-matter.

Understanding-oriented cognitivist accounts of art have endorsed an abundance of ways art can be conducive to understanding. Sometimes these views take the form of enhancing or enriching existing beliefs and conceptual resources, such that we have a better grasp of some subject-matter (Wilson, 1983). Another popular view holds that art can provide audiences with wholly new concepts which they can use in their inquiries and reasoning (Stecker, 2019). A promising recent view is that literature is conducive to understanding because of how it can confuse an audience about a subject-matter, inviting them to revise and alter their concepts and beliefs in light of this confusion (Mikkonen, 2021). I will focus on the notion of understanding-conducive *perspectives*, which has seen a considerable degree of uptake within aesthetics (Donnelley, 2019). Returning to the discussion at the top of section 1, I find the notion of perspectives to be useful for discussing the cognitive value of art because it focuses the discussion on how the artwork itself can manifest a perspective and thereby be cognitively valuable. Of course, it is also important that an audience could, in principle, adopt that perspective and use it to further their own understanding, but the success of the cognitivist thesis relies on an artwork's communication of a perspective, not how an audience uses it.

2.3. Perspectives

In order to properly engage with art, audiences are often asked to adopt a perspective different from their own. For instance, in reading Poe's "Cask of Amontillado" I ought to imagine the contents from the perspective of the narrator. As such, I adopt the perspective of the

¹⁴ This notion of understanding is most famously advanced by Catherine Elgin (1996; 2017). For other varieties, see Zagzebski (2001) & Hills (2015).

mischievous Montresor in order to make sense of how he justifies his cruel deed. In attending to the contents of the poem as narrated by Montresor, I do not endorse his behavior, but I gain some insight into how someone like Montresor acknowledges the world and those around him. In this way, Poe's poem has provided me with a perspective completely alien from my own, and its one I can use to better understand how some people acknowledge the world.

Borrowing from Elisabeth Camp (2017, pp. 7-11), let's describe a perspective as a disposition to characterize some subject in a particular manner. That is, a perspective treats particular features or values of the subject as salient or central to it, and treats a given set of features as fitting to the subject. My perspective on a bear hunter characterizes him as being brave, and I treat this feature as central insofar as I take it to explain his many of his other features such as his willingness to hunt bears. Camp's definition of perspective is broad enough that it can incorporate a wide variety of perspective-kinds, such as literal focal point-of-view as well as the assignment of particular values through characterization. With that in mind, we can see how perspectives acquired through art can further our cognitive ends.

Berys Gaut (2007, p. 158) offers a good example through invoking the phenomenon of "seeing-as." By seeing actual persons or scenarios in terms of the ones depicted in an artwork, Gaut says we glean some insight into actual behaviors and thought processes. My previous perspective on my bear-hunter friend might have been ill-fitting, and through reading *Moby Dick*, I acquire a different perspective through the characterization of Ahab. By seeing my friend in terms of Ahab, I am utilizing a different perspective to understand him and thereby find different features of him to be fitting. By doing so, I might learn something about him that I might not have otherwise, such as his general ignorance. Even though my friend is not completely Ahab-like, seeing him as Ahab-like has furthered my general understanding of him, and that is a cognitive success. That cognitive success can be traced back to the novel, because I acquired that perspective through my close and reflective engagement with the work. So, an artwork manifests a perspective, and by grasping and incorporating that perspective into their cognition, an audience can further their understanding of the world and others.

¹⁵ Camp has a very specific conception of "characterization" in mind. This need not concern us, we can rely on a general pretheoretic notion of characterization for our purposes.

Thus far, we have established that the cognitive aim of art is to potentially further an audience's understanding, and I focus on the notion of providing an audience with cognitively productive perspectives. In section 5, I will provide an account of how virtual art can manifest cognitively productive perspectives through the practices of *immersion* and *interaction*. However, immersion is an opaque concept in need of elaboration if we wish to understand the cognitive (and artistic) potential of virtual art. The next section is a detour into an analysis of immersion, although this analysis will play a central role in establishing how virtual art can manifest perspectives.

2.4. Varieties of Immersion

The development of cognitively valuable perspectives in virtual art is tied to the concept of "immersion", but what does that concept entail? Moreover, virtual art appears to enjoy a "special" sense of immersion, but that special sense is seldom elaborated on. All forms of art are said to be immersive in some capacity, so what is distinctive of immersion in virtual art? Immersion has been said to be an opaque and even unproductive concept with regards to virtual art (Tavinor, 2021, pp. 115), and I hope to provide some clarity here. I do not aim to provide a satisfying account of immersion, just an account which is operative for my project. Moreover, I do not aim to exhaust every sense of immersion, just to elaborate on a few varieties which are relevant to virtual artworks. Two phenomena are typically invoked or alluded to when discussing immersion: *presence* and *flow*. After discussing these two phenomena, I introduce three senses of immersion: *imaginative*, *perceptual*, *and virtual*. The latter two are especially symptomatic of virtual art, while most art invokes imaginative immersion. I will pay special attention to virtual immersion, as I think it plays a distinctive role in manifesting and communicating the cognitive content of virtual art.

In relation to representational art, immersion has been described as the sense of being in the presence of what is represented by the artworks (Ryan, 2015, p. 64-65). There is then a phenomenal state characteristic of immersion, in which a subject feels as though they stand in relation to some object. One can think of being immersed in a body of water, in which one is

¹⁶ For instance, see passages from Lopes (2009, p. 31) & Tavinor (2010, p. 6).

¹⁷ See Tavinor (2021, pp. 117-118).

totally submerged or dominated by the water. However, presence does not seem to be totally physical. Instead, I could be immersed in a daydream, in which I feel more present in the contents of that daydream than I do in my physical location in which I have the daydream. Likewise, I could live my whole life immersed in virtual reality and be unaware of it and feel as though I am immersed in my virtual surroundings, falsely believing myself to be physically immersed in this virtual world. This being the case, immersion is not characterized by a factive presence, but rather a sensation or phenomenology of being present.¹⁸

There is more than just a sense of presence involved in immersion, but also a total preoccupation with some activity, what positive psychology coins a *flow-state*. Think of being
immersed in a conversation. In addition to having a distinctive sense of presence in that
conversation, I am completely focused and actively engaged with the task of having a
conversation, such that my awareness and agency is pre-occupied with the task. Moreover, if I
came into the conversation with some instrumental goal, I place that goal in the background of
my mental occupation, as I find the act of conversing enjoyable for its own sake. I am immersed
in the conversation insofar as I have entered a flow-state while conversing. So, when immersed,
we typically feel a sense of overwhelming presence and enter a dominating flow-state.¹⁹ With a
minimal view of immersion such as this, immersion is a pluralistic concept. There are a
multitude of ways to be immersed, three of which I explore here.

Imaginative immersion is what is often referred to when discussing "immersion" in the philosophy of art. When imaginatively immersed, our imagination runs in an automatic and seemingly effortless fashion, such that we seem to be less conscious that we are imagining, entailing the previously mentioned flow-state.²⁰ A sense of presence can accompany this immersion as well, as the subject's attention is drawn towards their mental states such that they are less aware of their surroundings (Chasid, 2021). Instead, a subject could feel more present in

¹⁸ The idea of the presence in immersion being non-factive is important, as this is part of where Tavinor (2021) thinks immersion is a confused concept. Tavinor holds that "non-factive presence" and "immersion" are distinct, often conflated, concepts. If that is the case, then I am conflating the concepts as well. However, "immersion" has historically picked out non-factive presence in its extension. When speaking of being "immersed in a culture," that does not only capture a physical presence of being in a culture, but also an emotional tie or occupation with one, such that it feels as though I am present in a culture without being there.

¹⁹ I take both of these conditions to be necessary for any kind of immersion, but I do not believe they are sufficient. ²⁰ See Green & Donahue (2009) for more on the relationship between immersion, flow-states, and active engagement with narrative.

their own imaginings. As Susanna Schellenberg (2013, p. 507) describes, those who are imaginatively immersed in a fiction "lose themselves" in the fiction. Similarly, Ryan (2014, p. 118) suggests that imaginative immersion requires a sense of "seeing through the medium," or paying less attention to the art-status of the artwork. Moreover, if one is both imaginatively immersed and is affectively imagining, they might experience their affective response in an equally automatic fashion. Imaginative immersion seems to be a goal of sorts across artworks and narratives, in that artists desire for their audiences to be "swept away" by the depicted contents of artworks. However, particular art-kinds have resources at their disposal which can generate other sorts of immersion and might aid in imaginative immersion. Virtual art has two sorts of resources: *computer generated imagery* and *interaction* which relate to *perceptual* and *virtual* immersion respectively.

Perceptual immersion occurs when an audience's sense perception is dominated by some object or environment. This is the sort of immersion we think of when we consider users of virtual reality (VR) headsets perceiving themselves as being in a particular virtual environment, such as being on a virtual mountain in the VR rock climbing simulator *The Climb*. There is typically a distinct bodily sensation of being present associated with perceptual immersion in virtual art. An often cited study by Seth et al. (2012) points to how a VR user's senses are dominated by the technology such that the perceptual data acquired through VR presents a virtual environment, not the actual world. It seems then that perceptual immersion encourages a user to imagine themselves in a virtual environment, contributing to imaginative immersion as well.

However, perceptual immersion is distinct from imaginative immersion. I might be perceptually immersed in a cave, with my senses being completely overwhelmed by the cave. However, I can at the same time be imaginatively immersed in some daydream independent of my perceptions of the cave. Likewise, I can be wearing a VR headset and be perceptually immersed in the displayed environment, but my imagination could be intensely focused on a forthcoming job interview. Accordingly, imaginative and perceptual immersions are distinct.

²¹ Langland-Hassen (2020, pp. 186, 234-237) has argued that imaginative immersion in fiction entails intense affective engagement with fiction, but this need not be the case. I could be very focused on vividly imagining the experiences depicted in a narrative and feel no response towards the contents of those imaginings.

While we often think of virtual reality as being the paradigm instance of perceptual immersion, it occurs in other art-kinds as well. In his work on virtual art, Oliver Grau (2002, pp. 90-122) discusses how panoramic artworks produce an analogous state of immersion to the perceptual immersion afforded by VR, that is a sense of being present in the world represented by the art. Moreover, not all virtual artworks require total perceptual immersion. Works which are undisputedly virtual artworks such as Jeffery Shaw's augmented reality sculpture *Golden Calf* are presented on two dimensional displays and are thereby less perceptually immersive than the stereoscopic displays of VR.²² That being said, virtual art can render its perceptual offerings with a striking degree of richness and dynamic perceptual realism by way of computer-generated imagery, thereby allowing audiences to locate themselves in the world represented by the artwork in a way unavailable to the static imagery of panoramic paintings.

Virtual immersion is when a user takes an attitude of being present in and preoccupied with the depicted contents of an artwork. Importantly, it is an attitude that is characteristically prescribed or mandated by virtual artworks. It is evident that this attitude is mandated by virtual art when we consider that virtual art is often self-involving.²³ Borrowing from Robson & Meskin's (2016) account of videogames as self-involving interactive fictions, I take self-involving art to be art which is "about those who consume it," or incorporate an audience's attitude of presence into the artwork. Robson & Meskin argue that the status of videogames being self-involving is partly evident by the regular use of first-person language in discussing our experiences with them, such as saying "I killed the monster" or "I drove to this location." It strikes me that virtual immersion is a mental state that is required to appreciate these works as self-involving. It would be strange if I regularly used the first-person language Robson & Meskin describe without having a corresponding attitude of presence and involvement in the virtual depiction. Instead, it seems that the mental state of virtual immersion is required to appreciate these virtual artworks.

When one is perceptually immersed in VR, the sense in which they can be virtually immersed is salient. When they perceive a monster running towards them in the VR horror game *Resident Evil*, they are also virtually immersed when they adopt a corresponding attitude: that the

²² These works are still perceptually immersive in some minimal capacity. In the case of *Golden Calf* and other works presented on two-dimensional displays, they at the very least pre-occupy our visual attention.

²³ I suspect that within everyday speak, talk of virtual artifacts being "immersive" often refers to "self-involving."

monster is running towards them. However, perceptual immersion in VR is not necessary for virtual immersion. If one plays a third-person videogame on a two-dimensional display, such as *Dark Souls*, the user may still adopt the relevant attitude required to be virtually immersed. If they see a ghoul running towards their avatar or player character, they take the attitude of the ghoul running towards them. Virtual immersion is the means by which an audience can say that they had an experience with the virtual art beyond its representational status. That is, they experience the virtual representations as what they represent, not as representations.

An important aspect of virtual immersion is that it relies on being immersed *as a role* in that virtual scenario. In a bear hunting simulator, I am immersed *as a bear hunter*. This aspect of virtual immersion is evident by our identification of users with the role they occupy, such as saying "Jenny climbed the mountain" where Jenny is a user occupying the role of being a mountain climber. Virtual role immersion is how many of the perspectives we will discuss later are made intelligible to the user. Many virtual artworks mandate that I take the attitude of being a particular fictional character in that world with predefined traits and values, others allow me to be immersed as a character who lacks predefined values, or can have their values shaped by the user in some way. Occasionally, the user might be virtually immersed as themselves, taking the attitude that they are present in that virtual scenario as themselves. Often, virtual artworks can allow for flexibility in the role one is immersed as, allowing the some of the values of the user to be compatible with some of the values of the role. By adopting the attitude of being present in the virtual scenario as a given role, they adopt a corresponding attitude of having a causal role in the virtual world, and that their choices have a bearing on the world they are immersed in.

When being immersed as a virtual role in a given scenario, the virtual artwork provides a variety of affordances that are dictated by that role-scenario relationship, invoking the concept of *interaction*. Given that this is the case, the use of interaction in virtual art is largely related to virtual immersion.²⁴ The role is one immersed in (henceforth, immersed-role) and the scenario one is immersed in will partly determine the affordances one is provided. If I am immersed as a bear hunter, the choices provided to the user will reflect the scenario the bear hunter is placed in

²⁴ The relationship here is not an absolute one, as one can be virtually immersed without having interactive affordances. I could watch a VR documentary and take myself to be in the presence of what is pictorially depicted while having no or minimal interactive affordances, and thereby still be virtually immersed. However, where virtual immersion is mandated, there are typically affordances.

(such as bear hunting) as well as what the bear hunter can and would do in that scenario. The choices one makes or has at their disposal will largely relate to the values carried within the role one is immersed as. Moreover, when a user is virtually immersed with interactive affordances, they take themselves to have a real and direct causal relationship with the virtual environment. When immersed as the bear hunter, I take myself to really be hunting virtual bears.

The psychological mechanisms at play when virtually immersed in a role are similar to the ones Nguyen (2020, pp. 53-54) appeals to when we play a game, specifically what he calls agential layering. Agential layering refers to a process in which one's motivational state is dictated by some first-order desire which relates to a higher-order desire. In the case of the game of basketball, I have a first-order desire to get the ball into the basket which relates to a higher-order desire, which is determined by whatever reason I chose to play basketball, like exercise. Something similar occurs in virtual immersion, we immerse ourselves in a role which dictates our first-order desires, and that immersion relates to a higher-order desire. That higher-order desire is determined by the reason we engaged with the artwork initially, such as aesthetic pleasure.

While agential layering is a good device for explaining what happens when virtually immersed, it does not capture the full experience. While in the case of games, the agential layering can often be very simple, it is often more complex in virtual art. The evaluative attitudes taken up in virtual art can often be a mix of role-determined values as well as personal values. Therefore, the picture of how one's evaluative desires relate to one another in the virtual experience is not as simple as a first order and higher order relationship, and will largely be unique to the virtual scenario.²⁵

Here is an example, in the VR documentary *Common Ground* users are invited to explore a London social housing project, the Aylesbury Estate, and speak to the residents there. The role that the user takes up is that of themselves, and they are mandated to take the attitude of being present at the estate. The user does have some "higher-order desire" that explains why they engaged with the film, such as wanting to experience what VR documentary is like. However,

²⁵ This is not to say games *never* have complex cases of agential layering. Nguyen points to many rich examples suggesting the opposite. However, I take the agential layering found in virtual art to be standardly more complex than that found in games.

what would be called their "first-order desires" are not the relatively simple desires like "getting points," but rather the desires and wants they would have *were they* physically present at the estate, and were they to meet these inhabitants. So, the agential layering of virtual immersion relates to role-provided desires, similar to that of games, but it differs because virtual work's often invite a user's own attitudes to contribute something to the occupied role.

To sum, let me quickly describe these sorts of immersion in relation to presence.

Imaginative: To imagine being present, and have such imaginings dominate one's phenomenal experience.

Perceptual: To perceive oneself as present.

Virtual: To adopt the attitude of being present.

Immersion is a gradable notion, as are its varieties. Full body virtual reality technology is more perceptually immersive than haptic feedback controllers or stereoscopic VR helmets. In the case of virtual immersion, I might only partially immerse myself in a given role, only partly adopting the requisite values and attitudes. For instance, I might find the role's entailed values morally abhorrent, so I resist fully immersing myself in the role.

When we are perceptually or virtually immersed, we might find it easier to gain the sense of being present required by imaginative immersion. It might cease to seem that we are imagining ourselves as present, after all, we perceive ourselves as present and we take the attitude of being present. Of course, we are only imagining that we are physically present in these virtual environments (Antonsen, 2021), but the actual experiences are not imagined. It is for this reason that virtual immersion is a useful concept to employ, because even though we might only imagine our presence, we are *practically* present in the scenario, and take the attitude of these virtual events as happening in our presence. When imaginatively immersed, the user's awareness of being virtually or perceptually immersed might fade into the background as a result of the flow entailed in imaginative immersion.

²⁶ Moreover, the user is present in the virtual world, just not physically so. The user is virtually present in the virtual world through a virtual self or "avatar." See Chalmers (2022, pp. 220-221). Moreover, the contents of this imagining need not be experiential, but instead propositional, i.e. the user need not vividly imagine themselves in that location, but instead adopt an attitude "I imagine that I am there."

It is not one of these types of immersion which is characteristic of virtual art. What is characteristic of virtual art is the conjunction of some or all of them, and that immersion being computer generated. All three can be found independently in various art-kinds, but the combination creates a particularly robust and interesting experience, and what can be gained from that experience differs from what could be gained if it were just one sort of immersion. It is not a better experience than that found in other art-kinds, but it is one that I take to be particularly interesting.

