The Avatar and the Index

Digital Corporeality in the Art of Ed Atkins

A Master's Thesis for the Degree of Master of Arts (120 credits) in Visual Culture

Emma Shachat

Division of Art History and Visual Studies, Department of Arts and Cultural Sciences

Lund University

KOVM12, Master Thesis, 15 credits

Supervisor: Lila Lee Morrison, Ph.D.

Spring semester 2020

Acknowledgements

ABSTRACT

This thesis attempts to understand how digital representations of the body understand and mediate the digital and Real body. In order to approach this inquiry, this thesis will engage with and compare debates regarding the semiotic register of the index, and how it has been understood in relation to analogue photography versus digital media. This inquiry will be guided by an investigation into the dichotomy by which the analogue photograph is considered to be categorically indexical based on its materiality, whilst the digital image is thought to bring about the 'death of the index' due to its relative *im*materiality. This reconsideration of these conceptions of the index will then be applied to a reading of the digital representations of the human body, or *avatars*, in the digital animation artworks of contemporary artist Ed Atkins. A reconsideration of the index will serve as a tool in understanding how digital representations of corporeality effectively function as digital indices. Thereby, digital images do not kill the index, but resurrect it in digital-form. With this analysis arise new considerations of how we can define indexicality, the Real, and materiality within the realm of digital media and digital art.

Keywords

Avatar, digital, virtual, index, semiotics, mask, proxy, corporeality, embodiment, materiality

Table of Contents

Chapter 2: Proxies, Digital Death Masks, and the of Ed Atkins

List of Figures

Introduction: The Index, the Real, and the Virtual

Before I began writing this paper, I was discussing the British artist Ed Atkins with a group of friends, two[1] of whom recalled the time they had viewed his works at the Louisiana Museum's 2017-18 exhibition *Being There* in Denmark. One friend was, much like myself, unexpectedly moved and intrigued by the videos on display. The other stated that he actively avoided Atkins' portion of the exhibition, having been so unsettled by the uncanniness of Atkins' digital-avatar actors. He likened it to the same feeling of physical discomfort he experienced as a child during a particular scene in the 1999 film *Fight Club.* The scene consists of a digitally animated

Fig.1: The uncanny CGI-rendered reverse tracking shot of a garbage can in Fight Club (1999) (my own screenshot from the film).

reverse-tracking shot of a trash can (fig. 1). The scene, which is no more than 10 seconds, took three weeks to render[2]. But the objects in the shot, my friend noted, seem distinctly unreal: because they appeared *too* real, too perfect, instead of the way trash should look—spoiled, broken, discarded, unintentional, rotten. He then likened this to the CGI faces and bodies in Atkins' videos, which appeared to be photorealistic, hyper-detailed to the point of being 'uncanny', he stated; a bad copy of real life, real bodies. 'I really hated them, I had to look

---

[1] I would like to thank these friends, Pontus and Ebba, for granting me their informative insight and reflections on this exhibition, and for allowing the inclusion of their reflections in this thesis.

[2] 'History of computer animation: CGI', *computeranimationhistory-cgi* [website], 2016-2017, https://computeranimationhistory-cgi.jimdofree.com/fight-club-1999/, accessed 10 June 2020.

Fig. 2. Youtube user King Lizard's comment on a video teaser for Atkins'
exhibition, posted on the Statens Museum for Kunst's YouTube channel,
2016.

away', he said, shaking his head apologetically. But as we discussed further, I suggested to him

that perhaps this highly visceral sensation of discomfort brought about by Atkins' works, was

in fact perfectly appropriate and valid. I assured my friend, who felt that his reaction indicated

that he was unable to 'fully appreciate' digital art, that this reaction is, at least for me, rather

valuable insight. And this kind of reaction to Atkins' art, it appears, is common. For example,

in the research that ensued I came across a comment (fig. 2) by a Youtuber under the name of

King Lizard on an exhibition trailer for Ed Atkins' installation of *Safe Conduct* (2016), which

would be held at the Statens Museum for Kunst in Copenhagen. The Youtuber commented

simply: 'Postmodernist garbage'. This particular comment sparked my curiosity further: why

might some regard this kind of art to be 'trash', disposable, not worthy? Is it really so rotten?

My hunch was that this kind of reaction had something to do with the digital medium itself.

Why, then, do people often react so negatively to this medium? Of course, this particular

YouTube commenter may have simply disliked Atkins' particular *use* of the medium and hold

nothing against the digital medium itself. But the comment still left me with a question: must

we discard the digital as an illegitimate artistic medium? Is the digital capable of producing

worthy artistic meaning?

Aim and research question

The prior anecdote is representative of a common discourse around the digital image, and the aesthetic tensions that arise when digital media are used to convey images of corporeal decay—that is, the Real. In this thesis, the semiotic category of the index will be used as a way to understand how digital media, and its analogue predecessors, relate to the Real—that is, how they become *indexical*. The aim of this thesis is arranged in two cohesive parts in order to answer the overall research question: How is the category of the index understood in relation to digital media? Firstly, this thesis will engage with debates and understandings about how the index functions in the digital image and the analogue image, in order to highlight overall crucial theoretical concepts within the relevant field. This indexical inquiry will then be applied to a reading of digital representations of the human body, or avatars, in the digital art of contemporary artist Ed Atkins. Secondly, the index will serve as a useful theoretical category in reading Atkins' digital representations of corporeality. Finally, this thesis will ask the more specific question, How do these digital representations of the body understand and mediate the digital and the Real body, and can these representations become indexical?

Such an inquiry aims to open up a lens through which we can better understand digital media's particular ways of representing the experience of the Real/corporeality. In reexamining how the Real, the index and materiality have been defined in relation to both analogue and digital media, this thesis aims to present a consideration of how we as living bodies might relate to digital bodies. On a broader scale, these questions can perhaps encourage reflection on how our own contemporary experiences of embodiment are shaped and mediated by digital and other Virtual media, and vice versa.