I have staked out an understanding of which senses of immersion are at play in our discussion of virtual art. However, multiple, more robust senses of immersion might be better suited for this project. These accounts, *mutatis mutandis*, can still result in my thesis being successful, so long as these accounts allow for perspectives to manifest in immersion. What matters is that these accounts maintain the idea that a user takes an attitude of being immersed, or physically present in the virtual world, such that they can locate themselves in it. I now turn my attention to the role of immersion in gaining a novel perspective.

2.5. Immersed Perspectives

As previously established, engaging with art requires adopting perspectives. For example, literature characterizes certain people and events as having certain properties, and so readers characterize those people and events as having those properties as well. Here, I outline how instances of virtual art generate perspectives, and how these perspectives are rendered intelligible to audiences. Importantly, I establish the uniquely *constructivist* nature of perspectives in virtual art, which will be relevant in Section 2.6 when I discuss one of the cognitive merits virtual art can have: its ability to foreground motivational states for reasons.

When properly virtually immersed, users adopt two related perspectives of the roles they are immersed as, an *evaluative perspective* and an *affective perspective*. An evaluative perspective reflects the values those roles hold. If I am immersed as myself, I evaluate bears as being scary, while if I am immersed as a virtual hunter, I might not ascribe the value of "scary" to bears. An affective perspective reflects the emotions and affective state one holds while immersed in that role, such as fearing bears if immersed as myself or being not scared of bears if immersed as the hunter. I remain neutral as to whether the user *imagines* having these

perspectives, or if they genuinely adopt them. I think virtual immersion requires users to adopt these perspectives and corresponding attitudes towards virtual scenarios *inasmuch as* the artwork prescribes. If that is the case, then it will likely be the case that particular works and particular roles have differing requirements with respect to this matter. Going forward, I will speak as though users genuinely adopt the perspective, as I suspect that many virtual artworks require this.

Where virtual artworks allow for both virtual and perceptual immersion, then users adopt another perspective embedded in the role, the *sensory* perspective, which includes visual, auditory, tactile, and other sensory experiences. In addition to adopting role-determined values and affective attitudes, a user will have a sensory experience which is determined by the role. For instance, if I am immersed in the role of myself, in the presence of Aylesbury Estate in the VR documentary *Common Ground*, then I adopt a corresponding focal perspective. When I look up and I see a computer-generated rendering of the top of the building, I take myself to have looked up and seen the top of the building as though I were physically there. Sensory perspectives are not always visual, sometimes they can be auditory or tactile.

Virtual art makes these perspectives intelligible partly through its own devices. For one thing, as a pictorial medium, virtual art has the same resources as other pictorial mediums to manifest perspectives. The hellish and deformed appearance of the villainous Jack Baker in the VR horror game *Resident Evil VII* conveys with it particular attitudes about how the user should feel towards him and what values they ought to ascribe to him. The sensory perspective acquired through perceptual immersion also contributes to the evaluative and affective perspectives, as the user perceives Baker as having a dominating size in comparison to them, which can give rise to an evaluation of Baker as being dangerous and comparatively more powerful than the user.

Interactive affordances are another way virtual art can render perspectives intelligible. Typically, a set of affordances can make some role-embedded evaluative or affective perspective clear. In the Jack Baker example, a user is provided with a variety of means for them to choose how to hide from Baker, and it quickly becomes apparent that there are no affordances which allow the user to directly combat Baker. The user is then made aware that the immersed-role evaluates Jack as being insurmountable as an opponent, as well as someone who ought to be avoided. The evaluative and affective perspectives manifested in the interactive affordances

serve to enhance what is gained from the sensory perspective. Baker can be more easily seen as terrifying given the variety of perspectives informing that judgement.

In many cases, the user will have to infer some of the mental states involved in the perspectives manifested in virtual art. Users often lack direct access to these mental states, and so they might develop a theory of general human psychology to infer those mental states required for the role, or they could attempt to simulate being the virtual role.²⁷ Sometimes the mental states can be seemingly causally accessed as opposed to inferred. Seeing the virtual role from a third person perspective can result in affective contagion by which a user naturally mimics the facial expressions of the target role, yielding an analogous affective state.²⁸ Moreover, virtual art can prescribe the audience with certain bodily phenomenon which inform movements (Isbister et al., 2011). The complex interaction between virtual artworks and users to manifest and acquire perspectives shows that much of that work is done through construction.

Much of the manifestation and acquisition of a perspective in virtual art is done through construction on the part of both the work and user. Users are deliberately encouraged by the work to make salient properties in the work, not just through their selection of various displays through interaction, but also through their own perceptions and attitudes.²⁹ Sensory perspectives are only acquired in relation to the user and their actions, such as the user feeling force from haptic feedback controllers, or turning their head to reorient the image of a stereoscopic display, while affective and evaluative perspectives are developed through a user's own reactions. Part of the reason I characterize Baker as frightening is due to the presentation of him by the work, but another reason is my own affective reaction towards him when experiencing the game. I might find Baker to be more frightening than other users, and this reflects what is interesting about acquiring a perspective from virtual art. The work allows room for users to contribute their own values and affect to the perspective, and the perspective manifested in the work will be, in part, unique to an individual user's dispositions.

²⁷ More likely, they will engage in some combination of these. These theories of interpersonal understanding are often called the *theory-theory* and *simulation-theory* respectively, and can be found in Gordon (1986), Gopnik & Wellman (1992), with an extensive psychological treatment in Mitchell et, al. (2009).

²⁸ For philosophical treatment of affective contagion, see Gilmore (2020, pp. 68-70).

²⁹ One might think of a comparison to impressionist paintings in which the audience is invited to perceive the work differently based on their own emotions and experiences.

Grasping a new perspective may very well be a cognitive success, even if that perspective does not immediately and directly further our understanding. If perspectives can be mapped onto the world and further our understanding, then the acquisition of them is cognitively valuable. Matthew Kieran (2005, pp. 138-147) has shown that an artwork's cognitive value can be found in its ability to refine our epistemic practices, not just in its advancement of our aims of inquiry such as truth and understanding. Virtual art's constructionist features allow for these perspectives to manifest. Even if the communication of the perspective is, by its own lights, a cognitive value in the artwork, I want to address how these perspectives are understanding-conducive.

2.6. Virtual Perspectives and Motivational States

In constructing perspectives in virtual art, users think through the scenarios presented and contribute something to the work through their interactive affordances. This contributes to how the contents of the work are characterized to the user. One way the act of generating perspectives virtual art is cognitively valuable is that it allows users to grasp the reasons for actions from various perspectives. In grasping the motivational states of others, we can better understand the ways in which other people make decisions, but also find agreement between our own perspective and those which seem completely alien to us. Here, I am largely going to focus on scenarios in which the user is explicitly not immersed as themselves, and instead immersed as a particular character.

To understand how constructing perspectives in virtual art can aid in understanding motives and reasons for actions, let us look at an analogous sort of value from literature. It has been said that literary perspectives are particularly good at getting audiences to understand motivations for actions. ³⁰ Equipping a perspective different from our own when reading allows us to better understand a character's actions. We see how they evaluate the choices at their disposal, and the reasons which inform their choices. In looking at the odd day of Leopold Bloom in *Ulysses*, James Joyce's psychologically charged prose gives the audience an excellent idea of the evaluative dispositions which inform Bloom's behavior. By "trying on" Bloom's perspective and characterizing situations as he does, audiences can gain a good understanding of

³⁰ See Donnelly (2019, 18-20) for a particularly good analysis.

how Bloom's perspective informs his decisions throughout the text. In wielding that perspective in our everyday cognitive practices, we can look at those we know who are like Bloom and glean some idea of what informs their actions.

A view that many have rightfully adopted, however, is that these perspectives do not necessarily yield actual knowledge of human behavior. For one thing, characters in literary texts are often trait based, and so their motivational states often reflect this trait-based nature, but traits often play little role in actual human psychology. This would suggest that the perspectives manifested in artworks do not yield much knowledge of human psychology. I think that this should not motivate pessimism of the cognitive value of literary perspectives, certainly they can yield understanding if they do not yield knowledge. However, this does highlight a weakness of literary perspectives, that being their general unreliability that they match human perspectives as much as audiences hope they do.

Virtual perspectives cannot avoid this worry entirely, but they can mitigate the worry because of their constructivist nature, particularly with regards to decision making. I said earlier that users bring something to bear on the work when manifesting the virtual perspective, in that their attitudes and values are asked to play some part in the interactive components of the work. This is going to allow for the complexity and nuance in our own psychologies to contribute to the virtual perspective, thereby allowing the motivational states displayed in virtual perspectives to line up more with our own human perspective. It follows naturally from this that the manifested perspective will bear some resemblance to our understanding of human psychology, at the very least of the user's psychology, and so the user can have a good grasp as to where the perspective matches human psychology, and where it differs. That being the case, it would be a mistake to assume that virtual perspectives can reliably yield knowledge of human psychology, just that they have particular mechanisms to foster a better understanding of human psychology.

Importantly, in understanding the motivational states behind the decisions made in virtual art, the user need not endorse those decisions or corresponding attitudes. Instead, in exploring various decisions made in virtual art from a particular perspective, I can gain some sense of why that perspective is flawed or valuable in its characterizations. Peter Kivy (1997) highlights how

³¹ See Currie (2011) for this sort of account. See Stecker (2019, pp. 94-100) for a compelling cognitivist response.

the cognitive value of art is often found as "hypotheses" we can test in ordinary experience. Something like "hypothesizing" occurs in a virtual work, in that we weigh different options from a given perspective, then decide what choice would correspond to that perspective's evaluation. In seeing the outcome of that choice, I might be disappointed, and realize a grave fault in that perspective. The videogame *Spec Ops: The Line* contains a notable instance of this, in which the user is immersed as a rather reckless soldier named Walker. Walker desires to accomplish his objective no matter the cost. This results in the user making a reckless decision in which they mistakenly deploy chemical weapons on a group of civilians. The user is made keenly aware of the faults of this character's evaluative attitudes, and does not need to endorse these attitudes in order to appreciate how they contributed to the decision made.

The manifested perspectives in virtual art can be cognitively valuable when they aid us in making sense of the motivational states of others. In the *Spec Ops* case, the user makes sense of a perspective, and understands how someone with an analogous perspective would reason and evaluate particular scenarios. Additionally, in working through decisions from a perspective in a virtual work, users can come to find similarities between their own perspective and those of other's. In *Spec Ops*, I might find that Walker and I, though differing in many respects, do have some shared general values. While I do not agree with the high degree of importance he places on accomplishing objectives regardless of consequences, I do agree with the value he places on fulfilling commitments and obligations. Virtual art asks us to engage with these perspectives in order to make decisions, and in doing so we can better appreciate how these alternative ways of characterizing the world both agree and disagree with our own perspectives.

It is also clear how this cognitive merit can be connected to a work's artistic merit. It is seemingly an artistic merit that I am able to understand and think through why someone like Walker would make certain decisions which I could not see myself ordinarily making. Correspondingly, I can imagine a work less successful than *Spec Ops* in which the decision seems contrived and foreign, because I struggle to grasp the perspective behind certain decisions. In being allowed to make that choice as someone like Walker, I would be confused as to why the work would even suggest I make such a decision, because the work is not successful at getting me understand their characterization of the situation. This work would likely be dismissed as far-fetched and unsuccessful as a result. I will speak more on the connection between cognitive and

artistic merit in the next chapter. For now, I want to speak about another cognitive merit of virtual perspectives which is found when appreciating a virtual work as *interactive*.

2.7. Appreciating Virtual Art

In appreciating virtual art, we appreciate it as *interactive*. Appreciating a work as *interactive* entails appreciating its full range of possible instances, not just one particular instance (Thomson-Jones, 2021, p. 93). Similarly, some virtual artworks offer not one perspective, but a suite of differing perspectives which can be compared with one another. That "suite of differing perspectives" is what I call a "perspective-range." These differing perspectives will often focus on the same scenario, but offer differing ways of characterizing and evaluating that scenario. In appreciating the work simpliciter, users are invited to compare these perspectives. Through this appreciative and interpretive project, the work can effectively communicate to the user what is valuable and what is faulty in each perspective. In comparing the perspective-range, the user can approach a more complete and complex understanding of a subject.

Perspective-ranges allow for users to directly compare the perspective manifested in one instance of the work to the perspectives manifested in other instances, thereby realizing what is advantageous or flawed about particular perspectives. Literary theorist James Paul Gee (2002, pp. 146-155) offers an analysis of this sort in his discussion of a child's experience of the videogame *Sonic Adventure 2*, a work which allows the user to experience the events depicted from the perspective of the "good" or "evil" characters. Gee testifies that, through experiencing both perspectives, the child came to understand that the evil characters saw themselves as the "good guys" and had different evaluative dispositions as a result. In doing so, the child understood the faults in the evil character's evaluations. Despite that, Gee also testifies that the child better understood the variety of ways "good" or "evil" can be understood by different perspectives. This simple example generally tracks the cognitive merit of certain perspective-ranges. Perspective-ranges can communicate how certain perspectives differ, and what advantages each perspective has.

While the case of *Sonic Adventure 2* is a simple one, there have also been virtual artworks which communicate more complex perspective-ranges, and teach something more complex as a result. A good example of this is *Before Your Eyes* and its focus on the value of a

short life. Before Your Eyes is a virtual artwork in which users take up the role of "Benny." The narrative begins with a deceased Benny about to meet "The Gatekeeper," a St. Peter-type character who determines whether Benny can enter paradise in the afterlife. To ensure that Benny will be admitted, he is asked to recount his life story to another character, "The Fisherman." Benny describes a life in which he fosters his artistic talents to be a widely celebrated polymath, despite enduring hardships like recovering from a grave illness, the sudden loss of his mother, and a devastating heartbreak. The Fisherman believes this life story will be enough to allow him into paradise, as it is clear Benny has lived a good life. However, it is revealed that Benny's story is nothing more than a fantasy, and that this tale was the life he wished he could have lived. He then recounts his real life, in which despite having the potential to be a prodigy, the grave illness ended up taking his life when he was a young boy. He then recalls his mother summarizing his life to him, saying that despite his short life, Benny lived a good one because of his relationships between him and those he loved. In that moment, Benny realizes the value in his life, and the joy he brought to those around him. The Fisherman affirms that Benny will enter paradise, recognizing that Benny had nonetheless lived a good life despite the hardship he endured

The role of Benny contains a general framework the user can use to develop a perspective. Users experience the memories of Benny as he recalls them, experiencing the perspective he recalls them from. Moreover, the user progresses through the work's display by blinking, as the work tracks the user's eye movements. The user then sees the world as Benny saw it, although if the user blinks, they progress to another memory of Benny's. Their actions in this domain have a bearing on what Benny is said to recall in this particular telling of the story. The user is also afforded the ability to determine what values Benny ascribes to his memories, such as choosing whether he views his childhood as "strict" or "happy." Different decisions by different users will result in different perspectives gleaned. A user who evaluates Benny's childhood as strict will likely have a different affective response than the user who said it was happy. Moreover, the user who blinks through most of the happier moments of Benny's upbringing will likely understand Benny as having a different evaluative and affective perspective than the one who focused almost exclusively on those happier moments.

These different perspectives are made somewhat unique by each user's experience. If a user chose to say that Benny's childhood was overly strict, only to realize that they had blinked through most of the happier memories, they might recognize that sometimes those who ascribe similar values to their own upbringing fail to see what was good and valuable in those memories. Similarly, a user who skipped many of Benny's more mundane memories and only appreciated the ones which were parts of Benny's fantasy life might realize the connection between failing to appreciate the good in one's life and indulgence in imagining what could have been. The perspective gained gives users a valuable set of resources to understand those who display similarities to Benny, whether that be struggling with mortality or failing to appreciate what one has.

The perspective-range offered in *Before Your Eyes* teaches a valuable lesson about the complexity that goes into evaluating one's life, that there is an immense degree of intricacy with regards to the memories we focus on. If we choose to focus on the negative memories as one instance of Benny does, we might lose sight of what is valuable. Contrastingly, if we only focus on the most positive memories as another instance of Benny does, we might be disappointed in the fact we could not continue to make these positive memories. The work does not attempt to communicate that one perspective is better than another, but instead highlights the complications in each. In appreciating this, an epistemically vigilant user advances their own understanding of reflecting on one's life. The work is able to communicate this complexity only when these perspectives are appreciated relative to one another, something which interactive works can do through their multiple instantiations.

By having multiple engagements with *Before Your Eyes*, users can gain multiple perspectives, and understand a variety of ways someone like Benny can characterize their memories. They can also see how choices in characterizing memories, as well as choosing what one recalls, are received from those perspectives. Interestingly, users can compare the perspectives they obtain, seeing what one perspective misses in their evaluations and reactions compared to another. These result in subtlety different perspectives gained from each engagement, and those subtle differences highlight the complexity of how those perspectives relate to choices and consequences. We can then use those perspectives to see actual people and scenarios in terms of those perspectives. It seems clear then that *Before Your Eyes* is able to

advance one's understanding of those with perspectives similar to Benny's, contributing to sympathy towards their characterizations, choices, and evaluations of those choices.

2.8. Anti-Cognitivist Objections

I will use this section to respond to three plausible anti-cognitivist worries and objections. Many of them reflect anti-cognitivist worries towards art and fiction in general, although some are either solely about or particularly skeptical towards virtual art.

The first objection holds that virtual perspectives are only beneficial if 1. The immersed-role is sufficiently similar to an actual person and 2. The relevant virtual scenario is largely continuous with an actual scenario. These two conditions are rarely, if ever, filled as a result of aesthetic properties of the work. There are two assumptions underlying this objection. The first is that the aesthetic aims of art are fundamentally at odds with cognitive aims. If the artwork is attempting to provide an aesthetically rewarding experience, then this attempt is likely incompatible with providing any epistemically successful insight into motivational states. The second assumption is that the act of exporting a perspective only yields genuine understanding when there is a high degree of verisimilitude contained within the perspective and the scenario. If the perspective and scenario are largely discontinuous with the world, then straight export would surely misfire. I will discuss the first assumption in the next chapter, and focus on the second assumption for now.

There is a great deal of truth in this objection, but it misunderstands the complexity of what can be done with a perspective. Suppose the virtual perspective I am asked to take on is a deranged vigilante bear hunter, one whose affordances, values, attitudes, and even perceptions are largely removed from most actual bear hunters. Direct export of that perspective to understand my bear hunter friend will surely fail. Better options if I wanted to understand them would include reading psychological studies of bear hunters, reading their diary, or accompanying them on a hunt. However, there is still cognitive benefit to that perspective depending on how I wield it. If I use it in contrast with my friend's behavior and attitudes, then I

can still gain some understanding of them, and that is a cognitive success.³² All the objection shows is that learning from virtual artworks, and artworks in general, can be quite complicated.

The second objection, echoing claims made by Gregory Currie (2020, pp. 107-110), is that much of being taught by art is pretend. In the case of virtual art, we pretend to be present and learn things about the world depicted within the virtual art, and so you might think such pretense extends to things beyond that virtual scenario. In learning things about the characters and scenarios depicted, we deploy our epistemic skills and engage in an inquiry similar to the inquiries we engage in ordinarily. Recall, I mentioned earlier that part of the way we learn about the motivational state of the immersed-role is by deploying our own knowledge of human psychology. In some sense, we are *pretending* to learn about these characters. In deploying those epistemic skills in a virtual scenario, we might be inclined to include matters from our ordinary lives within that pretense. So, while we pretend to learn about Benny and his short life, we are also pretending to learn about how to evaluate our own lives.

Supposing this objection correctly assumes that audiences pretend to learn when they engage with art, the objection fails because it is not clear that *pretending to learn* precludes *genuinely learning*. To illustrate, pretend there is a student who designs a "cheat sheet" containing all the answers to an upcoming exam. In designing the cheat sheet, they unknowingly learn the answers to the exam. When taking the exam, they use their cheat sheet to answer the questions, although later find that it was unnecessary as they knew the answers without the aid of the cheat sheet. The student certainly pretended to learn, as made evident by the design and use of the cheat sheet, but they also genuinely and unknowingly learned through that original act of pretense. While this example is not quite the same as what happens when we learn from art, it shows that the acts of pretending to learn and genuinely learning are not exclusive from one another.

In suggesting that we acquire a perspective from an artwork, and that we can use that perspective to gain a better understanding of human behavior, it seems like pretense can occur alongside genuine learning. In learning one of Benny's perspectives, I might at first accept that

³² Whether this is a cognitive value of the work, or if it is incidental, depends on the work's attitude towards that perspective. If the work is deliberate in its communication that this is not how bear hunters behave or feel, then it is a cognitive value of the work.

it tracks genuine facts about human psychology, without believing it to be the case. That scenario would be pretending to learn, but in mapping it onto people in my ordinary life, I do glean what appears to be genuine insight into their motivational states, even if it is not entirely accurate. That second scenario would be genuine learning and advancement of understanding, so it seems as though pretending to learn and genuine learning are not mutually exclusive.

However, the initial assertion that audiences take an attitude of pretense in engaging with artworks is false. Focusing on the initial claim that we pretend to learn about the characters and scenarios in artworks, this strikes me as implausible. Much of art, particularly art-fictions, are composed of pretense and make-believe, and even if we take part in that pretense by imagining the contents of the work, that does not mean we have *pretended to learn* about the contents of the work, but instead we have genuinely learned about the pretense which composes the work. In reading Sherlock Holmes, I do genuinely learn that the proposition "Sherlock Holmes lives at 221b Baker Street" is true in the fiction. In order to make the claim that audiences "pretend to learn" about the contents of the work, the objector needs to show that there is a mental state of "pretending to learn" that is 1. Normatively required by the artwork to appreciate it and 2. That this mental state is in some respect distinct from the mental state of genuinely learning about the pretense of the work. Focusing on (2), I do not see how pretending to learn the aforementioned proposition about Sherlock Holmes is distinct from genuinely learning that proposition.

The third objection says that there is no active engagement in the decisions in virtual scenarios, and end up being cognitively detrimental as a result. This view would hold that the affordances provided in virtual art seldom approach the complexities of actual-world decision making. Instead, the choices are simple and unnuanced, and that users are asked to be passive in their engagement with them. This sounds cognitively detrimental, as virtual artworks would seem to give the user a false sense of clarity and passivity involved in actual world decision making.

There are two responses to this objection. The first is that simple and unnuanced decisions, while often present in virtual media, can still be thought of as cognitively beneficial. When contrasting the affordances manifested in virtual art with the actual world, we can better appreciate the complexities and subtleties in the choices we are able to make in our everyday lives, and the complicated nature of human psychology. The second is that in practice, the very

best virtual art we have is often quite complex. The decisions found in works such as *Before Your Eyes* require active and nuanced engagement on the part of the user. It is true that the complexity in these affordances and these perspectives likely do not approach the complexities of the actual world, but they do a good enough job that they can still aid us in better understanding these difficult matters.

Conclusion

Virtual artworks can advance our understanding of the actual world. They immerse users in virtual scenarios through multiple means, and within those scenarios users are provided a role. Embedded in that role is a framework for a user to develop a novel perspective. Users then make choices from that perspective, and thereby understand motivational states of others better. This perspective can be exported and wielded to better understand others who hold similar perspectives, and we can better understand how their perspective contributes to their decisions and evaluations. Virtual artworks can also contain a perspective-range, which is a suite of perspectives that can be compared with one another. In comparing these perspectives, users can learn the complexities and nuances found in each one. The cognitive value of virtual art is non-unique, but it is characteristic of the art-kind. Next chapter, I will argue that this cognitive value can count as an artistic value.

Chapter 3: The Artistic Argument for Virtual Cognitivism

The last chapter motivated the claim that virtual artworks can communicate cognitively valuable perspectives. I suggested that these perspectives are properties of the artwork, and virtual works can provide cues and guidance about how these perspectives can be used to further understanding. Additionally, I suggested that appreciating a virtual work as *interactive* leads users to appreciate a work's perspectives relative to one another, what I called the *perspective-range*. A perspective-range is cognitively valuable if it is conducive to understanding some subject matter, such as *Before Your Eyes* offering a perspective-range conducive to understanding what can be personally valuable in a short life.

This chapter argues for the *artistic commitment* of virtual cognitivism, which says that the cognitive value of a virtual artwork can count towards the work's artistic value. The chapter can largely be split into two halves. The first half argues that cognitive merits can, in principle, be artistic merits. The second argues that the cognitive merits of virtual art are found when appreciating the features specific to virtual art. I will largely be speaking about cognitively valuable perspectives, although some of my arguments can be augmented to fit other sorts of cognitive merits found in art.

I offer some desiderata for when cognitive merits can count as artistic merits (Section 1). Following this, I advance two arguments in favor of the connection between artistic and cognitive value (Sections 2 & 3). After responding to an influential objection raised by Peter Lamarque (Section 4), I motivate another objection which says that the cognitive merits can only be artistic merits of certain art-kinds (Section 5). I then explain when merits are art-kind specific merits (section 6). Following this, I explain why cognitively valuable perspective-ranges can be art-kind merits of virtual art (sections 7 & 8).

3.1. A Note About Artistic Value

My view of artistic value largely follows the popular line that the value of an artwork *qua* art is tied to the value of its afforded experience (Beardsley, 1958; Budd, 1995; Levinson, 1996; Stecker, 2010). However, I have a broad conception of what this "experience" consists of. Following Budd (1995, p. 4-5), I think the experience in question is one had through correctly

understanding and apprehending the artwork. To take a toy example, I can have a valuable experience if I misread a poem, prompting an ill-fitting but powerful imaginative experience. The value of that ill-fitting experience is not connected to the value of the poem, because it is not the experience offered by the poem itself, when understood correctly. Also borrowing from Budd (p. 5), I think that the experience can include more than purely aesthetic values, such as "the invigoration of one's consciousness, or a refined awareness of human psychology or political structures." I take it that we value these features largely as properties of the artwork. That is, we value the refined awareness of human psychology found in an artwork because the artwork has some property of being "insightful," the fact that audiences might have gained this refined awareness from the work is a consequence of that experience.³³ Thereby, artistic value is connected to the value of the experience afforded by the artwork.

To show when cognitive merits count towards an artistic value under this framework, I need to show that they are part of the prescribed experience of an artwork, and not an accidental or unintended by-product of the work. Given this, an audience's advanced understanding might be *indicative* of some artistically relevant cognitive merit, but it is not an artistic value as such. What is an artistic value is an understanding-conducive perspective-range, which can be found in the afforded experience of the artwork. Something I will note later is that this "experience" is drawn quite broadly to include the afterlife of the work, as well as gaps between engagements (Kivy, 1997). For now, I turn to two positive arguments in favor of the connection between artistic and cognitive value.

3.2. The Appreciation Argument

Here are two of the many arguments in favor of the connection between artistic and cognitive value: the *appreciation* argument and the *convention* argument. The appreciation argument holds that when we appreciate the epistemic success of an artwork, we sometimes also

³³ I am avoiding use of the terms "intrinsic" and "instrumental" here, because it is not entirely clear that this distinction holds true in the case of artistic value. While Budd sees the value of art as largely intrinsic, Stecker (2010) criticizes the view on the basis that valuing an artwork for the experience it provides is valuing it for an instrumental end, that end being the valuable experience. Thereby, the distinction does not hold. Instead, artistic value seems connected to the intrinsic value of the experience, as well as some non-accidental instrumental values.

³⁴ Some have criticized the idea that artistic value is tied to the experience of the artwork, see Shelley (2010).

appreciate an artistic success. The convention argument holds that the link between cognitive and artistic value is a product of norms surrounding artistic practice. I develop the appreciation argument first, which focuses on how we ordinarily evaluate the experience offered by art.

The appreciation argument has three components. First, the perspective of an artwork contributes to its artistic success. Second, part of the reason we find a perspective interesting in our artistic appreciation can be because it is an epistemically fruitful way of acknowledging or characterizing some subject matter. Third, if the artwork manifests an epistemically fruitful way of acknowledging or characterizing some subject matter, and that is part of why we take an interest in the content of the artwork, then that counts as an artistic success.

An uncontroversial point is that artworks manifest a perspective on a subject-matter, and these perspectives relate to the success of the artwork. Perspectives which are coherent and engaging in their characterizations are common amongst great artworks. Part of the reason why *Wuthering Heights* is valuable is because of the compelling and psychologically detailed perspective it offers on turbulence in romance. In the case of virtual art, *Before Your Eyes* is valuable in part because of the rich and nuanced perspective-range the work has about the value of a short life. Conversely, an artwork which manifests an unengaging or unintelligible perspective would indicate an artistic failing. A version of *Before Your Eyes* which manifests a less than compelling perspective on life's value could be criticized for offering shallow or confusing characterizations of one of the work's central themes. So, it seems essential to evaluating art that we appreciate the perspective from which the contents of the work are conveyed.

The perspective a work offers can be valuable in many respects, one of those respects can be generating an intellectually interesting way of thinking about a subject-matter.³⁵ In the case of *Before Your Eyes*, the interest generated by the perspective-range of the work relates to how each individual perspective motivates its users to rethink how they evaluate their own life and memories. This is intuitively an intellectual interest, as the work encourages the user to complicate their own views on the subject-matter by engaging with these perspectives. What this means is that the artwork offered a coherent and engaging way of addressing its subject-

³⁵ Not every valuable perspective generates a cognitive or intellectual interest. Works such as Titian's *Venus of Urbino* offer an artistically valuable perspective which primarily generates erotic interest.

matter, and the part of the reason it was coherent and engaging was that it was intellectually interesting.

The anti-cognitivist can agree with everything I have said up until now but suggest that the "intellectual interest" I refer to only relates to intellectual matters within the work. In taking an interest in Before Your Eyes, I take an interest in the work's perspective-range on life's value as depicted within the work. If we were to apply that interest to analogous matters beyond the work, two things can occur. One is that it might disturb our understanding of the world and those around us, a point I argued against last chapter. The second is that in treating the work's perspective on that subject-matter as analogous to the way that subject-matter presents itself outside of the work, we ignore the artistically interesting properties of the work.

What I need to demonstrate is that the epistemic productivity of that intellectually interesting perspective can be related to artistic success. That is, if I come away from *Before Your Eyes* with a more enriched understanding of life's value, can I attribute that to the artwork's value? If prior to engaging with the artwork, I had a relatively simple understanding of life's value, but then I find out from *Before Your Eyes* that my existing understanding is ill-fitting or lacking in some regard, that would indicate that *Before Your Eyes* manifests a more complete understanding of the subject-matter than I previously had. This means that the epistemic gain I experience relates to the epistemic success of the artwork. If the epistemic success of the art amounts to an artistically interesting way of viewing a subject-matter, then my epistemic gain also relates to an artistic success. In appreciating the fact that I have progressed my understanding of life's value through my engagement with *Before Your Eyes*, I am also appreciating the value of the artwork.³⁶

Here is virtual-specific summary of the appreciation argument. Ideally, we want the perspective-range manifested by virtual artworks to contain a variety of compelling ways of viewing some scenario or subject-matter. One way a perspective can be compelling is by provoking intellectual engagement with the subject-matter. A perspective-range can offer several thought-provoking ways of engaging with subject-matters. If in appreciating these perspectives, users come away with a better grasp of a subject-matter, then they can attribute that

³⁶ For other ways of making appreciation arguments, see Gaskin (2013), Donnelly (2019), Stecker (2019).

epistemic success to the artwork. If in appreciating the epistemic success of an artwork, users are also appreciating an artistic success, then that epistemic merit is also an artistic merit. The appreciation argument shows that epistemic merits can count as artistic merits because of this link.

3.3. The Convention Argument

The second argument is the *convention* argument, which holds that the link between cognitive and artistic value is evident in the conventions surrounding artistic practice. The argument has been formulated in a variety of ways: appealing to the expectations of audiences (Stecker, 2019, pp. 88-89), the goals of the authors (Currie, 2020, pp. 173-174), and the cognitively charged vocabulary of critics (Gaut, 2007, pp. 167-168). Instead of addressing these arguments separately, I implore the reader to consider them as a unified picture about artistic practice. Consider the production and reception to Spike Lee's *Do the Right Thing*. Lee's film explores themes of racial conflict and institutional violence, and it seems evident given Lee's discussion of the project that he expects viewers to take away a new perspective and understanding on racism.³⁷ As Lee hopes to provoke newfound understanding in his audience, critics evaluate the film partly on these grounds. Lastly, as viewers, we expect cognitive payoffs from the film. Lee's work is artistically successful because it provides an enlightening perspective on racism. Were this not the case, viewers might complain that the film has melodramatic moments that do not accurately capture racism. Thereby, the epistemic success of the film matters to viewers. The case of *Do the Right Thing* reflects a general convention within artistic practice to expect cognitive payoffs within artworks. Given that the evaluation of cognitive pay-offs occupy a large space within artistic practice, it is counterintuitive to suggest that these cognitive payoffs are not evaluated as artistic values.

The anti-cognitivist might rebuke that the conventions of art are not genuinely cognitivist in this respect. They could suggest that the conventions of the art-world are governed by received wisdom or folk-psychology, which might differ considerably from genuine facts about

³⁷ For instance, his interview with Marlene Glicksman (1989) where he suggests his audience reflect on the quotes from Martin Luther King Jr & Malcolm X at the end of the film. It is clear that he is not just asking the audience to reflect on the theme of racism as depicted in the film, but also have a larger cognitive take-away in their inquiries about racism.

the world. If that is the case, then the supposedly cognitive demands of artists amount to little more than pretense. What we call "cognitively valuable" artworks might just be artworks which shift our commonsense ways of acknowledging the world without any *bona fide* epistemic improvement. Compare this to an explicitly cognitivist practice such as biology which aims to provide a more accurate set of beliefs about the natural world through rigorous testing. As such, the conventions of the artworld do not evaluate work on genuinely cognitive grounds.

This argument does not show that the conventions of artistic practice are not cognitive in some capacity, just that their cognitive aims might differ from those in science. Folk-psychology and received wisdom are perfectly apt ways to understand the world, and if the conventions of art aim to improve those ways of understanding, then those conventions are genuinely cognitive. Folk-psychology has gone under many revisions throughout history, eventually settling on the standard "belief-desire" view which makes up our commonsense view of the human mind. If the conventions of art are governed by folk-psychology, then the relevant cognitive merits would be those which try to improve what the received wisdom or commonsense views of some subject were. Spike Lee's aims when making *Do the Right Thing* were surely to challenge commonsense wisdom about racism, which is intuitively a cognitive project even if it is not the same sort of cognitive project found in science. This is all to say that even if the cognitive aims of art are held to commonsense or folk-psychology standards, they are still genuinely cognitive aims.

I have advanced two arguments in favor of the relationship between artistic and cognitive value: the *appreciation* argument and the *convention* argument. Neither of these arguments exhaust the ways one can make the connection between artistic and cognitive value, but it shows we have good reason to think such a connection exists. However, the convention argument rests on a claim about artistic practice, which the following objection denies in order to contest the link between artistic and cognitive value.

3.4. The Objection from Irrelevance

In the last chapter, I advanced a view of aesthetic cognitivism which focused on art's capacity to further one's *understanding*. Artworks further understanding by providing novel perspectives which characterize scenarios in particular ways, providing their own

"understanding" of some subject matter. If that is true, it seems that an artwork providing its own coherent and successful understanding is relevant to its artistic value, because that is a way for art to give coherence and significance to its subjects, similar to other sites of artistic evaluation such as unifying themes. The *appreciation* argument enhanced this point by suggesting that in appreciating the perspectives of artworks, there can be cognitive and artistic components to that appreciation. If an artwork is able to communicate a nuanced understanding to an audience, then it can be both a cognitive and artistic success. Despite this, one might think that these cognitive and aesthetic dimensions of appreciation come apart, and that the cognitive dimension is irrelevant to appreciating an object *as* art given the norms surrounding the artworld. This is the central tenet of the *irrelevance* objection.

The irrelevance objection is a powerful and influential one. However, I think it is ultimately mistaken. The argument was explicitly formulated by Lamarque & Olsen (1994) and continued to see revisions from Lamarque (2006, 2009). Simply put, Lamarque and Olsen suggest that while art can be the site of epistemic success, and that individual artworks can be valued for this success, it will never contribute to their value *qua* art.³⁸ Even if there is some cognitive value to be found from the experience afforded by the artwork, this is irrelevant to our evaluations given the norms of the artworld. The argument's power comes from how much ground it cedes to the cognitivist, accepting most of their central commitments. The only thing the irrelevance objection denies is the link between cognitive and artistic value. While it has a great deal of force, the argument ends up being circular upon further inspection.