Background and Relevance

Since the 1980s, 'technological shifts'—what I will understand to include the increasing prevalence of digital interfaces, such as computers and mobile phones, and the prevalence of telecommunication technologies such as the internet— 'began to be theorized in terms of the *loss of the real* [italics my own]', as Amelia Jones notes[3]. One can be physically present in a Real, embodied space while also being present in a Virtual one. I can hold a conversation with someone in real space and time, whilst looking down at my phone and engaging in an entirely different conversation or social exchange online, my physical body merely a symbolic placeholder in our 'real life' conversation. Avatars on interactive chat rooms such as *Second Life* or multi-player videogames allow the user to occupy a digital body and navigate virtual terrain, as well as interact with other disembodied users and their avatars. CGI-rendered, hyperrealistic humans become Instagram influencers, modeling designer clothing online in the place of a human model. Furthermore, digital interfaces can enact real, embodied consequences: telerobotic military drones and missiles scan for their human-targets before inflicting physical damage, even death, on human bodies—all while being remotely-manned by military personnel thousands of miles away[4]; automated Twitter accounts plant seeds of doubt in an online target audience and influence real political landscapes; biometric data is codified and logged in order to classify and hierarchize our bodies in digital terms. These are just some cursory examples of the sociopolitical and cultural influences of digital media and virtual technologies on our daily lives. As a result, our lived experiences are increasingly situated between the realms of the Virtual and Real.

---

[3] Amelia Jones in Jones et al, 'The Body and Technology', *Art Journal* [JSTOR], no. 60, 2001, pp. 20-39, p. 20, accessed May 21, 2020.
[4] See Caroline Holmqvist, (2013), 'Undoing War: War Ontologies and the Materiality of Drone Warfare', *Millennium: Journal of International Studies* [Sage Journals], no. 41, June 7 2013, p. 535–552, accessed May 12, 2020.

Debates around what constitutes the 'Virtual' and 'Real' are of course not new, but they have certainly become revitalized within contemporary debates in which technologies such as the internet, artificial intelligence, and digital interfaces, challenge our conceptions of what constitutes the human and the Real (I cannot help but recall the ubiquitous acronym 'IRL', which stands for 'in real life' and is used to distinguish between online interactions and Real interactions). Thus, as a result of the revitalization of this debate, and because I am writing within the context of the post-internet age in which the term Virtual is used quite liberally, it is necessary that I define what the terms Real and Virtual will mean within the context of this thesis. I understand the Real as grounded in the *physical, embodied* world: the world we physically inhabit and touch with our own *sensing, physical bodies*. I understand the Real as that which is fleshy, subject to decay, prone to illness and death, is temporary and sensorial. This isn't to say that the body does not perceive the Virtual, or that the Virtual and the Real do not sometimes overlap (in fact, the opposite should become evident in my discussion). While distinctions between the Real and what is Virtual are of course contingent, ever-changing and highly contested, for the purposes of clarity and consistency, I will refer to the Real in highly *embodied*, materially grounded terms. The term Virtual, on the other hand, I will understand as that which is not directly tangible, does not directly occupy a material form, is not navigated *directly* through our fleshy bodies. However, this is not to say that the Virtual and the Real exist in a dichotomy. It certainly ebbs and flows in and out of the realm of the Real, but is always at some physical distance from it, resembling the Real but is not Real in a physical, embodied sense.

Samuel Weber notes that to attempt to oppose the Virtual with 'something ostensibly more material, more real, such as indexicality'[5], can be misleading, if we are only to define the

---

[5] S. Weber, 'A Virtual Indication', *Digital and Other Virtualities*, ed. Antony Bryant and Griselda Pollock, London: I.B. Tauris & Co Ltd., 2010, p. 65-66

virtual as something that '*excludes* reality or is independent of it'[6]. In order to avoid this discursive pitfall, my understanding and delimitation of the concept of the Real and Virtual, and the relationship between the two, will follow Gilles Deleuze's theory of the Virtual and the Real, which sees the two as distinct, but reflexive. Deleuze described the Real world as the 'actual' world, wherein the 'actual' is the 'here and now',[7] the materially existing object. Meanwhile, Deleuze defined the Virtual as a kind of delayed imaginary, or that which is simply *not* here and now, but still resembles the 'here and now' in some way.[8] While his definition makes a distinction between the two terms ('here and now' versus 'not here and now'), Deleuze also describes a reflexive and flexible *relationship* between the Virtual and the Real. Similarly, Anthony Briant and Griselda Pollock conceptualize of the Virtual as 'something that is effective, working in parallel to, but at a distance from the concrete, actual, material or lived reality. There is a similarity with the actual thing, but it is not the thing itself. It is not the real; yet it is not false'[9]. This paper will thus align with an understanding of the Real and the Virtual as, in the simplest of terms, the embodied and the not-directly-embodied, respectively, while incorporating Deleuze's understanding of the two as implicit within one another, and as inherently fluid.

Another delimitation of the term Virtual should be made, as the term 'digital' has become culturally and discursively affiliated with the notion of the Virtual, and vice versa, in the age of the internet. In the post-internet age, Virtuality is often associated with 'cyberspace' and other immersive digital-interface 'spaces' such as video games, social media platforms, chat rooms, and immersive virtual-reality experiences. This paper will understand the digital as

---

[6] Ibid.

[7] G. Deleuze, *Difference and Repetition* (1968), trans. Paul Patton (London: Continuum, 2006), in S. Weber, 'A Virtual Indication', *Digital and Other Virtualities*, ed. Antony Bryant and Griselda Pollock London: I.B. Tauris & Co Ltd., 2010, p. 66.

[8] Ibid.

[9] Anthony Bryant and Griselda Pollock, 'Editors' Introduction,*' Digital and Other Virtualities*, op. cit., p. 11

a *kind* of Virtual medium. The 'digital' can refer either to signals or data that are expressed through the binary-code system of zeros and ones, or it can refer to anything using or relating to computers[1]. This paper will refer to 'digital media' and the 'digital image/medium' as a mostly-Virtual medium that is mediated by computer technology and is expressed and stored as code.

The digital medium undoubtedly has many Real, *material* consequences and manifestations: digital data and signals are transported through fiber optic networking cables and housed in huge data centers (which have amassed a carbon footprint as large as global air travel[10]). Cybernetic theorists have long acknowledged the physicality of digital and internet systems—feedback loops simply detect and erase errors, noise, and distortion that result from 'material phenomena such as failures in circuit components or signal interference on transmission lines'[11]. But, for the purposes of clarity and consistency, I will understand the digital image as a kind of 'Virtual medium', in that it does not immediately exist 'here and now' (as a painting, sculpture, or photograph does). In doing so, this thesis acknowledges how digital images are still grounded and manifest themselves, albeit indirectly, in the material world. I will consider the digital medium as distinct from its analogue predecessors based on these unique aspects of relative *immateriality*. When the digital image presents itself to us, it does so through a process uniquely mediated by layers of numeric information that are not directly apparent to us. As such, not only is the digital an immaterial medium, but it is also *appears* opaque, mediated by processes that are not understood or at least not visually apparent, to the

---

[10]'The Internet Uses More Electricity than…', *Internet Health Report* [website], April 2018, para. 1, https://internethealthreport.org/2018/the-internet-uses-more-electricity-than/, accessed 8 June 2020.