The irrelevance argument can be roughly formulated as:

- 1. Artistic value is determined by the norms generated by institutional practices.
- 2. Constitutive values of art will be evaluated within these institutions.
- 3. These institutions do not evaluate the epistemic success of art.
- 4. Following from (2) and (3) these institutions ought not to evaluate the epistemic success of art.
- 5. Following from (1) and (4) epistemic success or cognitive value is not an artistic value.

³⁸ Lamarque and Olsen originally target *truth* as contributing to *literary value*. However, their argument can easily be retrofitted to account for other kinds of epistemic success and art-kinds.

An issue with the argument in its current form is that (4) does not follow from (2) and (3) as suggested.³⁹ The claim presupposes that because an institution x's it ought to x. That presupposition is plainly false, it does not stem from an institution doing something that an institution ought to do that thing. Even if it turns out that (3) is true, and artworld institutions do not pay attention to the cognitive aims of artists, there is no clear reason they should not be doing so. That being said, the converse is also true. If critics evaluate art on cognitive grounds, that does not mean they ought to evaluate it as such. We need to be careful about not deriving an ought from an is in this case. This makes everything quite messy, so I will ignore this for now and instead dismiss (3), then I will show that (4) cannot be claimed on independent grounds.

Let's grant (1) and (2) for now, as they are intuitively plausible. In the case of literature, Lamarque's primary interest, critics and scholars often debate and study the use of various literary devices and how they contribute to the themes of the work within their evaluations. Compare this to an explicitly cognitive practice such as philosophy, in which academics debate the success of Kant's or Plato's perspectives on the world in advancing our understanding. Evaluations of both philosophy and art are governed by the norms of their respective institutions, and they do appear quite different at first pass. Lamarque's point here is that if we read Plato as *philosophy*, we do read for advanced understanding, but if we read Plato as *literature*, we read for the sake of the internal pleasure of the work. The fact that these perspectives are understanding-conducive is not a fact evaluated by these institutional practices, and as such are not intrinsic qualities of the work, just "contingent by-products" of the experience of the work *per* Lamarque.

The issue I take is with (3) and (4). At the heart of (3) is an outright rejection of the convention argument. Lamarque (2006, p. 106) asserts that if empirically tested, (3) would hold "as an empirical generalization." This assertion does not seem right, as there are certainly critics who do debate the epistemic significance of artworks, arguing that they advance a poor or successful understanding or characterization of the subject, especially feminist, queer, and Marxist critics (Carroll, 2002, p. 19 n. 99). While these critics do not represent the totality of the

³⁹ Lamarque does not present his argument in premise-by-premise form. However, the current presentation generally captures the argument presented in Lamarque (2006).

artworld, they represent a large enough portion of it that I do not think Lamarque can claim (3) with much ease.

In fairness to Lamarque, some critics do not evaluate art on cognitive grounds, while others do. If we think that the convention argument is an empirical claim, then it might appear that the disagreement within critical practice should lead us to embrace a sort of relativism about artistic value. Critics who embrace forms of cognitivism and anti-cognitivism respectively sometimes criticize one another, and it might be difficult to adjudicate which, if any, of their value judgements are correct. If that is the case, it is tempting to endorse a form of critical relativism about artistic value, leaving Lamarque and myself at an impasse.

Thankfully, we do not have to endorse relativism about artistic value, instead we can shift the focus from the conventions of *critics* to the conventions of *artists*. Art is fundamentally a communicative practice, and most accounts of the interpretation of artworks grant a form of privilege to the artist with regards to the work's meaning or communicative aims. We have many accounts of artists who design their works with cognitive aims in mind, such as the previous example of Spike Lee. If part of the critic's goal is to evaluate the artist's success at achieving their aims, then it seems like a failing of the critic to not incorporate these cognitive aims into their evaluations of artworks. Going back to (3), if we restrict the scope of the claim to just those critics who evaluate works based on the author's aims, Lamarque has a greater difficulty claiming (3). So, even if the conventions governing critics appear to be at odds with one another, attending to the conventions governing artists shows us that cognitive value is, or at least ought to be, evaluated within artistic practice.

Lamarque (2006, p. 107) accepts that there are some critics who do evaluate art on cognitive grounds, but argues that these critics fall outside the bounds of artistic practice, as made evident by (4).⁴⁰ It is at this point that Lamarque's case for the irrelevance argument appears circular. Lamarque wants to hold that artistic value is governed by the norms surrounding institutional practice, but he also wants to hold that these norms are generated by the practice. I have already shown that a large part of art's institutions *does* cognitively evaluate the perspectives offered by art. He holds that these critics ought to be discounted as contributing to

⁴⁰ Lamarque is not responding to Carroll here, but rather to Rowe (1997) who points to cognitively charged critical discussion of Keats's "On a Grecian Urn" as a refutation of Lamarque.

artistic practice on the grounds that the practice does not evaluate art on cognitive grounds. In other words, the normative weight of (4) rests on the descriptive truth of (3), and Lamarque asserts that counterexamples to (3) fail on account of the normative weight of (4). If he wants to show that cognitive merits ought to be irrelevant to artistic value, then Lamarque cannot rest (4) on the contentious truth of (3).

Lamarque can attempt to claim (4) on independent grounds, but doing so would appear to embrace a form of formalism. Formalism, here, can be *roughly* defined as a view of artistic value which attends exclusively to the formal and structural features of an artwork, delineating artistic value as wholly autonomous from external concerns such as moral, political, or cognitive matters. I do not have the space to explain why formalist views of art are not preferable to adopt, although they have largely fallen out of favor with few contemporary defenders. For Lamarque's own purposes, formalism is not preferable to adopt, as he thinks evaluations of art ought to attend to the "humanly interesting content" within artworks, something which is largely independent from the features formalism attends to.

Lamarque (2009, pp. 294-295) tells us that the choice between cognitivism and formalism is a false dichotomy, and that artworks might very well have cognitively interesting content, but that they are not to be valued for their educative potential. Instead, artworks ought to be valued *as art*, and to value them for their cognitive import is to value them as something like science or philosophy. This claim's weight is contingent on one's view of artistic value. On the view of artistic value I presented in Section 3.1, a cognitive merit is an artistic merit when it is part of the experience of that artwork, which I showed was the case with my appreciation argument, so the cognitive import is appreciated when we value art *as art* under my view. However, Lamarque's view of artistic value is largely institutional, and artistic value is determined by how an artwork meets "conventional expectations" (2009, p. 258). Under this institutional framework of artistic value, we return to the same problem from earlier, that the conventions of the artworld do seem to evaluate the cognitive import of artworks. So, if we evaluate artworks *as art* using an institutional view of artistic value, it turns out that cognitive merits can still be artistic merits.

Despite its shortcomings, Lamarque's objection does reveal a truth. The norms surrounding how cognitive merits factor into artistic evaluations are not straightforward given

the large discrepancies between different schools of thought about artistic practice. Different sections of the artworld evaluate cognitive merits differently, the feminist critic and the formalist critic will have largely different views as to what ought to count towards the value of an artwork. This fact is complicated by differences between how different art-kinds are evaluated, which is the focus of the next section.

3.5. The Objection from Kind-Specific Irrelevance

The argument thus far has been that cognitive merits can be artistic merits, but some prefer to talk about *art-kind* value, not *artistic* value. Some artistic evaluations are intuitively contingent on kind-membership, i.e., you would not evaluate Mahler's Second Symphony as "verbose." Moreover, some hold that talk of artistic value does not serve our evaluative purposes, and that art-kind specific value is better suited for these purposes (Lopes, 2014). If that is the case, then all I am entitled to say is that cognitive value contributes to the artistic value of *certain* art-kinds, and it is not obvious that virtual art is one of those art-kinds. This gives rise to the Kind-Specific Irrelevance objection (KSI).

KSI is an objection against virtual cognitivism which accepts that cognitive merits can be artistic merits, but holds that this relation is on the basis of art-kind membership. The practice of literature, for example, might allow for the relevance of cognitive merits to evaluation, but the practice of virtual art does not allow for such a relevance according to KSI. That last bit might strike some as odd, as it seems strange to restrict a cognitive merit's counting as an artistic merit based on what category a work belongs to, but it has more force upon further inspection.

Cognitive merits are inevitably related to the medium which transmits those resources. Take two works which contain similar cognitive merits: Laszlo Krasznahorkai's novel *The Melancholy of Resistance* and Bela Tarr's film adaptation of the novel, *Werckmeister Harmonies*. The works are both cognitively valuable for their pessimistic perspectives and characterizations of how revolutions manifest themselves. However, how that cognitive value factors into evaluating the works differ based on their respective medium. In evaluating the

⁴¹ Lopes's "buck-passing theory" of artistic value successfully motivates that correct identification of kind membership is important for artistic evaluation, but it does not seem entirely successful in disregarding artistic value as a unified category. See Young (2016) for criticism.

novel, a literary critic notes how the perspective is communicated through long stream of consciousness sentences, while a film critic pays careful attention to how the work's long-takes bring rise to a similar perspective in a manner distinct to the medium.

We can now see why one might think that the artistic relevance of cognitive value is restricted to a given category of art. The way a cognitive value manifests in literature might be relevant to the work's *literary* features, but that might not be the case for other art-kinds. This is evident in discussions of aesthetic cognitivism, which are often focused on literature. Likewise, discussions on "film as philosophy" often make specific reference to the importance of films "screening" their claims, a value specific to the cinematic medium (Wartenberg, 2007). By comparison, works of music very rarely figure into the conversation of aesthetic cognitivism, despite compelling accounts of music's cognitive value with respect to the regulation of emotions and understanding dynamic affective responses (Langer, 1951, ch. 8). Perhaps this is because those cognitive merits appear to be, to use Lamarque's language, contingent by-products of music, not the product of the *musical* features found in our experience of the work. When evaluating Mahler's Second Symphony, the fact that it has aided me in understanding the range of my emotions is irrelevant to the artistic merits of the work. Comparatively, the cognitive merits of literature and cinema can be relevant to their medium's features.

In order to respond to KSI, the virtual cognitivist must show that the appreciation of cognitive merits is connected to the specific features of virtual media. Thus far, I have not referred to the standard features of the category of virtual art in discussing how cognitive merits can be relevant to their evaluations *qua* art. Moreover, something needs to be said about what goes into evaluating a specific art-kind. Considering this, I will show how we value art as an art-kind, and then I will show how the cognitive merit of virtual art figures into our artistic evaluations.

3.6. Evaluating an Art-Kind

A standard line in the philosophy of art is that much of what goes into evaluating and appreciating an artwork is related to how it is categorized, or what medium it belongs to. In his classic essay "Categories of Art," Kendall Walton (1970) shows that when appreciating an artwork, it is necessary that we correctly appreciate it as a member of some category or

categories of art. By experiencing an artwork as belonging to a particular category, certain artistic qualities of the work are made salient and appreciable. A given category of art contains with it three classes of features: *standard* (features counting towards belonging to the category), *contra-standard* (features counting against belonging to the category), and *variable* (features neither contributing towards nor counting against belonging to the category). The popular example is that the category "painting" includes two-dimensionality as a standard feature, moving parts as a contra-standard feature, and being representational as a variable feature for Walton. When an artwork is perceived as having the standard features of a category, and as lacking the contra-standard features, it is recognized as belonging to that category.

By recognizing an artwork as a member of a category or categories, various properties of the work become salient to an audience due to what are standard features and what are variable features of the respective category. To demonstrate this, Walton offers the example of a fictional art-category "guernica" whose members depict Picasso's painting *Guernica* done as a bas-relief. If one appreciates Picasso's *Guernica* as a member of the category "guernica," the two dimensionality and comparative flatness of the work is made salient to the audience, where they would not be made salient if the work were appreciated as a painting where features of two-dimensionality and flatness are standard. That variation of salience gives rise to other properties, such as the work being seen as "serene" when received as a guernica and "violent" when received as a painting. Importantly, Walton asserts that *Guernica* can only be correctly appreciated when received as a painting, not as a guernica.

Walton's celebrated account lays a productive framework for how we determine art-kind specific value. As there will be variation in which properties are salient based on an artwork's categorization, there will be a variation in which valuable and unvaluable properties are salient as well. Appreciating *Guernica* as a member of "guernica" can justify one's evaluation of it as being boring and uninteresting due to its flatness. However, appreciating it as a painting can justify the evaluation of it being powerfully intense and varied due to its violence. This provides us with a nice account of when a value is art-kind specific: a value is art-kind specific when that value arises from appreciating that artwork as being a member of a specific kind, i.e., the intensity and variety in *Guernica* is found through receiving it as a painting.

What this tells us is that evaluating virtual art *qua* virtual art is determined by noting the features that arise from apprehending an artwork as virtual, and paying attention to what is communicated through those features. The common understanding of virtual art provides a list of three standard features: *interaction, immersion,* and *computer generation*. A promising example from virtual art is the VR animated short film *Henry,* which justifies differing evaluations depending on whether one appreciates it as a work of digital cinema or as virtual art. Henry tells the story of Henry, a hedgehog who finds himself alone on his birthday. The film's narrative begins with Henry appearing to make eye contact with the viewer, followed by Henry wishing he would have a friend come to his birthday party.

When received as a work of digital cinema, *Henry* can be appreciated for its lively computer-based animation of the title character as well as for the emotional power of the character's brief acknowledgement of the viewer, as such acknowledgements are not standard in cinematic art and thereby more salient. Contrastingly, if received as a work of virtual art, the emotional power of that moment is muted, as treating the user as present in the virtual scenario is a standard feature of the medium. What does become salient is the inconsistency of the diegetic presence of the user.⁴³ The title character only acknowledges the user in the very beginning, and the rest of the film deals with Henry's loneliness, which is striking because of the comparative lack of the standard immersive qualities in virtual works. This example shows how value can be tied to the standard features of virtual art.

However, if we locate virtual art within a wider institution or practice, it could be said that virtual art is not evaluated on cognitive grounds. *Henry*'s critics did not seem to evaluate it on cognitive grounds whatsoever, instead praising it for technological advancement and animation quality. Generalizing from this, when we think of how virtual works are praised, it is not obvious that cognitive merits figure into these evaluations. If this point is to be defeated, we need to show that the standard features of virtual art (*interactivity* and *immersion*) are partly evaluated on cognitive grounds within the practice.

⁴² While I use a disjunction here, there is nothing preventing the work from being received as a member of both categories.

⁴³ In the case of *Henry*, this appears to be a demerit of the work, but this is not categorically the case for virtual works. As we will see, *The Stanley Parable* frequently breaks the attitude of immersion for the sake of irony, and is a value of the work.

Here is where this leaves us, KSI holds that the cognitive merits of an artwork are only made salient when the work is received as a member of a particular class of categories, virtual art not being part of that class. I will argue that kind-specific variations of the appreciation and convention arguments favor the virtual cognitivist position. Artistically appreciating a perspective-range can have a cognitive dimension when the artwork is received as virtual, and that the conventions surrounding virtual art do not discount such an evaluation. First, I will say a bit about how a perspective-range relates to a virtual artwork's artistic value, then I will speak on the cognitive dimension to that appreciation.

3.7. Perspectives and Virtual Art's Value

When discussing interactive art, philosophers have taken a careful approach to distinguish between appreciating the interactive work simpliciter, and an instance of that interactive work. Dominic Lopes (2010, pp. 59-61) gives a compelling picture of this distinction. He notes that each experience with a work of computer art gives rise to different displays. My first experience with *Before Your Eyes* gave rise to a story which focused on Benny's potential as a prodigy and fantasies of being a polymath, while my second experience brought rise to a story of Benny living a happy childhood where he always valued his time with his family above all else. The work *Before Your Eyes* cannot be identified as being both experiences. Moreover, it is unintuitive to identify *Before Your Eyes* as being just one of these instances. This peculiarity holds true with all works of virtual art and computer art. Lopes's solution is to identify the object of appreciation as the algorithm or system which allows for the generation of these displays, not any individual display.

What this means for appreciating virtual perspectives is that the relevant property being appreciated in virtual art is the perspective-range, not the manifested perspective of one instance of the work. Consider this very minimal sense: suppose there are two robust virtual recreations of the *Trevi Fountain*. One of them only allows me to see it from the left-hand side of the fountain, while the other allows me to walk around the entire sculpture. When evaluating the two recreations, we will note that the former allows for a comparatively restricted perspective-range, as only so many characterizations of the fountain can be generated. What is not evaluated

is one particular experience with each fountain, but rather the range of experiences I could have with each fountain, and what can be done through the given perspective-range of each work.

Immersion plays a role here as well. In evaluating immersion, we evaluate what stems from the user's attitude of presence in the virtual world. Returning to the *Trevi Fountain* example, say the immersed-role in the restricted perspective-range work is that of being a member of a crowd, attempting to push through the crowd to see the fountain from other sides, only for the work to subtly restrict the user to the left side of the fountain through the crowd's behavior. Conversely, the one with the larger perspective-range of the fountain has the user take on the role of a floating disembodied camera which can move around the fountain. These differences in immersed roles and scenarios will inevitably impact how the user evaluates the work, as there are distinct differences in what they can say *happened to them* from their perspective.

The perspective-range is appreciated when we identify an artwork as virtual. We consider how perspectives can be manifested from the standard features of virtual works, and we ascribe artistic value to how the work allows the user to generate them. Importantly, we do not ascribe value to one single perspective generated from the work. However, some might contest that these value ascriptions are mistaken, and that there really is no artistic value attached to virtual perspectives. Here are two arguments in favor of such a position and my responses.

The first argument holds that perspectives manifested in virtual art are not the result of an artistically valuable algorithm, but rather they are directly imported by the user, and therefore not the property of the work. The argument points to how virtual immersion and interaction mandate constructive input on the part of the user in order to realize a perspective. However, often the work provides very little in the way of *mandated features* of the perspective. For instance, VR documentary, in an effort to increase the sense of immersion, often does not embed values or attitudes in the immersed role, so the user can be immersed and feel present as themselves. This would make the perspective seem to be a product purely of the user, not the work's algorithm. That is to say, in many instances, users import their own perspective into the work, with no influence from any role-determined values or attitudes, and little influence of the algorithm. Therefore, the manifested perspective is not an artistic value of the work.