[11] N Casemajor, 'Digital Materialisms: Frameworks for Digital Media Studies', *Westminster Papers in Digital Culture* [online journal], no. 10, 2015, pp. 4–17, https://www.westminsterpapers.org/articles/10.16997/wpcc.209/p.5, accessed May 2 2020

person encountering the digital image on the screen. This is a medium-specificity that should be kept in mind when discussing the digital medium.

Conversely, this essay understands 'analogue media' as media that are contingent upon Real physical, material means, such as paint, sculpture, photography[12], etc. Any of these analogue images can of course be translated into the digital, so long as a digital scan or photograph is taken of them. But until that point, they remain materially-housed, analogue images. The digital, on the other hand, is a *Virtual* medium, stored as code. The difference here is essentially the 'directness' of the image to its medium; a painted image is represented *in paint*, while a digital image is produced through illegible, underlying code, and stored indirectly in a processing unit such as a computer. While this distinction between the digital and analogue mediums might appear to uphold the dichotomy between the Virtual and the Real, we will later complicate these terms by exploring how the Virtual and the Real do, in fact, meet and become hybridized with one another. But in order for the contestations of these categories to be discussed, I find it necessary to establish some basic distinction between the two, as pertaining to the limits of the discussion.

Theory and Method

In order to understand how digital images mediate the Real and the Virtual, I will draw on the theoretical discussion of the index. The semiotic category of the *index* will thus serve as a lens for analyzing and understanding the digital image's link to the Real. In order to best analyze how the digital medium represents and mediates the Real in art, this thesis will engage in a

---

[12] Although some would argue photography should not be considered analogue, this view has changed over time, and in light of the relatively automated nature of digital media, I would consider the photograph to at least have primarily analogue qualities in the context of today's visual technologies.

detailed discussion on the semiotics of the digital image. This discussion will aim to understand how the characteristics of the digital image render it as an indexical sign.

Indexicality has often been equated with trustworthiness, stability, and physical-proximity. Because the digital image is mediated by code, Virtual distance, or computers, the link between the Real and the digital interface and ourselves appears distant or at least more opaque. As such, digital images are seen as 'increasingly vulnerable to error, deception and forgery', notes Ken Goldberg[13]. This apparent mystification of the link between the image and the Real, has informed a rhetoric wherein the digital is discussed as representing the '*death*' of the index. The digital image has been discussed as diluting or even destroying the link between the image and the Real, which 'the physical processes of analogue media once ensured'[14]. The result has essentially been a perceived-crisis of the Real, and scholars now must reexamine what the Real and the index might mean in light of the proliferation of digital images and Virtuality. As such, the link between images and the Real, and the nature of the Real as a category in itself, has been thought to be 'at stake in the current shift from photographic to electronic media'[15]. A reading of indexicality and how it functions, via an engagement with scholarly discussions of how it functions and manifests across analogue and digital media, will assist my reevaluation of the index within the context of the digital image.

---

[13] K. Goldberg, 'Introduction to *The Robot in the Garden: Telerobotics and Telepistemology In the Age of the Internet,* Introduction: The Unique Phenomenon of Distance', *The Robot in the Garden: Telerobotics and Telepistemology In the Age of the* Internet [website], https://goldberg.berkeley.edu/art/tele/intro.html

[14] Ibid, p. 84

[15] A. Jones, 'The Body and Technology', in Jones et al, op. cit., p. 21-23

Empirical Material and Delimitation

Notions of what constitutes the Real and the Virtual, and where we stand in between the two, change over time. Understandings of what kinds of images truly represent the Real, also change as new visual technologies come about. New media and new technologies force us to reconsider our complex relationship to 'visuality, embodiment, and the logics of mechanical, industrial, or cybernetic systems'[16], both past and present. Today, the digital image forces us to reconsider our understanding of these 'logics'—such as indexicality and what constitutes the Real. As past understandings of the Real and the Virtual are reconsidered by some theorists[17] in the age of digital media, the analogue photograph is often discussed as embodying the last remaining link to the Real, a link that digital media supposedly severs. This thesis will delimit its inquiry to the realm of digital images as empirical material. Specifically, this thesis will analyze the digital animations of British contemporary artist Ed Atkins. All the artworks discussed are digitally-animated, audio-visual moving image works that feature digitally-rendered human bodies (or 'avatars') as a central motif.

While Atkins' practice spans across disciplines—he also works as an educator, painter, poet, and writer—I have chosen to analyze Atkins' works because they consistently utilize, almost exclusively, the digital medium. As such, I would refer to him as a 'digital artist', and his artworks as 'digital art'. Commonly, though, such practitioners as Atkins are referred to as 'new media' artists, though this term has become culturally diluted. Though perhaps fading in its early-2000s technophilic glamour, 'new media art' is still sometimes used as a catch-all label for contemporary, non-traditional art. However, more specific terms such as 'post-internet art', 'new-aesthetic art', and 'digital art' continue to arise in the 21st century. As such, the terms

---

[16] Ibid, p. 20.
[17] See Kris Paulsen, Martin Lefebvre, WTJ Mitchell.

'digital art and 'new media art' should be distinguished, in order to better situate my empirical material.

Artists have long utilized their art to comment on the conditions and tools of art production and visual experiences. Specifically, however, Erkki Huhtamo traces highly 'conversational relationships to technology'[18] to the Dadaists and surrealists. Art movements in the 1950s and 60s saw artists becoming increasingly fascinated with the relationship between art and technology. Incorporating new technologies and mediums that previously sat outside the realm of art-making, they began 'constructing functioning devices to administer visual and auditory experiences'[19]. Notably, however, artists began increasingly incorporating digital technology in artworks, particularly in the form of experiential installations, in the 1980s. Most of these art works emphasized the novelty of the digital medium itself, often utilizing these technologies to create interactive or simulated 'experiences'.

At the end of the 20th century, 'new media' art[20] became a fashionable buzzword, used to refer to artists using any media or technologies that were just emerging at the time. These media often included digital film and digital photography, participatory internet-based network art[21], computer-generated art, art that utilized new surveillance technologies—essentially, any media that was digitized. 'New media art' now largely refers to such artworks that utilized 'new' media that are no longer new[22]. Today, as digital technologies and virtual networking systems have come to underly nearly every aspect of our daily lives, the phrase 'new media' loses its novelty. Thus, following Christine Paul's suggestion,[23] it is necessary to distinguish between

---

[18] E. Huhtamo, 'Art in the Rear-View Mirror' in Christine Paul (ed.), *Blackwell Companions to Art History: A Companion to Digital Art.* New York, John Wiley & Sons, Inc., 2016, p. 75.
[19] Ibid.
[20]C. Paul, 'Introduction', in Christine Paul (ed.), *Blackwell Companions to Art History: A Companion to Digital Art.* New York, John Wiley & Sons, Inc., 2016, p. 1

[22] Ibid
[23] Ibid, p. 2.

art that takes digital technology as simply a tool for the production/dissemination of a 'more traditional art object'[24], on the one hand, and medium-specific art that takes digital technology and its unique characteristics as a *point of inquiry*, on the other. The unique characteristic of digital art lies in its ability to, according to Paul, 'capture the embeddedness of the digital in the objects, images, and structures we encounter on a daily basis and the way we understand ourselves in relation to them'[25]. I take this distinction as my basis for delimiting my empirical material. As such, I will not consider such digital images, such as a digital photograph of an object or person, as 'digital art'. An artwork made with computer generated image (CGI) technology, or that is somehow directly mediated by a digital interface, would constitute 'digital art', in my view.

Previous Research

The aesthetic, political, phenomenological and cultural implications of digital images have been engaged with by many contemporary theorists across disciplines of fine art, visual culture, philosophy, communication, robotics, and new media/media studies. As discussed earlier, when the term 'new media' was at its height at the end of the 20th century, the internet and digital interfaces were increasingly being incorporated in participatory, relational, and cybernetic art and 'new media' practices. Scholars writing within the field of electronic and new media studies—WTJ Mitchell, Marshall McLuhan, N. Katherine Hayles, to list a few highly influential names—were engaging with debates about digital and electronic media and their meaning around this technological turn. As digital interfaces grew more ubiquitous, scholars have delved even deeper into the ontology and phenomenology of the digital 'object', questioning whether the digital should be conceived as a *thing* or as matter. Such scholars as

---

[24] Ibid.
[25] Ibid, p. 3.

Joohan Kim ('Phenomenology of Digital-Being', 2001) and Yuk Hui (*On the Existence of Digital Objects,* 2016) have considered such questions, both drawing upon the phenomenological theories of Edmund Husserl and Martin Heidegger.

An investigation of the semiotics of digital media has been carried out by such scholars as Kris Paulsen ('The Index and the Interface', 2013) and Martin Lefebvre ('The Art of Pointing', 2007), and Mary Anne Doanne ('Indexicality: Trace and Sign', 2007), whom I will refer to heavily in this essay. These theorists all draw upon discussions of indexicality in relation to the digital as well as the analogue photograph. Both Lefebvre and Paulsen utilize Roland Barthes' consideration of the index and the Real in relation to the photograph (*Camera Lucida,* 1981), which I will also draw upon. Finally, Charles Peirce's classification of signs provides the semiotic framework for such debates of the index, including my own.

Contemporary filmmaker, digital artist and culture and media theorist Hito Steyerl, who is also the cofounder of the Research Center for Proxy Politics at the Berlin University of the Arts, is perhaps one of the foremost scholars on the culture and politics of digital images. While Steyerl's work and research is highly operational and grounded in social and political commentary, her ideas about embodied presence and the *proxy* will be brought into this essay.

Disposition of the Thesis

In chapter 1, digital images generally will be considered first on a semiotic level, by way of Charles Peirce's conception of the index, and through a problematization of understandings of the index and how it functions in the analogue and digital image. Therefore, I question understandings of the photograph as the last true 'index', on the one hand, and the conceptualization of the digital image as representing the 'death' of the index, on the other hand. Chapter one will problematize often essentialist claims that the index is defined by only by its immediate proximity to materiality. In doing so, this chapter seeks to present an ontological

consideration of the digital image as having a *particular kind* of indexicality, but capable of being indexical nonetheless. This chapter will also discuss the rhetoric of death, and how it has carried over from discourse around the photographic index to discussions of the digital image as 'killing' the index. This theoretical framework and engagement with relevant debates, will then aid a discussion the particularity of the digitally-represented body in art, and how it might be read as an index.

The theoretical framework and delineations outlined in chapter one, will then be applied to chapter two. Chapter two will situate the digital video artworks of Ed Atkins within the previous debates around the index. The theoretical distinctions and debates engaged with in chapter one will be applied to a reading of Atkins' digital representations of the body (avatars) *as digital indices*. This theoretical framework will guide this analysis, and aim to answer the initial research question: how does the image of the human body in digital artwork articulate distinctions between the Virtual and the Real? I will discuss a selection of digitally animated, audio-visual video artworks by Ed Atkins that utilize the digitally represented body, or *avatar*, as a motif, and as a means of understanding the index and distinctions of the Virtual and Real today. I will analyze how Atkins employs the specificities of the digital medium, in such a way that his digital avatars function as digital indices of the embodied Real. Bazin and Barthes' metaphor of the *mask* as index, as it relates to the deathliness of the photograph, Hito Steyerl's notion of *proxy presence*, and Julia Kristeva's concept of the abject will be applied to a semiotically-informed discussion of Atkins' works.

Chapter 1. Is the Index Dead? Indexicality in the Analogue Photograph versus the Digital Image

'Every day the urge grows stronger to get hold of an object at very close range by way of its likeness, its reproduction.'

--Walter Benjamin, *The Work of Art in the Age of Mechanical* Reproduction, 1936.[26]

In his seminal essay on the authenticity of the image, *The Work of Art in the Age of Mechanical Reproduction,* Walter Benjamin stated that 'every day the urge grows stronger to get hold of an object at very close range by way of its likeness, its reproduction'[27]. 'Close range' or proximity is, as Benjamin states, sought via likeness and the reproduction of likeness. The analogue photograph, for instance, is perceived as having an *immediate proximity* to the Real, based on its process of materialization and its direct resemblance to the objects it represents. In turn, the digital is demarcated as sullying the integrity of images, due to its ability to mimic photo-realistic likeness without the need to be produced under the same physical circumstances as a photograph.

The index—particularly in photographic theory—is often understood as a sign defined by its material correspondence and physical proximity to its object. The index is thus often understood as contingent upon its direct relationship to *matter*. As we will see, this proximity

---

[26] W. Benjamin, 'The Work of Art In The Age of Mechanical Reproduction' (1935), in *Illuminations,* edited by Hannah Arendt, trans. Harry Zohn, New York: Schocken Books, 1969, p. 218.
[27] Ibid.

to material is seen as a means of guaranteeing the veracity of an image; this is perhaps why, in light of the proliferation of the digital image, '*materiality* has come to matter with new urgency'[28]. This materially-dependent definition of the index, however, can be broadened to encompass other kinds of indices, including digital ones. By broadening this definition, we can come to understand how digital images can become indexical.