This argument is sound, but it does not defeat my account. I agree that the manifested perspective is not a property or value of the work, only of a particular instance of the work. However, a work's ability to support or incorporate a wide variety of perspectives is certainly a property, and sometimes a value, of the work. This means there is nothing in these works blocking any user from being immersed as themselves and looking at these scenarios as they would were they actually there. In VR documentaries such as *Common Ground* and *Clouds Over Sidra*, the lack of role-determined values or attitudes allows the user to maintain their attitude of presence regardless of what values they bring to bear on the work. That space to allow a user to incorporate their own perspective into their virtual experience can be a value because of how it impacts a user's immersion in the virtual world.

The idea of a work allowing an audience to incorporate their own perspective, while the work aims to offer no perspective or a neutral perspective, is not a foreign one. This notion was the basis behind much of Italian Neorealist filmmaking. In these works, audiences are invited to characterize the subject matter with their own attitudes and values based on their own real-world experience, while the filmmakers' aim is to offer very little characterization of the presented scenarios. Andre Bazin (1971) famously argued that films of this movement, and other films in the "deep focus" style were the most realistic films as they offered a striking degree of perceptual realism for cinema and did not impose any sort of perspective or characterization on the content. If that is seen as a value in traditional cinema, I see no reason we cannot accept it as a value in virtual art.

The comparison between cinema and virtual art can be challenged on the basis of medium specificity: the idea that the value of one medium is not necessarily a value of another. Despite this, it does seem that we appreciate this perspectival space as a value of virtual media, because it is a product of the media's immersive features. A user can appreciate the fact that when they take the attitude of virtual immersion, they can fittingly feel present in the work as though they were there, regardless of whatever attitudes or values they might hold. For that reason, a work allowing its audience to incorporate their own perspective is not necessarily a medium specific value, rather it can be found in virtual media as well as other mediums such as cinema.

Second is a particularly threatening variant of an argument I mentioned last chapter, that being that the perspectives offered by virtual works will almost always be banal and uninteresting because of the great difficulty of writing, programming, and producing instances of a work which are always artistically valuable in their own right. Some perspectives offered might be more artistically valuable than others, but often times they will be artistically lacking because there are too many of them to craft with equal care for detail and quality. Steven Poole (2004) suggests that this is due to the computer-based nature of virtual media, as computer technology lacks the artistic resources to generate robust and highly interactive narratives. Most of the artistic quality in narratives of a virtual work can be found in the non-interactive cutscenes according to Poole, but seldom do computer programmers have the resources to develop artistically rich cutscenes for every choice a user makes. Given this, it follows that corresponding perspectives manifested in a work will often lack artistic value.

I respond by reaffirming what I have previously said, that the relevant object of appreciation is not individual instances of a work, but the total work. We can accept that individual instances might be artistically lacking, but still hold that the total work is artistically valuable because of the algorithm that allows for the generation of these displays. The work's value does not stem from each instance being valuable, but rather from an artistically robust and intricate algorithm which permits the generation of a wide variety of displays, and invites the construction of various perspectives. We value a work for allowing us to make decisions and appreciate consequences from a wide variety of perspectives, and we also find value in comparing how things were in one instance to how they could have been in another instance, as evident by our repeat engagements with the work as well as frequent comparisons to other users experiences. Thereby, the construction of thin or banal perspectives in particular instances of virtual art does not negate the artistic value of the ability to generate perspectives in virtual art. Furthermore, as mentioned last chapter, the cognitive merit of those perspectives is further highlighted when we appreciate the range of perspectives which could be developed. Likewise, we can appreciate the artistic intricacies of the perspectives when we appreciate the perspectiverange of the work.

Another point about Poole's argument is that technology has come a long way since the original publication of his argument. His point is contingent on the idea that the technology we

use to create virtual art can only do so much, and that a sacrifice needs to be made when deciding between a large degree of interactive affordances, and rich artistic value. Since his argument, we have seen computer technology grow and develop in such a way that have works with multiple artistically valuable instances. As computer technology evolves to allow for more demanding projects, then we can expect more artistically valuable works as well.

In exploring the ways in which users appreciate the perspective-ranges of virtual art, I have shown that these contribute to the artistic value of virtual art. Going back to section 3.2. I think it is counterintuitive to appreciate these perspectives or the perspective-range on purely aesthetic or artistic grounds. I will explain more about what I mean by this, offering a kind-specific version of the appreciation argument.

3.8. What Does Understanding Have To Do With It?

Perspective-ranges in virtual art often have a distinctly cognitive component. Users appreciate the profundity and insight found in appreciating the perspectives found in a work, either finding ways in which they contrast with each other, or come together to advance a larger thesis. This has much to do with the artistic success of the work, because the communication of the cognitively valuable perspective-range is tied to the features like the details found in each possible instance of the work, as well as the emotional journey that is found through the attitude of immersion. Moreover, if the perspective-range advances a user's understanding of a subject matter, then surely that cognitive gain can be attributed to the artistic and communicative success of the work. This shows that virtual-specific features do support the appreciation argument, because in appreciating the artistic success of these features, we also appreciate their cognitive components. After presenting *The Stanley Parable* as an illustrative example, I will respond to some objections.

The Stanley Parable is a virtual work whose artistic value comes from its insightful commentary about free-will and decision making. The work sees the user immersed as Stanley, an office worker who ordinarily spends his days pushing buttons on his computer at the direction of his employers. One day, he does not receive any orders to press any buttons. It is revealed that all of Stanley's colleagues have mysteriously vanished as well, and so the user (as Stanley) seeks to uncover what has happened. Throughout his journey, Stanley's actions and thoughts are

accompanied by a narrator. However, Stanley need not conform to the narration provided, and this is where the work's epistemic aims become clear. A notable moment is when Stanley is presented with two doors, and the narrator asserts that "Stanley went through the door on the left," but the user can choose the door on the right, leading to the narrator attempting to regain control of the story. The work features multiple moments where the user can choose to disobey the narrator, leading to around 20 different conclusions to the story. Here are just a few of the perspectives which can be generated by the work.

One perspective the user can glean is one which characterizes choice as merely illusory, which can be done through following the narrator's instructions throughout the entire piece. This series of displays concludes in Stanley uncovering that he and his colleagues had been subject to mind-control on the part of their employers, and so he destroys the mind-control machine and escapes to newfound freedom, ironically at the instructions of the narrator. Another perspective the user can acquire is one which characterizes choice as nonsensical and confusing, with no clear idea of who controls what choices. This perspective is generated by the "confusion" ending, in which the narrator and Stanley "lose the story" and are unable to find it. The two characters make multiple attempts to tell a straightforward story, but they end up being overwhelmed by the number of possible choices. The last conclusion characterizes choice as contingent on whatever social roles one occupies. This one sees the user making a choice "Stanley" would not make, and the narrator becoming increasingly frustrated at the user for not conforming to role-determined attitudes and decisions.

These are simple descriptions of only three of the endings the work has to offer, but they serve our purpose of showing that the work offers many different ways of characterizing the subject-matter of free-will. Moreover, these characterizations are connected to artistic properties of the work stemming from its *interactive* and *immersive* features. In the last ending, for example, the work ironically severs the attitude of immersion to communicate a point about choices and the role one occupies. Similarly, the role of the narrator in every conclusion plays on the work's interactivity, with the narrator commenting on the choices the user makes. These components serve to communicate the work's perspective on free-will, and make the perspective deeply related to the artwork itself. More importantly, the perspective-range on offer is interesting and engaging not only because of the way it employs the work's interactive and

immersive properties, but because the perspective-range continues to say something interesting about its subject matter. Each instance of the work has the capacity to provoke its user, through artistic means, to think more about choices in their own life, and to what extent choices seem illusory, confusing, or role-determined.

In appreciating the work as both interactive and immersive, *The Stanley Parable* complicates and frustrates the user's conceptions of choice and freedom. It does not offer a single new way of looking at these subject-matters, but instead shows a variety of ways their existing conceptions do not accurately understand the subject-matter. Each perspective is something like a "live hypothesis" to use Kivy's (1997) language, which users can test or contemplate to see which ones are effective for understanding choice and freedom. This cognitive value is found when the work is received as *virtual art*, because the cognitive merits are communicated through the artistic success of the work's interactive and immersive features. Thereby, *The Stanley Parable* offers a clear instance in which appreciating the artistic value of a perspective-range of a virtual artwork contains a cognitive component.

Here are two objections which suggest that the perspective-range is not evaluated on cognitive grounds in virtual art. The first is that it is not clear that the conventions surrounding the practice of virtual art value cognitive merits as artistic merits. As I mentioned before, there seems to be disagreement on this issue within artistic practice. Despite this, conventions surrounding virtual art do not *necessarily* exclude cognitive evaluations. For instance, it seems deeply relevant to evaluating the VR Documentary *Common Ground* that the work allows me to generate a perspective on the Aylesbury Estate as though I were there, and gain some sort of understanding about the subject-matter from that perspective. If this were not the case, then it is unclear how the work could succeed as a documentary. Similarly, the critical evaluations of *Before Your Eyes* frequently praised the work because of the perspectives it offers on the meaning of life. For instance, Marcus Stewart (2021) praises the work:

Despite its pleasantly whimsical veneer, the narrative's themes of depression and existentialism hit hard, as does understanding life's meaning from the perspective of a person who, despite having a great family and born with prodigious gifts, struggles to find personal fulfillment.

Given this, the practice of virtual art certainly *allows* for cognitive evaluations, even if they might not occupy a large space within the practice.

The second objection is that when *immersed*, we really are only concerned with features internal to the work, as to be concerned with external matters would violate that attitude of immersion. If I am taking an attitude of being present and occupied with the depictions in the work, I ought not to be considering how these contents improve my understanding of the matters external to the work. Moreover, you might think that in simulating the mental contents of the immersed-role, you ought to pay less attention to your own values and desires. This would suggest that in meeting the required standards of virtual immersion for an artwork, cognitive merits of a virtual artwork cannot or should not be appreciated. This point directly contradicts the appreciation argument because it suggests that in appreciating an artwork *as immersive*, it is unintelligible to appreciate it as cognitively valuable.

This argument about appreciation and immersion is similar to the argument against aesthetic cognitivism from the *aesthetic stance* offered by T.J. Diffey (1997). Diffey holds that taking an aesthetic attitude towards an artwork is necessary for appreciating it; where the aesthetic attitude is a state of contemplation directed towards the content of the work. By "contemplation," Diffey seems to be referring to a Kantian picture in which aesthetic judgements are made through a "disinterested" attitude in which an audience sets aside practical matters in their judgements. Epistemic or cognitive merits are surely practical in nature, so factoring them into our evaluations would violate the attitude required for appreciating art. ⁴⁴ If that's the case, then cognitive merits are ought not to play a role in evaluating art.

Something similar can be said for immersion. Even if one does not believe that the aesthetic stance is required for artistic appreciation, I have already shown that virtual immersion is mandated for appreciating a virtual work. Virtual immersion requires taking up the interests, attitudes, and values of the prescribed role and scenario. The issues at hand for the user ought to be the depicted contents of the work, as the user is supposed to take the attitude of being present and preoccupied with them. Given this, taking interests in matters external to that immersed role and scenario violates virtual immersion, and thereby those matters cannot be factored into our evaluation of the work.

⁴⁴ Something to note is that it is contested whether practical interests are fully set aside with respect to the aesthetic stance (Nguyen, 2020, pp. 118-120).

⁴⁵ Dickie (1964) is arguably the standard dismissal of the aesthetic stance.

The problem with this argument is that it over-estimates the degree to which virtual immersion is mandated for appreciating a virtual artwork. In appreciating an instance of the work, the user ought to be virtually immersed, but it is impossible to be virtually immersed when appreciating the work in its entirety. Because the work is interactive, to appreciate the work is to appreciate the range of displays it offers and the algorithm which generates them. Thereby, the experience of the artwork cannot be narrowed down to a single instance in the case of virtual art, the experience must include the afterlife of the work, which is when we appreciate the range of displays and the work's algorithm. Virtual immersion is mandated for engaging with an instance of the work, but it is not continuously mandated for appreciating the work in its afterlife. The notion of the afterlife of the work is central to experience an artwork for Peter Kivy (1997), and it is his view which explains why evaluating a work's cognitive merits can still count towards its artistic merits.

This afterlife is when cognitive factors can figure into our evaluations. Kivy holds that in the afterlife of the work, as well as the time between engagements with the work or its "gaps," audiences are meant to contemplate the work further. The gaps and afterlife of the work allow the audience to consider not only the narrative or depictive content of the work, but also the insights and perspectives the work has offered. When the audience contemplates those insights and perspectives, they are still appreciating the work and are thereby still engaged in an experience with the work. Given that this is the case, the audience receives the cognitive value of the work through the experience of the artwork, which is enough for it to count as an artistic value given the criteria laid out in Section 3.1. This is all to say that even though contemplating cognitive merits might violate the attitude of immersion when engaged in an instance of the work, they need not do so when considering those merits during the work's gaps and afterlife.

I have shown that evaluating the perspective-ranges offered by virtual art on both cognitive grounds and artistic grounds is permissible. I showed this by arguing that 1. The conventions surrounding virtual art do not necessarily discount such evaluations and 2. Deliberating about those perspective-ranges on cognitive grounds is permissible within the afterlife of the work, which is also when we tend to compare the virtual work's many instances.

Conclusion

In this chapter, I have shown that the cognitive merits of virtual art can also be artistic merits. I did this by showing that an understanding-conducive perspective-range can be appreciated as an artistic merit when receiving the work as a *virtual artwork*. I also showed that an understanding-conducive perspective-range is received directly through the experience of the artwork, and is not received as a contingent by-product. In doing this, I have satisfied the final commitment of virtual cognitivism, that the cognitive merits of virtual art can be artistic merits.

However, the problem of pessimism about virtual art's effects remains. I mentioned in the introduction that virtual art is subject to a cognitive devaluation because of its perceived harmful effects and poor moral education. Framed this way, pessimism about the cognitive effects poses a threat to virtual cognitivism in the following way. You might think that specific features of certain art-kinds have particular cognitive merits and demerits. This pessimistic attitude towards virtual art states that there is some feature in virtual art which is necessarily cognitively pernicious. If the pessimist is right about this, then there is a *pro tanto* reason to devalue virtual art as an art-kind relative to other art-kinds.

Chapter 4: The Pessimist Challenge

This chapter argues against an objection towards my thesis, as well as a more general worry about virtual art. This objection, what I will call the "pessimist challenge," is articulated in the spirit of the infamous moral (or epistemic) panic surrounding videogames. The moral panic in question suspects that videogames and other virtual artifacts increase the dispositions of users to act aggressively and commit real-world acts of violence. Moving outside the domain of just violent behaviors, the pessimist challenge reflects a view that virtual artworks are poor educators, disposing their audience to act in violent, bigoted, and otherwise unethical and inapt ways. Note the distinct cognitive component of the claim: virtual artifacts negatively impact our cognitive capacities, specifically with regards to normative matters. I claim that this cognitive component is best articulated by reference to what Johnathan Gilmore (2020, p. 186) calls a quarantine violation, a situation in which a simulated mental state begins to encroach on a genuine mental state. The pessimist holds that these quarantine violations are generally required to properly engage with virtual artworks, and that they are on the whole epistemically harmful.

In addition to the cognitive component to the pessimist challenge, there is also an evaluative component. The objection is that there is a *pro tanto* reason to devalue virtual artworks on cognitivist grounds. Virtual media is, *per* the objection, cognitively predatory. The cognitivist is committed to the idea that an artwork's value comes in part from its cognitive value. For this reason, artworks created in virtual media are less valuable than those created in other media. Works such as *Before Your Eyes*, *The Stanley Parable*, and *Common Ground* might be cognitively valuable, but insofar as virtual media is used to create them, they are less cognitively (and therefore artistically) valuable than comparable works of literature, cinema, etc. This argument poses a threat to my position, as the challenge asserts that virtual artworks can never be as valuable as non-virtual artworks for this *pro tanto* reason. I argue against both the cognitive and evaluative components of the pessimist challenge, holding that virtual art is not necessarily cognitively pernicious, and that there is no good reason to devalue virtual art (as an art-kind) on cognitivist grounds.

The chapter proceeds as follows. I begin by making clear what exactly this "pessimist challenge" is, and argue that it is not an empirical claim, but rather a claim about the norms of engaging with virtual artifacts (Sections 1-2). The pessimist's claim is that properly engaging with virtual artifacts requires a breakdown between the represented mental states of the immersed-role, and the mental states of the user. I offer two distinct ways of understanding that claim, one which says that the represented beliefs of the immersed role ought to encroach on the beliefs of the user, the second which says that the represented sub-doxastic attitudes of the immersed role ought to encroach on the sub-doxastic attitudes of the user (Section 3). After dismissing the first reading (Section 4), I argue that the second reading has some plausibility in that our sub-doxastic attitudes towards virtual depictions might require a quarantine violation (Section 5). Nonetheless, I argue that this sub-doxastic peculiarity can manifest in a cognitively valuable way (Section 6). Following this, I explore the consequences my arguments have on the evaluative component of the pessimist challenge (Section 7). I conclude by showing that there is no *pro tanto* reason to devalue virtual art on cognitivist grounds.

A quick caveat before we continue. Many of the pessimist positions cited or mentioned are not neutral with respect to content. They primarily focus on works which depict violence or immoral attitudes. Despite that, many of them also allude to some underlying feature of virtual media, typically related to the technology used to create virtual artifacts. These authors suggest that this underlying feature is what disposes users to adopt bad attitudes in the virtual scenario and transfer those attitudes to the actual world. It seems fair to suggest that while the specific cognitive harms of virtual artifacts will be contingent on the depicted content of individual works *per* the pessimist, engaging with virtual artifacts puts us in some bad epistemic position by nature of engaging with that underlying feature. I personally find these positions to be quite opaque, so I will do my best to give them a fair analysis.

4.1. The Pessimist Challenge Articulated

A familiar attitude some have taken towards virtual artworks is that they foster bad behaviors and attitudes. The worry is that users learn some behavior in a virtual scenario which would ordinarily be inappropriate, and that users begin to exhibit that behavior in their ordinary lives. While the examples can range from the development of unbecoming sexual behaviors to the adoption of overly simplistic evaluative attitudes, the most common example is fostering aggressive and violent tendencies.⁴⁶ There exists a view that the development of these undesirable attitudes is a non-accidental by-product of virtual artifacts.⁴⁷ This is what I call the pessimist challenge.