The internet and other Virtual interfaces present newfound opportunities for telepresence, extending the distance between ourselves as bodies and information, data, and actions. Paradoxically, the internet both increases our ability to communicate and interact across distances as well as affect real environments remotely: digital telecommunication (video and chat), multiplayer cyberspaces navigated by avatars, telerobotic military drones and missiles, space explorations carried out by telerobots—all are examples of telepresence, where Real objects or bodies operate either other Real objects or bodies or Virtual bodies across distance, with the aid of digital interfaces. But distance has the tendency to instill a sense of mistrust, doubt and a loss of agency in the viewer: 'As the Internet extends our reach, it leaves us increasingly vulnerable to error, deception and forgery', writes Ken Goldberg[29]. The link between the actual object and ourselves, made distant by simulation, automation or telepresence, lends to perception that this link has been corrupted, and rendered opaque and untrustworthy. Sigmund Freud noted this sense of mistrust of automated objects--in particular, Freud discusses the wariness felt in the presence of *automaton*, or a mechanical device made

---

[28] B. Brown, 'Materiality', *Critical Terms for Media Studies*, ed. W.J. T. Mitchell and Mark Hansen, Chicago: University of Chicago Press, 2010, p. 50.

[29] K. Goldberg, 'Introduction to *The Robot in the Garden: Telerobotics and Telepistemology In the Age of the Internet,* Introduction: The Unique Phenomenon of Distance', *The Robot in the Garden: Telerobotics and Telepistemology In the Age of the* Internet [website], https://goldberg.berkeley.edu/art/tele/intro.html

to imitate a human being, popular during Freud's time. The simulation or automation of the object leads the viewer to question, Freud notes, 'whether a lifeless object might not be in fact animate'[30]. Freud identifies that this discomfort is ultimately derived from our inability to decode underlying, invisible mechanization, especially in something that *appears* otherwise authentic and Real[31]. Opacity and distance thus become synonymous with falseness, inauthenticity and trickery. The flood of new forms of technological information and telepresence, supposedly 'threatens to erode, suspend, and dissolve its predecessors'[32].

This chapter will problematise the belief that the digital image is incapable of being indexical. I will aim to articulate ongoing debates about what constitutes indexicality, the Real, and materiality. In doing so, I will attempt to show just *how* the digital image relates to the Real, as compared to analogue images such as photography. A reading of Peirce's notion of the semiotic *index,* and debates surrounding the index, will assist us in reaching an understanding the digital image's relationship to the Real and its unique indexicality. Taking Nathalie Casemajor's advice from her essay *Digital Materialism,* this discussion will resist the 'temptation of separating old media from supposedly new immaterial ones'[33]. While distinctions will of course be made between analogue and digital media, this discussion will resist essentializing the analogue and digital mediums as entirely indexical or a-indexical,

---

[30] E. Jentsch, "Zur Psychologie des Unheimlichen., in Sigmund Freud, 'The Uncanny', 1919 [web document], https://web.mit.edu/allanmc/www/freud1.pdf, p. 5.

[31] According to Freud, automatons and other simulacrums can be categorized as uncanny, which by definition is 'that class of the terrifying which leads back to something long known to us, once very familiar'. Thus our sense of closeness and familiarity with automated or otherwise artificial objects becomes distanced, defamiliarized. F. Sigmund, 'The Uncanny', 1919 [web document], https://web.mit.edu/allanmc/www/freud1.pdf, p. 2.

[32] A. Borgmann, 'The Introduction to Holding onto Reality: The Nature of Information at the Turn of the Millenium' [webpage], excerpted from pages 1-6 of *Holding On to Reality* by Albert Borgmann, published by the University of Chicago Press, copyright 1999 by the University of Chicago, https://press.uchicago.edu/Misc/Chicago/066258.html, accessed 17 June 2020.

[33] N Casemajor, 'Digital Materialisms: Frameworks for Digital Media Studies', *Westminster Papers in Digital Culture* [online journal], no. 10, 2015, pp. 4–17, https://www.westminsterpapers.org/articles/10.16997/wpcc.209/p.5, p. 6, accessed May 2 2020

respectively. In doing so, this chapter aims to show how the digital's proximity to the Real, and the category of indexicality in general, are more complex than related discourse understands it to be. The discussion of the index in this chapter will serve as a theoretical framework for understanding the digital medium's indexicality and, later on, digital representations of corporeality in art.

The Analogue Photograph as a 'Carnal Medium'[34]

Historically, the process of materialization inherent to photography, as well as its ability to (if used with a steady hand) capture the exact likeness of its object, lent to an investment in the photograph as visual *proof* that the events and objects it depicted really occurred and existed. The photographic process is contingent upon the photo-chemical process of automatic light-capture and the photographer's physical and temporal proximity to the subject. It is this supposedly uninterrupted automatism and immediacy that has historically granted the photograph its authority. As Susan Sontag observes in *On Photography,* the 'less doctored, the less patently crafted, the more naive—the more authoritative the photograph [is] likely to be'[35] (of course, the debate continues on whether the photograph is an automatic and 'pre-intellectual' encounter, as Susan Sontag puts it, or a 'lucid and precise act of knowing'[36], but this debate will not be engaged with here). The photograph, with its supposedly uninterrupted proximity to its object of representation, has thus been discussed as a *stamp* or *mark* of the Real. In contrast, the digital medium's ability to convincingly *simulate* photo-realism through code, has resulted in the belief that the digital compromises or even destroys the indexical link

---

[34] R. Barthes, *Camera Lucida: Reflections on Photography,* New York: Hill & Wang, 1981, pp. 80-81.
[35] S. Sontag, *On Photography,* New York: Rosetta Books LLC, 1973, pg. 40
[36] Ibid, pg. 90

between the sign and referent—implying that digital media lack any direct link to the Real, and are therefore incapable of being indexical.