An illustration of the pessimist challenge is found in the reception to the 2006 video game *Bully*. In *Bully*, users are immersed in the role of Jimmy Hopkins, a juvenile delinquent enrolled in a strict private school who attempts to earn a positive reputation amongst the school's cliques through pranks and acts of violence. Despite its acclaim, the work was controversial due to the acts of violence users were allowed to partake in, with many worrying that users would be disposed to commit similar real-world acts of violence.⁴⁸ The worries surrounding *Bully* prove to be apt demonstrations of the pessimist challenge. An idea expressed by many of the work's critics was that those who found the most enjoyment out of *Bully* would likely evaluate real-world acts of violence similarly to how Jimmy Hopkins evaluates violence. This example generally captures the worries surrounding our engagement with virtual media. The worry is that users are put in an epistemically unfavorable position when they are engaging in virtual media, and this ends up yielding bad attitudes or beliefs.

However, the pessimist challenge is stronger than "virtual media possibly has pernicious effects." The challenge is that these pernicious effects are necessary and intended by-products of appreciating artifacts made in virtual media. In his *Video Kids*, Eugene Provenzo (1991) argues that virtual media perpetuates harmful behaviors not only through the content depicted, but also simply through the machines and practices used to create virtual artifacts. These pessimistic views target virtual media because they see it as necessarily, or at least highly regularly, harmful to cognition. While this claim might seem overcommitted, it seems more plausible when we consider the attitude users are asked to take towards virtual artifacts.

The strength of the pessimist position comes from recognizing that virtual media not only encompasses the set of practices governing the creation of virtual artifacts, but also the conventions of how a work is appreciated and evaluated within a medium. Timothy Binkley

⁴⁶ For the sake of simplicity, I will only be talking about examples where users of virtual artworks are said to adopt violent or aggressive attitudes.

⁴⁷ For example: Provenzo (1991), Virilio (1995).

⁴⁸ See, for instance, lawyer Jack Thompson's attempt to ban the work within the United States (Bangeman, 2006).

(1977) reminds us that part of the medium of painting is the practice of looking at the front of a painting, and Gregory Currie (1990) tells us that the medium of literature requires us to engage our imaginations. Similarly, I have shown that part of the conventions of virtual media is virtual immersion. To appreciate and evaluate artifacts created in virtual media, users take an attitude of presence in and preoccupation with virtual depictions. Moreover, users adopt different perspectives from their own when engaging in the work. This mandated attitude, while a source of aesthetic enjoyment, is the site of the pessimist's worries.

The pessimist worries that a *quarantine violation* is required for virtual immersion. The "quarantine" in question is that between our imagined mental states and our genuine mental states. When virtually immersed, we attempt to adopt the immersed role's relevant perspective inasmuch as the work prescribes, but ideally keep that perspective quarantined from our own. I might imagine finding violence fun and desirable when immersed in the role of Jimmy Hopkins in *Bully*, knowing that I believe violence to be repugnant and undesirable. Johnathan Gilmore (2020, pp. 186-195) describes a quarantine violation as a breakdown in this isolation. In one sort of case, the quarantine violation involves the user attributing their own mental states to the immersed role (p. 188). For instance, I could mistakenly assume that Jimmy shares my disgust of violence, and is only committing these acts because of a desire to "fit in." In the second case, the imagined mental state of the immersed role encroaches on the user's genuine mental state (p. 190). Being immersed as Hopkins might contribute to my evaluation of violence as desirable. It is the second case that generally reflects the pessimist's concerns about virtual media.

Quarantine violations can occur in our engagements with almost any artwork, but the pessimist worries that quarantine violations are a *required by-product* of virtual immersion. In order to meet the requirements of virtual immersion (attitudes of presence in and preoccupation with virtual depictions, as well as adopting the role's perspective), the pessimist thinks that a quarantine violation required. Users want to feel as though the virtual scenario is their own experience, and that they played a genuine role in the depicted scenario. An effective way of doing this is by confusing the user's conception of what their own beliefs and desires are, and what the role's beliefs and desires are. Indeed, Gilmore (p. 191) references this phenomenon when he says "players (of videogames) experience a temporarily diminished capacity to separate their real-world attitudes from those the game prescribes for their adopted roles."

However, Gilmore's explanation of the type of quarantine violation that occurs in virtual art does not match the pessimist's concern. Gilmore makes reference to a "temporarily diminished" quarantine, an idea shared by much of the empirical research on videogames. The pessimist worries that the diminished quarantine is, or at least aims to be, long lasting. The classic example is that users of violent videogames begin to desire, or become desensitized to, real-world violence. This is what David Chalmers (2022, pp. 323-324) is referring to when he says that "Some people worry that habits learned in virtual worlds will transfer to the non-virtual world," the worry is that virtual media preys on our cognition and confuses us. Eugene Provenzo (1991, pp. 73-74) addresses a similar worry when he says that the attitudes of users are distorted by virtual artifacts.

This is the pessimist challenge: properly engaging with works of virtual media requires virtual immersion, and virtual immersion requires a quarantine violation. A quarantine violation intuitively puts users in an unfavorable epistemic position, and so artworks made in virtual media are less cognitively valuable. My argument against this position is that the quarantine violation mentioned ends up being a cognitively valuable mechanism. Before offering my argument against the pessimist challenge, I want to dismiss a mistaken argument against it: that our empirical data simply disproves it outright.

4.2. Is This a Philosophical Question?

A common but mistaken way to dismiss the worries invoked by the pessimist is to appeal to empirical metrics. If virtual media necessarily has cognitively pernicious effects, then surely the best work done in cognitive science would demonstrate this. Given that there has been little agreement in cognitive science as to whether virtual media is necessarily harmful or beneficial, then it appears that we can dismiss the pessimist challenge. While such an answer is intuitive, it does little to persuade the pessimist because 1. The lack of agreement in cognitive science on the benefits and harms of virtual media might give us more of a reason to be pessimistic as opposed to optimistic and 2. The appeal to empirical data misses the philosophical nature of the challenge, which is that the pessimist challenge is concerned with the norms surrounding our engagement with virtual art.

The conclusions of empirical studies on the cognitive effects of virtual media have been heterogenous and controversial. In lieu of a survey of the scientific literature on virtual media, here is an infamous example of the inconsistency found in the literature, which generally captures the state of empirical theories about virtual media and cognition. In 2020, the APA released a resolution stating that there was evidence of a relationship between videogames and violent behavior (American Psychological Association, 2020). This resolution received criticism from within the APA when their media psychology division published an open letter in response. They argued that this resolution focused on meta-analyses which were poorly conducted due to a failure to look at recent studies with null results, and public media influence (Society for Media Psychology and Technology, 2020). The failure of the APA to converge on this issue is indicative of the general complexities surrounding the cognitive value of virtual media. A recurring pattern is that studies which claim a relationship between virtual artifacts and cognitive harm end up being criticized for a faulty methodology.

A mistake would be to assume that because these empirical studies are inconclusive, the cognitive harms of virtual artifacts are at best negligible and unlikely to be a necessary by-product of engaging with these artifacts. ⁴⁹ Taking a Popperian line, David Waddington (2007) has shown that these positions fail to consider the fact that despite rigorous testing, hypotheses such as "violent videogames cause aggression" have yet to be falsified. Given that similar pessimistic theses have not been falsified, despite extensive research, Waddington argues that we should be cautious when considering the harmful effects of virtual media. Stopping short of endorsing his moral rebuke of virtual media, I agree with Waddington that inconclusive empirical data is not a good reason to dismiss pessimism about virtual media.

A second reason we cannot dismiss the pessimist challenge on empirical grounds is that the challenge is largely one about the norms of properly engaging with virtual media, not the general effects of virtual media. I argued in the previous section that the pessimist is concerned with the potential epistemic consequences of adopting an attitude of immersion. Looking back on previous chapters, we know that users ought to take up the perspectives embedded in the immersed roles of virtual artifacts. Given this, the pessimist can explain away empirical data which runs counter to their claims by suggesting that the studies were not designed with these

⁴⁹ Many consequentialist accounts of virtual violence take stances similar to this (Schulzke, 2010).

norms in mind. As a result, participants in these studies who did not have long lasting changes in their cognition might not have been respecting the norms governing virtual media, and so they did not experience the expected negative effects.

Characterizing the pessimist challenge as one about the causal relationship between virtual artworks and ordinary behaviors is a misrepresentation. The pessimist is instead concerned with what is normatively required of users to properly engage with virtual artworks. In being required to adopt an immersed-role's perspective, the normative ideal is that users "feel like" they really are that role, and that they "feel like" they are present in the depicted scenario. Surely not every user of every virtual artifact will experience these "feelings," but they are something users ought to strive for in their appreciation of virtual artifacts. An apt way of characterizing the pessimist's initial question is "what is the cognitive import of these 'feelings' in virtual artifacts?" As we established in the previous section, the cognitive import is, *per* the pessimist, a quarantine violation.

It turns out that empirical data does little to persuade the pessimist. Instead, persuading the pessimist requires focus on the norms surrounding virtual media, not on empirical data. In the next section, I will present two plausible understandings of the pessimist challenge. The first reading of the challenge fails because it incorrectly identifies the norms required to engage with virtual artifacts, while the second reading fails because it does not point out a necessarily harmful norm.

4.3. Two Readings of the Pessimist Challenge

So far, I have shown that the pessimist is concerned with the mental states users ought to occupy to properly engage with virtual artifacts. In order to engage with virtual media, users treat themselves as present in and preoccupied with depicted scenarios. When a virtual car is depicted, users make decisions and behave as though they were in that car. Moreover, they occupy a given role with a given perspective, such as a racecar driver. The pessimist takes such a mental state to be inherently detrimental, as this mental state is thought to require a quarantine violation. However, more must be said about what this quarantine violation consists of. There are at least two ways of cashing out the quarantine violation.

There are two readings of the worry: the *doxastic* reading and the *sub-doxastic* reading. As their names suggest, the doxastic reading holds that engaging in virtual media straightforwardly generates false beliefs, whilst the sub-doxastic reading holds that engaging in virtual media warps our sub-doxastic tendencies in pernicious ways, particularly with regards to our affective capacities. I explain the doxastic reading first.

The doxastic reading says that virtual immersion requires adopting false beliefs, in particular the beliefs that the immersed role is represented as having. To illustrate, the role of Jimmy Hopkins is represented as believing that violence is fun. In being immersed as Jimmy, a user does not just imagine that violence is fun, instead they come to believe that violence is fun. An attractive reason for adopting such a view is that it explains our engagement with and intense affective responses towards virtual depictions. When playing *Resident Evil VII*, I react towards the depiction of Jack Baker with fear because I believe he intends to do me harm. Paweł Grabarczyk and Marek Pokropski (2016) adopt such a view, arguing that such beliefs are necessary to explain our reactions towards virtual media, especially virtual reality.

Here is the doxastic reading in a formal presentation:

D1: Engaging in virtual media requires adopting false beliefs.

D2: Adopting these false beliefs leads to epistemic loss.

C: Engaging with virtual media leads to epistemic loss.

In the next section, I will dismiss D1. Let me turn now to the second reading: the *sub-doxastic* reading.

The sub-doxastic reading assumes that our emotions towards virtual media do not confer false beliefs, but can nonetheless be cognitively harmful through subtly warping our evaluative and affective dispositions. For example, children who play violent videogames do not suddenly adopt the belief that violence is fun and normatively permissible. Instead, through virtual immersion, they might imagine that the depicted violent scenarios are fun, but they might slowly come to treat violence as fun. This reading of the pessimist challenge resembles Plato's original challenge towards poetry in the following way: the relevant artworks are said to "corrupt" or disturb the emotional capacities of their audiences, and in doing so the artworks negatively

impact the cognition of their audiences. In both contemporary worries about virtual art and Plato's ancient charges against poetry, audiences are said to inappropriately treat ordinary scenarios like those scenarios found in art. Because virtual artworks result in cognitive harm, they are thereby less artistically valuable than other art-kinds *per* this reading.

Here is the sub-doxastic reading:

S1: Engaging in virtual media requires a shift in our sub-doxastic attitudes.

S2: This shift in our sub-doxastic attitudes leads to epistemic harm.

C: Engaging in virtual media is epistemically harmful.

If either reading is successful, then the pessimist has good reason to devalue all virtual art as a result, for reasons previously explained. In responding to the sub-doxastic reading, I accept S1, but deny S2. Before attending to the sub-doxastic reading, I will quickly dispel the doxastic reading.

4.4. The Doxastic Reading

The doxastic reading of the pessimist's worry says that virtual media systemically generates false beliefs in its users. Before I dismiss this claim, we need to spell it out in some detail. First, the relevant "false beliefs" are the beliefs which immersed-roles are represented as having. When immersed as the detective Cole Phelps in the film-noir inspired *L.A. Noire*, I ought to adopt his represented belief that "I" value solving the relevant case. Second, the claim is not that virtual media *can* instill such beliefs, that claim is a given. All art could theoretically give rise to mistaken beliefs. Instead, the claim is that such false beliefs are necessarily adopted in order to correctly engage with virtual media. Third, the pessimist appears to be concerned with *evaluative* beliefs. In explaining why we take pleasure in committing virtual acts of violence, the pessimist says that it is because we believe violence to be normatively permissible.

Another point of clarification is that virtual artifacts might require some belief uptake in order to appreciate them. On one plausible account, appreciating *Resident Evil VII* requires believing that the antagonist Jack Baker is *represented* as having properties that make the

emotional response of fear apt, such as having the potential to do me harm.⁵⁰ That belief is not a false one, because Jack Baker is represented as having those properties, and my emotion of fear is apt in virtue of that representation. The first premise of the doxastic reading is stronger than that. It holds that our attitudes towards *Resident Evil* ought to judge him as having the potential to do us harm, as opposed to being *represented* as having that property.

Paweł Grabarczyk and Marek Pokropski (2016) offer an account of virtual action which endorses this first premise of the doxastic reading. Puzzled by how users treat virtual depictions not just as pictures, but as distinct objects and locations, the authors assert that an "obvious prerequisite to being immersed or present in a virtual environment is to believe that there is some kind of alternative place in which we can immerse ourselves or be present." They extend this argument to suggest that users believe themselves to actually be in these locations. The authors also gesture towards the idea that decision making in virtual scenarios is best explained by users adopting corresponding beliefs about the norms governing virtual worlds. The reason users immersed in *Resident Evil VII* run away from Jack Baker is because they believe that 1. Jack Baker intends to do them harm and 2. They ought to run away from Jack Baker. Thus, virtual media does not inadvertently give rise to false beliefs on this account, but instead does so systemically and deliberately.⁵¹

There are two sorts of beliefs that you might think users ought to adopt to correctly engage with virtual artifacts: descriptive beliefs about the sorts of objects that exist and the properties they have, and normative beliefs about the norms governing virtual scenarios. Grant Tavinor (2021, pp. 136-140) responds to Grabarczyk and Pokropski's assertion that descriptive beliefs are required for engagement with virtual media, arguing that their assertion is at odds with empirical facts. Much of the empirical literature on virtual media engagement, particularly Mel Slater's influential work on virtual reality, speaks of users being subject to perceptual illusions in which they *feel* present in a different location. However, these perceptual illusions hardly ever confer *beliefs* or similar doxastic states. Expanding on Tavinor's point, adopting

⁵⁰ The account in question is one which takes emotions to confer evaluative beliefs or judgements on their objects, and so our emotional responses to art will ideally confer beliefs or judgements that correctly represent the contents of the artwork.

⁵¹ In fairness to Grabarczyk and Pokropski, their claims here are mostly presuppositions for a larger, more promising, account of affordances in virtual space.

false descriptive beliefs is at odds with the norms governing virtual media. If users were asked to adopt a belief that Jack Baker really could do them harm, then surely no one would desire to experience the work, which seems counterproductive to the artistic aims of the work. This means that false descriptive beliefs are not a requirement to fully experience and appreciate *Resident Evil VII* as well as other virtual artifacts. I will address the idea that normative beliefs must be adopted as well.

To fully appreciate *Bully*, do we need to adopt the belief that violence is normatively permissible? The claim that users ought to adopt false normative beliefs fails because it is at odds with typical evaluations of virtual artifacts. Namely, it is typical to enjoy certain virtual artifacts *because* of the discrepancy between the represented normative beliefs of the immersed-role, and our ordinary normative beliefs. For instance, I know that in ordinary scenarios, I believe violence is undesirable and morally impermissible. However, when I am engaged in a virtual artifact such as *Bully*, I get to temporarily adopt a mental state which does not represent violence as impermissible, and so I get to enjoy taking part in virtual depictions of actions I would ordinarily find abhorrent. If I truly adopted a new belief about the moral permissibility of violence through my engagement with *Bully*, I would no longer engage with it for reasons dealing with discrepant attitudes towards violence.

The pessimist might respond by suggesting that I am only entitled to say that we do not continue to have these false beliefs outside of our virtual engagements. Users might have to adopt these beliefs in order to meet the requirements of virtual immersion, and have these beliefs corrected in their extra-virtual experience. If what the pessimist says here is correct, then it is unclear that their position entitles them to say that these false beliefs are cognitively harmful. If these are just beliefs we temporarily incorporate into our cognition for the sake of our virtual engagements, only to dismiss them once we cease to engage with virtual works, then it is unclear that ongoing epistemic harm is a necessary consequent of adopting such a belief. Without being able to claim long lasting epistemic harm, the pessimist cannot meet the requirements of doxastic reading, and so the view fails.

More importantly, the pessimist's suggestion that we ought to temporarily adopt false normative beliefs is counterintuitive. If in virtual media, we temporarily adopt beliefs about what is ordinarily normatively permissible, only to have them regularly corrected in ordinary experience, then it is intuitive that these are not beliefs *per se*. Standard thoughts about beliefs suggest that they are not as fickle as the pessimist's view would suggest. That is, beliefs are not states that are voluntarily adopted for the sake of practical matters. Perhaps alternative doxastic attitudes are present in our virtual engagements, such as *accepting* certain normative beliefs, or *imagining* having these normative beliefs, but these are distinct from genuinely *believing* a proposition. Furthermore, if it turns out that users *imagine* holding false beliefs, then the doxastic attitudes required of users end up looking similar to the attitudes we ought to adopt when engaging with most representational art-kinds or art-fictions.⁵²

Here is what we have learned from the doxastic reading's failure: engagement with virtual media does not require a quarantine violation at the doxastic level. Our ordinary beliefs can ideally be separated from the represented beliefs of the immersed role, as made evident by the fact that our continued engagements with *Resident Evil VII* and *Bully* would indicate no pernicious shift in our ordinary doxastic attitudes. However, many pessimist criticisms of virtual media do not focus on shifts in *beliefs*, but rather shifts in affective response and behavior. I will now respond to sub-doxastic varieties of pessimism by first examining whether our engagements with virtual artworks require a quarantine violation at the sub-doxastic level.

4.5. The Affective Complexity of Virtual Media

I turn now to the second *sub-doxastic* way of formulating the pessimist challenge. Perhaps the move to say that we adopt false beliefs when engaging with virtual art was too strong, but it is instead more accurate to say that virtual art requires a quarantine violation at the sub-doxastic level. The pessimist charges that users of *Bully* do not have to believe that violence is normatively permissible, but instead their emotions ought to represent violence as desirable or positively valanced. Is this quarantine violation a requirement for properly engaging in virtual media? In this section, I will tentatively answer "yes," but with a healthy dose of skepticism. However, it turns out that this quarantine violation can aid users in receiving the lessons of some cognitively valuable virtual artworks, as I will show in the following section.

⁵² A view adopted by many is that engaging with fiction requires imagining or make-believing that certain propositions are true. See Currie (1990) and Walton (1990) for the classic accounts.

Before continuing, here are some presuppositions about emotions. Firstly, I speak of emotion as a *cognitive* attitude, one which is *about* some object and confers some evaluation of that object. I fear the bear, and in doing so I evaluate it as having the potential to do harm. To be clear, I do not take this cognitive attitude to necessarily confer belief about the evaluative properties an object has. For present purposes, I will mainly be speaking of them as sub-doxastic evaluative appraisals of objects. Second, emotions towards fictional objects can be *rational*. I will not assume what the rationality conditions for these emotions are, but whatever they are, I will always assume they are fulfilled for our present purposes.

In order to see if a quarantine violation is required in our affective engagement with virtual media, we should get clear on the structure of our emotions towards virtual artworks. The complexity of our emotional engagement with virtual media is connected to two standard features of virtual media: *interaction* and *virtual immersion*. Berys Gaut (2010, pp. 273-275) highlights two sorts of objects of one's emotions in virtual artworks. Firstly, interaction allows for the possibility of emotions directed towards what the user chooses to generate. That is to say, the objects of emotions in virtual art can be the real-world decisions the user made such as pressing certain buttons which generate certain properties within the display. For example, in engaging with *L.A. Noire*, I can feel joy which is directed towards my making it fictionally true that a case was solved. These decisions being objects of users' emotions in virtual art are contingent on interactive features. Without those interactive features, there is no sense in which my emotions towards an artwork ought to be directed towards my real-world decisions.

Additionally, immersion allows for the possibility of emotions directed towards my actions *within* the virtual world. The object of my joy in *L.A. Noire* is not limited to my choices as a user, but also to my decisions *as immersed as Cole Phelps*, the immersed-role of the work. Through virtual immersion, we take the attitude of having solved a case as Cole Phelps, and so the object of our emotions follows suit. So, we feel joy directed towards our fictionally *solving* the case in the world of *L.A. Noire*. To sum, our emotions can have two sorts of objects in

⁵³ For accounts of emotions that pay attention to their sub-doxastic role, see Prinz (2004) and Robinson (2005). Note, I am not excluding the possibility that emotions confer beliefs, just that I will be giving special attention to their more automatic, less cognitively mediated sub-doxastic role.

⁵⁴ Gaut does not use the term "virtual immersion," instead he uses "involving" which he relates back to immersion. Additionally, his focus is on "interactive cinema," not virtual artworks.

virtual art, our real-world actions that generate truths in the virtual work, and our represented actions in the virtual work. In the case of L.A. Noire, we feel joy towards our real-world decisions which made it fictionally true that a case was solved, as well as our virtual decisions to solve the case.

Gaut's explanation is fertile for further elaboration. Notably, there is an asymmetry as to the roles these objects play in our emotional responses when properly engaging with virtual media. Recall, virtual immersion entails *preoccupation* with the depicted contents of the work, the sort commonly found in a flow-state. If that requirement of preoccupation is fulfilled, it strikes me that the acts done *within* a virtual world will be more salient in the phenomenology of emotions towards virtual works. In being preoccupied with the depictions of *L.A. Noire*, it is less salient to me that I am "pressing buttons to fictionally solve a case," and more salient to me that I am "solving a case." This is evident in our language used to describe our engagement with virtual media. I would sooner say "I solved the case," as opposed to describing the physical actions I took to generate the fictional truth. That is not to say users are unaware that they are pressing buttons or making real world decisions, just that their emotions ought to foreground their virtual actions in their experiences with the works. Of course, these thoughts are simplifications of the complex emotional experience with virtual works.

Does this emotional engagement entail a quarantine violation? Some of the empirical literature on video games and virtual reality suggests so. For instance, some of the research on violent content in video games has demonstrated a relationship between it and aggressive behavior, although the degree to which this relationship is causal is highly contested (Calvert et al., 2017). Similarly, some research on virtual reality technology indicates that users feel analogous affective responses to those the immersed-role is represented as having (Herrera, 2018). Now, it is not clear to me that this is the product of the norms governing virtual media so much as it is the product of certain human dispositions, but there is good reason to think it is the product of such norms. For example, you might think the users who are in the best position to evaluate the artistic success of virtual artworks are the ones who experienced apt emotions towards the artwork, and the aptness of those emotions might be contingent on the norms governing the immersed-role's emotional response. As a result, the person who genuinely adopts the immersed-role's affective perspective, as opposed to just imagining having it, is one

who has correctly appreciated the artwork. Therefore, there is good reason to think that virtual immersion requires a quarantine violation.

If it does entail a quarantine violation, the pessimist's worries might appear more plausible. In our emotional responses towards virtual depictions, the more salient object of my emotions is the one within the virtual work. Because of the quarantine violation mentioned in the above paragraph, the norms governing the appropriateness of those emotions are going to be ones which the immersed-role endorses. To see where this can go awry, let us borrow an example from Stephanie Patridge (2010). Patridge argues that certain virtual actions are wrong because their corresponding images have an "incorrigible social meaning," or socially determined semantic content which is difficult to invalidate. She provides the example of the horribly sexist and racist depictions of sex in Custer's Revenge, arguing that the image contributes to women's oppression. In turn, users can be held morally culpable for generating this imagery, because the act of generating this imagery demonstrates dangerous ignorance of social facts. The problem is that because of the asymmetry in users' affective engagement with virtual depictions, it ought to be more salient within the user's emotions that they "saved the captive" and are rewarded with sex, not their action of generating socially harmful images. This partly explains a response from users that Patridge refers to, that users of Custer's Revenge will assert that they have no racist or sexist beliefs, and that their actions were permissible. That might be true with regards to beliefs, but the enjoyment they experience towards the work would indicate pernicious sub-doxastic attitudes. As a result, the work can be said to foster moral and social ignorance.

For the sake of argument, I accept that a quarantine violation is required at the sub-doxastic level for virtual immersion, although I think there is good reason to think that the picture is more complex. Primarily, the current picture is contingent on the idea that virtual immersion always requires fully adopting the affective perspective of the immersed role. In Section 2.4, I argued that virtual immersion requires adopting the affective perspective of the immersed-role *inasmuch as the work prescribes*. I left open the possibility that some works might only prescribe *pretending* to adopt the perspective, and that it will likely be particular to individual works and immersed-roles whether the user genuinely adopts the affective perspective. Another complication is that it is not entirely clear how long-lasting this quarantine

violation is. With the correct sort of cognitive monitoring, it seems plausible that they are often short lived. That being said, even if all virtual works require adopting the affective perspective, it seems to me that the quarantine violation can be a means of realizing the cognitive value within certain works, and thereby not necessarily epistemically pernicious.

4.6. The Affective Education of Virtual Art

In the last section, I showed that there is good reason to think that S1 (there is a quarantine violation required at the sub-doxastic level to engage with virtual media) of the sub-doxastic reading is true. In this section, I dismiss the sub-doxastic reading by showing that S2 (that the quarantine violation is necessarily epistemically harmful) is false. While there might be cases where our emotions towards virtual depictions ought to represent violence as joyous and fun, there are also cases where our emotions towards virtual depictions ought to teach us and refine our emotional sensibilities. It is a commonly held view by cognitivists that our affective engagement with art can be cognitively valuable, and the same is true of virtual art because of its affective complexity.

Let's briefly sum up the affective complexity of virtual art. Our emotions in virtual art have two objects: our real-world actions such as deciding to press certain buttons to generate certain properties within the display, and our virtual-world actions such as climbing a virtual mountain or visiting a virtual recreation of the *Trevi Fountain*. I suggested that there is an asymmetry in the roles these objects play in our affective response to virtual art. Namely, the virtual-world objects ought to be more salient in our affective responses than the real-world objects. There is good reason to think that there is a quarantine violation at the sub-doxastic level because of this asymmetry. When we feel joy whilst immersed in *L.A. Noire*, it is more salient to us that we feel joy because we solved the case, not because we pressed certain buttons that made it fictionally true that a case was solved. This entails a quarantine violation because the appraisal of the relevant object (i.e., that solving the case was a morally good act) conferred by my emotion was based on the simulated affective response of the immersed-role, not my

⁵⁵ However, there are some instances where this norm might be deliberately subverted. For example, Volker Morawe and Tilman Reiff's *PainStation* can inflict physical pain on its user. In that case, you might think that the real-world objects ought to be more salient in the user's affective response.

ordinary mental state. This affective complexity might strike some as worrisome, but it is a central part of how virtual art can teach us.

A standard line from aesthetic cognitivists is that we can "emotionally learn" from art, meaning that our affective sensibilities can be refined through our engagements with art. A popular account from Jennifer Robinson (2005) pays special attention to the sub-doxastic component of this education with particular regards to literature. For Robinson, emotions function as immediate and non-deliberative affective appraisals, which can be evaluated by "cognitive monitoring" on a doxastic level. When I feel fear during a horror film, it is not because I deliberately judged the monster to be represented as scary, but rather it was an urgent appraisal of "scary" directed towards the monster. She holds that through this aspect of emotions, novels can educate us. Prior to arriving at a judgement about the characters or situation in a novel, emotionally engaged readers can experience a variety of different affective responses and corresponding appraisals which draw their attention to different features of representations, making direct appeal to the reader's own "wants and interests." Afterwards, readers can reflect on this emotional engagement and form beliefs based on that experience. Part of how virtual art can teach us through its affective complexity ends up looking like Robinson's account of learning from literature.

We get a clear sense of how virtual art's affective complexity is cognitively valuable through application of Robinson's thesis. If our emotional engagement in art allows certain features and qualities to become salient to us based on what our "wants and desires" are, then the fact that the immersed objects of our emotions ought to be more salient than the non-immersed ones becomes relevant. The "wants and interests" our emotions attend to ought to be the ones which reflect features of those immersed objects and represented mental states. For instance, in *L.A. Noire*, my emotions ideally represent "solving the case" as desirable, not my hope to make it fictionally true that the case is solved. To be clear, this does not reflect a consciously deliberated *belief* that solving the case is desirable, instead it is a more immediate and automatic appraisal. Moreover, if we have adopted the affective perspective of the immersed-role, the wants and interests we feel to be at stake ought not to be our ordinary ones, but rather the ones the immersed-role is represented as having. We appraise "solving the case" as desirable and just

⁵⁶ Accounts of emotional learning from art include Nussbaum (1990), Robinson (2005), Gaut (2007).

because Cole Phelps is represented as evaluating it as desirable and just. A worry is that virtual art with violent content can lead our emotions to appraise a violent scenario as exciting and fun, even if we do not really believe that violence is exciting and fun. I will speak more about troubling virtual depictions in the next section, but what is of importance for now is that this affective complexity can be cognitively valuable in the same way Robinson describes our emotional engagement with novels as cognitively valuable.

The "wants and interests" at stake when immersed in virtual art are those the immersed-role is represented as having, because of the sub-doxastic quarantine violation. This allows us to feel wants and interests which are distinct from our own without our ordinary beliefs and attitudes presenting an obstacle. An example where this ends up being a source of cognitive value is Courtney Cogburn's VR short film 1000 Cut Journey. 1000 Cut Journey has the user immersed as Michael Sterling, a Black man who experiences racism at various points in his life. The work provides three scenarios, deliberately presenting cases where the racism directed at Michael might be otherwise opaque (i.e., casual workplace discrimination). The cognitive value of this piece is that the emotional response of users can make certain features of the depicted scenarios more salient through their immersion as Michael. In doing so, the piece educates them about every day racist encounters.

Let us recall the asymmetry mentioned previously and apply it to one of the depicted scenarios in 1000 Cut Journey. My real-world "want and desire" is to progress the display such that it is fictionally true that Michael arrives home, but my virtual-world "want and desire" is to arrive home. So, when Michael is pulled over and berated by the police on his way home, the salient desire being frustrated is my desire to arrive home, not the desire to make it fictionally true that Michael arrives home. This asymmetry can aid in making certain features of the scenario more salient to me than it otherwise had been. There is clearly a difference in an emotion appraising an obstacle to my progression of the narrative as frustrating, and an emotion appraising an obstacle to me going about an ordinary day-to-day task. That second object of our emotion has certain properties that we might immediately correctly appraise as subtlety racist properties. By being immersed as Michael and adopting his affective perspective, users experience frustration at the racist attitudes and behaviors preventing them from accomplishing their goals.

In the example provided, I paid attention to the immediate affective appraisals we can expect users to make as a result of the quarantine violation in their virtual immersion. Let's turn our attention to the role cognitive monitoring can play in getting us to appreciate the cognitive value of this experience. The scenarios depicted in 1000 Cut Journey are meant to depict instances of racism that would typically go unnoticed by certain onlookers. Through taking on a differing affective perspective and having corresponding appraisals from that perspective, users are provided with a way of refining their own emotional sensibilities such that these socially pernicious properties can become more salient in their ordinary affective responses. Moreover, by consciously attending to the emotional discrepancy as to how they reacted in 1000 Cut Journey compared to how they react when they experience these encounters in their ordinary lives, certain users are meaningfully taught something about their own ignorance and biases.⁵⁷

What the example of 1000 Cut Journey shows us is that the sub-doxastic quarantine violation entailed by virtual immersion ends up playing a key role in the sort of affective education discussed by Jennifer Robinson. Just like literature, virtual media has certain mechanisms which can take audiences on a complex and dynamic emotional journey, in which various features of the work appeal to their sub-doxastic tendencies and capacities. The practice of virtual immersion prescribes us to feel differing wants and desires than we ordinarily would, refining our own sub-doxastic tendencies and leading users to reflect on these tendencies at a doxastic level. If what I have said in this section holds true, then the quarantine violation in question is not necessarily cognitively harmful, and can in fact be a source of cognitive value. This means that the pessimist challenge fails, because virtual art is not necessarily cognitively hostile. Instead, the mechanism of virtual immersion is, in principle, cognitively impartial.

This being said, all of what I have shown so far is consistent with the idea that most virtual art is cognitively hostile. For one thing, some users of 1000 Cut Journey might not reflect on their experience, and inadvertently have their racist biases reinforced, not reduced. This can be explained by these users not appreciating the work properly, but it is still worrisome. More importantly, however, it might appear that we ought not engage with certain virtual artifacts. If

⁵⁷ Empirical studies on the effects of *1000 Cut Journey* are currently ongoing. However, I draw attention to a study conducted by Kishore et al. (2019) which had a group of users immersed in a VR scenario as Black men experiencing racist attitudes from police officers. The study showed generally more pro-social attitudes and reduced biases from those who were in this group.

some virtual artifacts have epistemically productive properties through this sub-doxastic quarantine violation, then surely we should avoid the ones which have epistemically harmful properties. In the next section, I will explain why this prescription is wrong.

4.7. Prescriptions and Evaluations

It turns out that virtual media is not necessarily cognitively harmful because 1. It does not mandate false belief uptake and 2. The affective complexity of virtual media ends up having the ability to be cognitively beneficial. I want to turn now to the evaluative component of the pessimist challenge. The pessimist challenge said that if virtual media is necessarily epistemically pernicious, then we can devalue virtual art relative to other art-kinds on cognitivist grounds. I've already shown the antecedent to be false, but I will use this section to respond to a pessimistic objection and explain what this means for the evaluative component of the pessimist challenge. It ends up being the case that there is no good reason to devalue virtual art relative to other art-kinds.

I said that there is a quarantine violation at the sub-doxastic level when engaging with virtual media, but that this quarantine violation is the mechanism by which certain virtual artworks are cognitively valuable. The pessimist can respond that my work in this chapter entails the following prescription: we should not engage with virtual artworks whose content entails a quarantine violation which confers unethical or otherwise undesirable appraisals. *Bully* requires such a quarantine violation, as users ought to adopt an affective stance which represents violence as desirable. This affective stance can cause epistemic harm *per* the pessimist, and so works such as *Bully* should not be engaged with. There are two points being made here, one is about the morality of adopting such a mental state, and the other is about the potential cognitive harms of adopting the mental state and what to do about them. I am only concerned with the latter point here; I will leave the former for those concerned with the ethical criticism of virtual art. ⁵⁸

I can only offer a partial reply to this objection. The good news is that the partial reply I can offer confirms that we cannot devalue virtual art relative to other art-kinds. First, let us get

⁵⁸ See Bartel (2020, pg. 60-74) for a comprehensive and opinionated survey on the literature on the ethical criticism of virtual depictions.

clear on the cognitive consequences of these "pernicious" affective stances. I am unsure of the long-standing cognitive harms of adopting these affective stances. The data suggests that whatever quarantine violation occurs at the sub-doxastic level is often a short-lived one, but it also appears that there can be more longstanding consequences if one continuously engages with virtual artifacts of a similar nature (Anderson et al, 2010). Engaging with violent virtual artifacts every so often as part of a varied repertoire of virtual media might result in temporarily increased aggression, whilst only playing violent virtual media for long periods might prolong that aggression. The data here is somewhat contentious, but I will accept it for the sake of argument. ⁵⁹

However, it is not clear that other art-kinds such as literature are different from virtual art in this regard, and so perhaps we can adopt similar prescriptions across art-kinds. Kris Goffin and Stacie Friend (2022) have shown that literary fiction has many cognitively and morally neutral mechanisms that when realized in certain ways can be used to enhance or dampen biased attitudes. They suggest that a good way to avoid the impact of biased literary fiction is engage with literary fiction of a wide variety, as opposed to having a diet of literary fiction that is restricted to one genre or culture. Their prescription here is not to avoid literary fiction which might foster biases, but rather to engage with literary fiction which might challenge those biases as well. Similarly, with virtual art, it might be harmful to only engage with works that ask us to adopt violent dispositions, and whatever effect these works have can be challenged by engaging with works which ask us to adopt opposing dispositions.