A stamp, such as a fingerprint or seal, is a sign that derives its authority from its materiality, its direct touch with the object, as well as its near-exact resemblance to the object being signified (a 'likeness by way of close range', to reverse Benjamin's phrase[37]). And indeed, the photograph is often discussed in such material terms. It is often discussed as a medium that 'touches', and is touched by, the Real: 'The camera does more than just see the world; it is also touched by it', writes Geoffrey Batchen (this is also the main premise of Roland Barthes' *Camera Lucida,* in which he deems the photograph a uniquely 'carnal medium'[38], one that physically touches or 'bruises' the viewer). The photograph has been conceptualized by some as a highly embodied medium, having immediate proximity to the material Real. The index has, at least in photographic theory, been considered to constitute 'material traces of past moments of *physical contact* [italics my own]'[39], with the object leaving an imprint on a photosensitive surface. The photograph itself, therefore, has been categorized as a guarantee of the Real. And it is this guarantee that is supposedly at stake when the digital image is intoduced: as Geoffrey Batchen states, the photograph's 'embodied type of vision', and its ability to 'fetishistically guarantee something's erstwhile presence in space and time' is 'at stake in the current shift from photographic to electronic media'[40].

But I see the 'guarantee of something's erstwhile presence' as something that is specific to the medium of photography itself, and not definitive of indexicality. Peirce stated that the photograph, especially the 'instantaneous photograph', has indexical qualities because it not

---

[37] W. Benjamin, 'The Work of Art In The Age of Mechanical Reproduction' (1935), in *Illuminations,* edited by Hannah Arendt, translated by Harry Zohn, New York: Schocken Books, 1969, p. 218.
[38] R. Barthes, *Camera Lucida: Reflections on Photography,* New York: Hill & Wang, 1981, pp. 80-81.
[39] K. Paulsen, 'The Index and the Interface', *Representations* [JSTOR], vol. 122, no. 1, Spring 2013, pp. 83-109, University of California Press, p. 105, p. 84.
[40] G. Batchen, 'Carnal Knowledge', in Jones, et al, op.cit., p. 21

only represents its object due to what we know to be a near-exact likeness, but also because many photographs are 'physically forced to correspond point by point to nature'[41]. However, this materially-contingent process, as Kris Paulsen points out, is not *inherent* to the category of the index[42]. The culturally-embedded ideas about the photograph's '…qualities of pastness, permanence, truth, and resemblance resulting from physical contact' have, according to Paulsen, come to inaccurately define the nature of indexicality, rather than merely the 'specific condition of the analog photograph'.[43]

The digital has thus been dialectically opposed to the photograph in recent cultural discourse (see Anne-Marie Willis, W. J. T. Mitchell, and Lev Manovich[44], and W.J.T. Mitchell) as a threat to the Real. The 'technological shifts'—e.g. the increasing prevalence of the digital interface and telerobotic, telecommunication technologies—of the 1980s 'began to be theorized in terms of the loss of the real', notes Amelia Jones[45]. Due to the fact that it simulates its analogue predecessors, and because it is stored as numeric information rather than, say, presented as a photochemical material, the digital has thus been condemned as corrupting the indexical link to the real that 'the physical processes of analogue media once ensured'[46]. What has resulted is a perceived delay or even *death* or breakdown of *the indexical link between the Real and the digital sign*, and hence the decay of veracity of the photograph and even to the production of 'authentic' images generally. As such, *the ability of images to mediate Reality* more broadly have become contested in light of the digital medium.

Deleuze's Real and Virtual

---

[41] C. Peirce, 'What Is a Sign?', *The essential Peirce: selected philosophical writings*, ed. Peirce Edition Project, Indiana University Press, 1998*, p. 5.
[42] K. Paulsen, op. cit., p. 90.
[43] Ibid, p. 87
[44] Ibid
[45] A. Jones, op. cit., p. 20.
[46] Ibid, p. 84

Before we discuss indexicality as it is usually understood (as a physical imprint of the Real), we must first establish briefly what we mean when we say Real and Virtual. The Virtual and the Real are often considered to be highly distinct—if by Virtual one means something beyond or outside of 'reality' and if by 'reality', we mean the realm of purely material objects. Gilles Deleuze, however, defines the Virtual and the Real not as oppositional or distinct, but as engaged in a reflexive and fluid relationship. Deleuze argued that there is in fact no such thing as a 'purely actual' object.[47] This is because, as Deleuze claims, 'every actual surrounds itself with a cloud of virtual images'[48]. In his book *Difference and Repetition* (1968), he insisted that 'the virtual should not be opposed to the "real", since it itself has its own reality'. Instead, Deleuze merely opposes the Virtual to the 'here and now';[49] therefore, Deleuze defines the virtual as that which is simply not here and now. But the Virtual and the Real are still inextricably linked, and therefore the Virtual is constantly acting upon actual objects[50]. Actual objects and the virtual are mutually tethered through varying layers of virtuality. In this sense, the actual always has its Virtual double, and the two are in constant exchange and oscillation.[51] That is, that which is not here and now, and the here and now, constantly define and contour one another.

    For example, our understanding of an actual object is not possible without a Virtual image or conditioned understanding of that object and how it differs from and relates to a matrix of a world of other actual objects and Virtual images. By challenging the reductive discourse of the index as a category of signs relegated only to analogue media, we can begin to broaden our understanding of the 'here and now' in the age of the digital image, and the

---

[47] Samuel Weber notes that the English translation of 'actual' would be 'here and now'.
G. Deleuze, *Difference and Repetition* (1968), trans. Paul Patton (London: Continuum, 2006), in S. Weber,, 'A Virtual Indication', p. 66, *Digital and Other Virtualities,* op.cit.
[48] G. Deleuze, C. Parnet, 'The actual and the virtual', *Dialogues II,* trans. Eliot Ross Albert, London: Continuum, 2002, p. 148.
[49] Ibid
[50] Ibid, p. 149
[51] Ibid, p. 150

digital's ability to affect and 'point' to Real bodies through Virtual imagery. The nature of the 'here and now' today is a complex hybrid of materiality and immateriality, of distance and proximity, of the human and nonhuman. Therefore, a reconsideration of the indexicality of analogue and digital media is needed, in order to better approach discussions of the relationship between the digital image of the body, and Real embodiment.

'The Index is an Interface'[52]: The Index and the Digital Image

The term *index* in this context was defined by American pragmatist, philosopher and logician Charles Peirce, who revitalized the field of semiotics for late modernity with his renewed list of categories of signs. The index is just one of Peirce's classifications of signs; from this point forward the term *sign* will refer to Peirce's notion of the sign, or something that has an identifiable, existential link to its object and its interpretant sign, and the term *index* will refer to Peirce's definition of the term. Peirce lays out three different kinds of signs—icons, symbols, and indices. Peirce defines indices as signs that 'show something about things, on account of their being physically connected with them'[53], having an 'existential relation' to the events and objects they signify[54].

While this definition emphasizes materiality, Peirce's definition of the index is contested and rather vague. Peirce also lists a weathercock, a sundial, a rap on the door[55], demonstrative pronouns such as 'this' or 'that', or even verbal assertions such as 'this!' or 'hey!', 'which acts upon the nerves of the person addressed and forces his attention'[56]. All of

---

[52] K. Paulsen, op. cit., p. 105.
[53] C.S. Peirce, 'What Is a Sign?', *The Essential Peirce,* op. cit., p. 5

[54] C.S. Peirce, *Philosophical Writings of Charles Sanders Peirce*, ed. Justus Buchler, New York, 1955, p. 101.

[55] Peirce, Charles S., 'What Is a Sign?', *The Essential Peirce,* op. cit, p. 8
[56] Ibid, p. *5*

these signs, according to Peirce's rather flexible definition, simply 'force the attention'[57] of someone, directing their attention to the object in question by way of pointing/directing. Thus, it appears that the index can both be a sign that is physically connected to its object, such as a footprint or, according to Peirce, 'an instantaneous photograph'[58] (which is physically connected also by point-by-point physical likeness to the objects represented), or some immaterial thing such as a spoken indication, which merely draws the attention to the object being indicated.

The fact that an index can appear as something that requires an 'existential relation' or which 'acts upon the nerves of a person' leaves room for quite a bit of interpretation as to what an index is, and what an existential relation is in the first place. We can thus open up a debate surrounding Peirce's understanding of the index, and how it functions for the digital image, which is usually understood as being immaterial (thus, not an index by way of a physical connection, or at least not a direct one). The index thus appears more complex and flexible than popular discourse would have it. Does the digital image, then, lack any indexical qualities, i.e. an existential relation to the objects it signifies? I would argue that to say so would be an essentialist oversight—particularly in light of the increasingly complex modes of telepresence that are made possible today by digital and Virtual technologies.

Indirect Materiality, Indirect Indices

In his essay 'The Art of Pointing', Martin Lefebvre makes the case for a more flexible and complex understanding of the index, one that allows for the digital image to possess indexical qualities—to indicate an existential relationship to the Real. In his essay, Martin Lefebvre challenges the notion that photographs, unlike pictorial representations, are *definitive* of

---

[57] Ibid, *p. 5*
[58] Ibid *,* p. 5

indexicality, and thus completely analogous to the Real. Rather, Lefebvre argues that signs are more flexible than much discourse gives them credit for, arguing that signs can *become* indexical in any number of ways, depending on their context and interpretation. He reminds us that *all* signs, including paintings, drawings or CGIs are by nature 'indexically connected to reality' in innumerable ways, 'from the moment that [they stand] for something'[59] (which is why, Lefebvre points out, Peirce claimed that a sign can never be purely icononical[60]).

However, he points out that some signs, such as digital images or pictorial representations, are *indirectly*[61] indexical, whereas others, such as a photograph, are more directly indexical—that is, have a more direct relationship to the object they represent, simply because the photographer was required to be physically present in front of that object. But if we understand that all images can have indexical qualities, then we can no longer limit the definition of the index to that which has immediate physical contact to its object. Therefore, we can understand all signs as having varying degrees of proximity to the Real, even if we are to limit the Real to the material world. Indeed, Peirce himself states that **'**In all reasoning, we have to use a mixture of *likenesses, indices,* and *symbols.* We cannot dispense with any of them'[62].

The digital image may be less immediately material or Real than the photograph (the digital image itself cannot be held in my hand), but I can still touch or hold the interface that the image is stored on, such as a phone or computer. All digital images and information are ultimately housed in submarine fiber optic cables, for instance, and other networking and data storage systems are also required for a digital image to exist. The digital image, though perhaps

---

[59] M. Lefebvre, 'The Art of Pointing: On Peirce, Indexicality, and Photographic Images'*, Photography Theory (The Art Seminar, II),* ed. James Elkins, New York: Routledge, 2007, p. 9.
[60] Ibid.
[61] Ibid, p. 7.
[62] C.S. Peirce, "What Is a Sign?", *The Essential Peirce,* op. cit., p. 10

not directly indexical, still has an existential relationship to the Real and to actual, material objects. But, as Paulsen points out, even if this material reality of the digital were not the case, 'the "materialist" argument for nonindexical status breaks down' because materiality is not a defining feature of the index'[63]. And indeed, if we take a closer look at the ways in which Peirce defined the index, we will find that his definition of indexical signs is not limited to signs that ensure material proximity: Peirce did not reduce indices as static, immoveable, or defined solely by material or touch. This is evident if we take a into account his broader definition of the index as 'anything which *startles* us'[64]. For instance, an expletive, such as 'watch out!' might indicate a dangerously fast bicycle careening into my path. This expletive, though verbal, counts as an index because it indicates a particular object or event—in this case, 'danger' or a bicycle. Thus, a digital image need not be materialized in the same way as a photograph, in order to become an indexical sign.

'Acting Upon the Nerves'

In his essay 'What Is A Sign?', Peirce expands the definition of the index quite extensively by listing several examples of possible indices. According to Peirce, one kind of index is one that simply 'marks the junction between two portions of experience'[65]. An index is a mediator, bridging two portions of experience by instilling affect in the body of the viewer. To borrow Kris Paulsen's succinct phrasing, the 'index is an interface' and 'the interface is an index': it 'is a sign that inherently sets up connections between it, the event that created it, and the receiver's senses and mind'[66]. By way of an affective cue that catches the receiver's attention, the index essentially startles or affects the viewer into linking the two seemingly disparate signs

---

[63] K. Paulsen, op. cit., p. 89.
[64] C.S. Peirce, "What Is a Sign?", *The Essential Peirce,* op. cit. *,* p. 8
[65] Ibiid
[66] K. Paulsen, op. cit., p. 105.

together to understand the ideas, objects and phenomena being signified. Thus, the receiver's senses are the nexus between the sign and the object, and must be alerted for the sign to become an index, to point directly to the object or event in question.

This kind of embodied indexicality, though it might not immediately appear so, actually exists within digital interfaces. Much of our digital language utilizes sonic cues and physical sensations to indicate or 'startle' the user and 'mark the juncture' between the digital and embodied experience. When I 'drag and drop' (a phrase that implies a familiar embodied action) a file into my desktop trashcan (represented by a wastebasket symbol), I will hear the identifiable sound effect of dropping wadded paper into a metal wastebasket. When I take a digital photo on my cell phone, the sound of a camera-shutter opening and closing is activated in order to indicate to me that I have succeeded in capturing an image. This digital language is multi-sensorial when it comes to single-player video games, where the game avatar's physical experience, such as walking or being wounded, is indicated by corresponding vibrations in the player's controller. This biosomatic feedback assists the player in responding reflexively, bringing the player's and their digital avatar's bodies into harmony.