However, most individual artworks, virtual or otherwise, are not entirely cognitively beneficial nor cognitively harmful. This point has consequences for both our artistic and purely epistemic evaluations of artworks. With regards to artistic evaluations, cognitivists broadly accept that a work's profundity ought to be weighed against the ignorance it communicates. For instance, we might value *Before Your Eyes* for its insightful commentary on the values of a short life, but we might also criticize it for propagating a romanticized view of lying and dishonesty. This phenomenon should strike the reader as a standard fact about the complexity of our artistic engagements. Works can communicate cognitively valuable resources as well as cognitively harmful ones, and ideal audiences should be attuned to what is of value in a work and what is

⁵⁹ The study cited was criticized by Hilgard et al. (2017).

not. It does not reflect any reason to devalue one art-kind relative to another, but instead to attend to the particular artistic features of individual works.

This raises another question, how do we handle the cognitive benefits and harms of art more broadly? That is, how do we import what is cognitively valuable in a work, whilst avoiding its more cognitively damaging components? It is here that I can only offer unsatisfying conjectures. One obvious solution is to encourage artists to be more epistemically virtuous when creating artworks. Another point is to encourage media literacy amongst consumers of art. Audiences should ideally know when a work might be deliberately promoting immoral propaganda, or when the attitudes presented in a work ought not be adopted in our ordinary lives. Critics can also aid in drawing our attention to what is epistemically valuable in a work and what is not. The literature on *imaginative resistance* also points to some mechanisms that might aid audiences in managing the cognitive harms and benefits of art. I think it is fair to say that whatever prescriptions ought to be provided should ideally attend to the standard features of individual art-kinds, whilst keeping in mind that no art-kind is wholly pernicious or wholly good.

That being said, if it turns out that the mechanisms of virtual art can be used to manifest cognitive merits and demerits, and that similar facts hold true about other art-kinds, then the pessimist cannot devalue virtual art relative to other art-kinds. I recognize that the conclusion of "the cognitive value of virtual art is particular to individual artworks, and that no art-kind is more or less cognitively valuable than the other" might strike some as disappointingly trivial. If it strikes you as such, consider the relatively common intuition from the beginning of this dissertation that virtual works are a waste of time, and that we are better off engaging with other art-kinds. What I have argued for here shows that this intuition is false, and that there is no special feature of virtual art that warrants this devaluation.

In this chapter, we asked the following question: is there a *pro tanto* reason to devalue virtual artworks on cognitivist grounds simply because they are virtual? I presented a reason one might think that this is the case: that virtual art requires virtual immersion, virtual immersion requires a quarantine violation, and quarantine violations are inherently pernicious. I presented two readings of that claim, and showed them both to be false. In doing so, I concluded that there was no *pro tanto* reason to devalue virtual art. Virtual media is incredibly powerful, and particular uses can generate epistemically valuable and hostile properties.

Conclusion

In this dissertation, I developed an argument against what I called the "cognitive devaluation of virtual art," which is a devaluation of virtual art on cognitivist grounds within critical practice. The idea behind this view was that virtual art lacked the features of mediums like literature and cinema which allow for those mediums to be cognitively valuable. My virtual cognitivism comprised of two arguments which jointly refuted this position: that virtual art can be cognitively valuable, and this cognitive merit can sometimes be an artistic merit. I also offered a critical look at the relatively common view that virtual art is cognitively pernicious, and found that there is no inherently cognitively pernicious standard feature of virtual art. I concluded that there is no good reason to devalue virtual art relative to other art-kinds, refuting the cognitive devaluation.

My hope is that the views espoused here seem commonsensical and intuitive. I found out that, like most art, virtual art has a variety of mechanisms which aid in generating perspectives. I specifically pointed to the notion of "immersion," and argued that virtual art mandates that when we adopt an attitude of presence in and preoccupation with a virtual work's depicted contents, we are also provided a role which has embedded evaluative and affective attitudes that we are asked to adopt. Given that the work is immersive, users must make decisions from that role's perspective, and end up getting to practice making decisions with motivations and values which are not their own. Moreover, the interactivity of virtual works allows for the possibility of multiple perspectives, and so users are invited to compare and contrast the perspectives found throughout the work. This might sound similar to the cognitive values found in literature and other art-kinds, and that is because it is. The only difference is that I showed how these cognitive values are related to the standard features of virtual art.

In attending to the standard features of virtual art, it was also revealed that the cognitive value of virtual art can be an artistic value. Programmers and artists must display a large degree of skill and artistry in manifesting not only a cognitively productive perspective-range, but one which creates coherent and engaging instances of these virtual artworks. It is not just enough to create engaging instances however, artists must also create instances which can fruitfully incorporate the user's decisions and attitudes into them. When we appreciate an artwork as virtual, we judge it based on its standard features, and we pay special attention to how the cognitively valuable properties arise from those standard features.

Lastly, I considered the possibility that virtual art is inherently cognitively detrimental. I found that the mechanisms involved in virtual immersion can be cognitively beneficial as well as harmful, and showed that similar mechanisms can be found in most art-kinds. If what I say here is true, then not only is the cognitive devaluation unjustified, but it is quite strange that we were so worried about virtual art to begin with. Virtual art can teach us, it can also harm us if we are not careful, as is true of most art-kinds.

Bibliography

American Psychological Association (2020). APA Resolution on Violent Video Games. *apa.org*, February.

Anderson, Craig; Akiko Shibuya, Nobuko Ihori, Edward Swing, Brad Bushman, Akira Sakamoto, Hannah Rothstein, & Muniba Saleem (2010). Violent Video Game Effects on Aggression, Empathy, and Prosocial Behavior in Eastern and Western countries: A Meta-analytic Review. *Psychological Bulletin* 136 (2), 151–173.

Antonsen, Paal Fjeldvig (2001). Self-Location in Interactive Fiction, *The British Journal of Aesthetics* 61 (1): 41–52.

Bangeman, Eric (2006). Jack Thompson sues over upcoming "Bully" title. arstechnica.com, August, 16th.

Bartel, Christopher (2020). Video Games, Violence, and The Ethics of Fantasy.

Bazin, Andre (1971). What is Cinema Volume 2. University of California Press.

Binkley, Timothy (1977). Piece: Contra aesthetics. *Journal of Aesthetics and Art Criticism* 35 (3):265-277.

Budd, Malcolm (1995). Values of Art: Pictures, Poetry and Music. Penguin Books.

Beardsley, Monroe C. (1958). Aesthetics. Harcourt, Brace.

Calvert, Sandra; Mark Appelbaum, Kenne Dodge, Sandra Graham, Gordon Nagayama Hall, Sherry Hamby, Lauren Fasig-Caldwell, Martyna Citkowicz, Daniel Galloway & Larry Hedges. (2017). The American Psychological Association Task Force Assessment of Violent Video Games: Science in the Service of Public Interest. *American Psychologist*, 72(2):126–143.

Camp, Elisabeth (2017). Perspectives in Imaginative Engagement with Fiction. *Philosophical Perspectives* 31 (1):73-102.

Carroll, Noël (1998). A Philosophy of Mass Art. Oxford University Press.

Carroll, Noël (2002). The Wheel of Virtue. Journal of Aesthetics and Art Criticism 60 (1):3–26.

Carroll, Noël (2007). Literary Realism, Recognition, and the Communication of Knowledge. In *A Sense of the World* (eds. Gibson, J. Huemer, W. & Pocci, L.) Routledge.

Chalmers, David (2017). The Virtual and The Real. Disputatio 9 (46):309-352.

Chalmers, David (2022). Reality+. W.W. Norton & Company.

Chasid, Alon (2021). Imaginative Immersion, Regulation, and Doxastic Mediation. *Synthese* 199 (3-4):1-43.

Currie, Gregory (1990). The Nature of Fiction. Cambridge University Press.

Currie, Gregory (2011). Literature in the Psychology Lab. Times Literary Supplement.

Currie, Gregory (2020). Imagining and Knowing. Oxford University Press.

Declos, Alexandre (2021). Videogame Cognitivism. Journal of the Philosophy of Games 1:1-31.

Dickie, George (1964). The Myth of the Aesthetic Attitude. *American Philosophical Quarterly* 1 (1): 56-65.

Diffey, Terry (1995). What Can We Learn from Art? *Australasian Journal of Philosophy* 73 (2): 204-211.

Donnelly, Maureen (2019). The Cognitive Value of Literary Perspectives. *Journal of Aesthetics and Art Criticism* 77 (1):11-22.

Ebert, Roger (2010a). Video Games Can Never Be Art. rogerebert.com, April 16th.

Ebert, Roger (2010b). Okay Kids, Play on my Lawn. rogerebert.com, July 1st.

Elgin, Catherine (1996). *Considered Judgment*. Princeton: New Jersey: Princeton University Press.

Elgin, Catherine (2017). True Enough. Cambridge: MIT Press.

Gaskin, Richard (2013). Language, Truth, & Literature. Oxford University Press.

Gaut, Berys (2007). Art, Emotion, and Ethics. Oxford University Press.

Gaut, Berys (2010). A Philosophy of Cinematic Art. Cambridge University Press.

Gee, James Paul (2002). What Videogames Have to Teach Us about Learning. Palgrave Macmillan.

Gibson, John (2008). Cognitivism and the Arts. *Philosophy Compass* 3 (4):573-589.

Gilmore, Johnathan (2020). Apt Imaginings. Oxford University Press.

Glicksman, Marlene (1989). Interview: Spike Lee. Film Comment, July-August 1989.

Goffin, Kris & Friend, Stacie (2022). Learning Implicit Biases from Fiction. *Journal of Aesthetics and Art Criticism* 80 (2):129-139.

Gopnik, Allison & Wellman, Henry (1992). Why the Child's Theory of Mind Really is a Theory. *Mind and Language* 7 (1-2):145–171.

Gordon, Robert (1986). Folk Psychology as Simulation. Mind and Language 1 (2):158-171.

Grabarczyk, Paweł & Pokropski, Marek (2016). Perception of Affordances and Experience of Presence in Virtual Reality. *Avant: Trends in Interdisciplinary Studies* 7 (2):25-44.

Graham, Gordon (1997). Philosophy of the Arts: An Introduction to Aesthetics. Routledge.

Green, Melanie & Donahue, John (2011). Persistence of Belief Change in the Face of Deception: The Effect of Factual Stories Revealed to Be False, *Media Psychology* 14 (3):312-331.

Grau, Oliver (2002). Virtual Art: From Illusion to Immersion. M.I.T. Press.

Hammel, Michael (2005). Towards Yet a Newer Laocoon. In *Digital Art History: A Subject In Transition* (eds. Bentkowska-Kafel, A. Cashen, T. & Gardiner, H.) Intellect.

Heim, Michael (1998). Virtual Realism. Oxford University Press.

Herrera, Fernanda (2018) Building long-term empathy: A large-scale comparison of traditional and virtual reality perspective-taking. *PLoS ONE 13*(10): e0204494.

Hilgard, Joseph; Christopher Engelhardt & Jeffery Rouder. (2017). Overstated evidence for short-term effects of violent games on affect and behavior: A reanalysis of Anderson et al. (2010). *Psychological Bulletin*, 143(7): 757–774.

Hills, Allison (2015). Understanding Why. Nous 49 (2), 661-688.

Isbister, Katherine; Rahul Rao, Ulf Schwekendiek, Elizabeth Hayward, and Jessamyn Lidasan (2011). Is More Movement Better? A Controlled Comparison of Movement-Based Games, *Proceedings of the 6th International Conference on the Foundations of Digital Games*. 331

Jones, Johnathan (2012). Sorry MoMA, video games are not art. *theguardian.com*, November 30th.

Kieran, Matthew (2005). Revealing Art. Routledge.

Kishore, Sameer; Bernhard Spanlang, Guillermo Iruretagoyena, Shivashankar Halan, Dalila Szostak, Mel Slater (2019). A Virtual Reality Embodiment Technique to Enhance Helping Behavior of Police Toward a Victim of Police Racial Aggression. *PRESENCE: Virtual and Augmented Reality*; 28, 5–27.

Kivy, Peter (1997). *Philosophies of Arts: An Essay in Differences*. Cambridge, England: Cambridge University Press.

Lamarque, Peter & Olsen, Stein Haugom (1994). *Truth, Fiction, and Literature: A Philosophical Perspective*. Oxford University Press.

Lamarque, Peter (2006). Cognitive Values in the Arts: Marking the Boundaries. In *Contemporary Debates in Aesthetics and the Philosophy of Art* (ed. Kieran, M.) Blackwell.

Lamarque, Peter (2009). The Philosophy of Literature. Wiley-Blackwell.

Langer, Susanne (1951). Philosophy in a New Key. Cambridge: Harvard University Press.

Langland-Hassan, Peter (2020). Explaining Imagination. Oxford University Press.

Levinson, Jerrold (1996). *The Pleasures of Aesthetics: Philosophical Essays*. Cornell University Press.

Lopes, Dominic (2009). A Philosophy of Computer Art. Routledge.

Lopes, Dominic (2014). Beyond Art. Oxford University Press.

Mikkonen, Jukka (2021). *Philosophy, Literature and Understanding: On Reading and Cognition*. London: Bloomsbury Academic.

Mitchell, Peter; Gregory Currie, Fenja Ziegler (2009). Two Routes to Perspective: Simulation and Rule-Use as Approaches to Mentalizing. *British Journal of Developmental Psychology* 27 (3):513-543.

Nehamas, Alexander (1988). Plato and the Mass Media. The Monist 71 (2): 214-234.

Nussbaum, Martha (1990). Love's Knowledge: Essays on Philosophy and Literature. Oxford University Press.

Nguyen, C. Thi (2020). Games: Agency as Art. Oxford University Press.

Patridge, Stephanie (2010). The Incorrigible Social Meaning of Video Game Imagery. *Ethics and Information Technology* 13 (4):303-312.

Poole, Steven (2004). Trigger Happy. Fourth Estate.

Popper, Frank (2007). From Technological to Virtual Art. M.I.T. Press.

Preston, Dominic (2014). Some Ontology of Interactive Art. *Philosophy and Technology* 27 (2):267-278.

Prinz, Jesse (2004). Gut Reactions: A Perceptual Theory of Emotions.

Provenzo, Eugene (1991). Video Kids: Making Sense of Nintendo. Harvard University Press.

Robson, Jon & Meskin, Aaron (2016). Video Games as Self-Involving Interactive Fictions. *Journal of Aesthetics and Art Criticism* 74 (2):165-177.

Robinson, Jennifer (2005). Deeper than Reason. Oxford University Press.

Robinson, Nathan (2022). Unfortunately, We Are Not Living in a Simulation. *currentaffairs.org*, February 2nd.

Rowe, M.W. (1997). Lamarque and Olsen on Literature and Truth. *Philosophical Quarterly* 47 (188):322-341.

Ryan, Marie-Laurie (2015). Narrative as Virtual Reality 2. Johns Hopkins University Press.

Schellenberg, Susanna (2013). Belief and Desire in Imagination and Immersion. *Journal of Philosophy* 110 (9):497-517.

Schulzke, Marcus (2010). Defending the Morality of Violent Video Games. *Ethics and Information Technology* 12:127-138.

Seth, Anil K., Keisuke Suzuki, and Hugo D. Critchley. (2012). An Interoceptive Predictive Coding Model of Conscious Presence. *Frontiers in Psychology* 3: 1–16.

Shelly, James (2010). Against Value Empiricism in Aesthetics, *Australasian Journal of Philosophy* 88:707-710.

Society for Media Psychology and Technology. (2020). An Open Letter to the APA Council. *div46amplifier.com*. March 2nd.

Stecker, Robert (2010). *Aesthetics and the Philosophy of Art: An Introduction*. Rowman & Littlefield Publishers.

Stecker, Robert (2019). *Intersections of Value: Art, Nature, and the Everyday*. Oxford University Press.

Stewart, Marcus (2021). Before Your Eyes Review. GameInformer. April 8th.

Stokes, Dustin (2007). Fiction and Psychological Insight in *Knowing Art* (eds. Kieran, M. & Lopes, D.) Routledge.

Stolnitz, Jerome (1992). On the cognitive triviality of art. *British Journal of Aesthetics* 32 (3):191-200.

Tavinor, Grant (2010). The Art Videogames. Wiley-Blackwell.

Tavinor, Grant (2021). The Aesthetics of Virtual Reality. Routledge.

Thomson-Jones, Katherine (2019). The Philosophy of Digital Art. In *The Stanford Encyclopedia of Philosophy* Spring 2019 Edition (ed. Zalta, E.) The Metaphysics Research Lab.

Thomson-Jones, Katherine (2021). *Image in the Making*. Oxford University Press.

Waddington, David (2007). Locating the Wrongness in Ultra-Violent Video Games. *Ethics and Information Technology* 9: 121-128.

Walton, Kendall (1970). Categories of Art. Philosophical Review 79 (3):334-367.

Walton, Kendall (1990). Mimesis as Make Believe. Harvard University Press.

Wartenberg, Thomas (2007). Thinking on Screen. Routledge.

Wilson, Catherine (1983). Literature and Knowledge. *Philosophy* 58: 489–496.

Witmer, Robert & Singer, Michael (1998). Measuring Presence in Virtual Environments: A Presence Questionnaire. *Presence: Teleoperators and Virtual Environments*; 7 (3): 225–240.

Virilio, Paul. (1995). Speed and Information: Cyberspace Alarm! Ctheory.

Young, James (2016). The Buck Passing Theory of Art. Symposium: Theoretical and Applied Inquiries in Philosophy and Social Sciences 3(4): 421-433.

Zagzebski, Linda (2001). Recovering Understanding. In *Knowledge, Truth, and Duty: Essays on Epistemic Justification, Responsibility, and Virtue* (ed. Steup, M.) Oxford University Press.