And indeed, digital visual culture, as Jay David Bolter and Richard Grusin argue, is a *remediation*—or, an emulation 'of one medium in another'[67]—of analogue visual culture. For instance, a computer 'desktop' is what we call the default digital interface or background where files and applications are kept for easy access on our computers, much like a physical desktop. The 'bookmark' tab on a browser represents the familiar dog-earing action of saving a significant page. Some might claim that the analogue is a particularly embodied medium because it can be touched: but the language of analogue, Real touch becomes *remediated* in digital technologies.

---

[67] J.D. Bolter and R. Grusin, 'Introduction: The Double Logic of Remediation', in *Remediation: Understanding New Media,* MIT Press, 2000*,* p. 45

These examples make evident that digital images and interfaces mediate through a grammar of embodiment and sensorial indication. This vocabulary of embodied, sensorial cues serve as a means of indication, alerting the user to the danger of a virtual 'injury' in a video game (physical/auditory indication via vibration and auditory cues), or communicating the completion of a virtual action such as taking a photograph (auditory indication via the shutter sound effect). Such cues are a means of more effectively mediating between the virtual and the actual, between the body and the digital. In this way, we can see how an analogue language of embodiment and the 'here and now' becomes remediated in the digital and virtual realm, so as to recall Real (corporeal, physical) experience.

Death (Mask) and the Index

As discussed previously, the digital image, because it seemingly lacks the any material process of physical impression yet is capable of simulating photographic realism and likeness, has been theorized as presenting the *death* of indexicality itself. But the language of death has been present in discussions of the index, the photograph, and even images more generally. Jean Baudrillard noted the 'murderous capacity of images', the capacity of images to be 'murderers of the real…To this murderous capacity is opposed the dialectical capacity of representations as a visible and intelligible mediation of the real'[68]. Baudrillard's statement is testament to the potency of images. We can see Baudrillard's statement mirrored in discourse that understands the digital as having the potential to 'murder' the analogue mediums' ability to 'visibly and intelligably' 'mediate the real'. Contemporary discourse around the digital clearly affords the digital image with a 'murderous capacity'. While my arguments have aimed to demonstrate that to condemn the digital image as murderous is to misunderstand the complexity and mutability of the index, the theorization of the digital as 'killing' the index can tell us about

---

[68] J. Baudrillard, *Jean Baudrillard, Selected Writings*, ed. Mark Poster, Stanford; Stanford University Press, 1988, pp.166-184.

how the index has been seen as something that comes under threat with the emergence of new, immaterial media such as digital media.
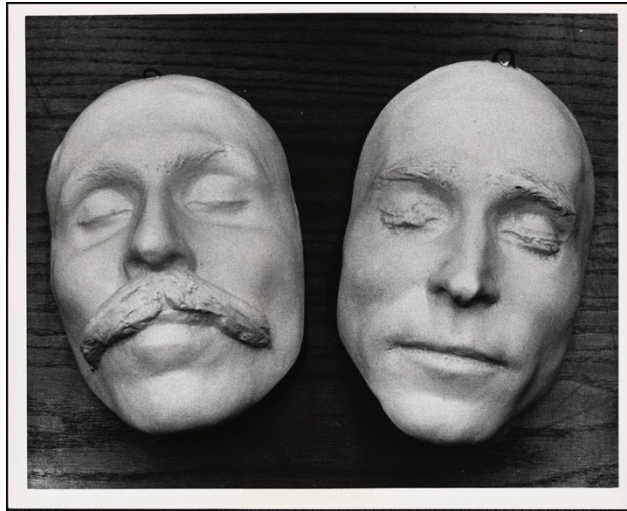

Fig. 1.1. Death masks of executed anarchists Nicola Sacco and Bartolomeo Vanzetti.

Death has been consistently associated with photographic images, specifically, by 'culture and the human imagination', as Laura Mulvey notes[69]. The photograph and its indexicality is perceived as a 'preservation', a mummification of a fleeting moment in time. The indexical imprinting of the photograph is seen as instantaneously immortalizing the image of a body, object or a fleeting moment in time. Indeed, André Bazin even equated the photograph to a death mask. The death mask (fig. 1.1) was a central part of many ancient funerary rites, such as those of the Romans. Roman death masks differed from Roman marble busts—death masks were intended to ensure an exact likeness of the corpse's face, rather than serve as an idealized portrait of the general appearance and character of the once-living person. To create a death mask, an impression was made of a deceased person's face with wax; the resulting mask was sometimes painted to appear more realistic. The usage of death masks for purposes other than funerary rites did not occur until around the seventeenth century, when phrenological studies became popular[70] and 'life masks' (wax casts taken of a living person's face) became more common in non-funerary wax-masking practices.

---

[69] L. Mulvey, 'The Index and the Uncanny: Life and Death in the Photograph', *Death 24x a Second: Stillness in the Moving Image*, Reaktion Books Ltd., London, 2006, p. 58

[70] M Pointon, "Casts, Imprints, and the Deathliness of Things: Artifacts at the Edge." *The Art Bulletin* [JSTOR], vol. 96, no. 2, 2014, pp. 170-95, Accessed June 6, 2020, pg. 171

In his 1960 essay 'The Ontology of the Photographic Image', André Bazin identifies the ancient Egyptian death mask as one of the first examples of humans' attempt at making images via an immediate and direct imprint, in an attempt to create an exact likeness. The urge to do so, Bazin argues, is an urge to capture or embalm time and the having-been-ness of the deceased. The death mask is here considered as an index, on the basis of its process of impression-making and direct material contact, resulting in a near-exact copy of the original object (and an impression, of course, falls under Peirce's category of signs that are indexical by way of 'physical connection'[71]). Bazin writes: '…the molding of death masks…involves a certain automatic process. One might consider photography, in this sense as a molding, the taking of an impression, by the manipulation of light'[72]. The photochemical inscription of light on paper is thus likened, in highly visceral terms, to the process of impression-taking of the death mask. Thus, the photographic index becomes affiliated with death, in that it is seen as a medium capable of *embalming* of life or a moment in time by creating a near-exact impression; the photographic image in this way acts as the ultimate death mask. Roland Barthes also went so far as to say that a photograph becomes an index *only* by 'assuming a mask', stating: 'photography cannot signify (aim at a generality) except by assuming a mask'[73]. Barthes goes on to describe the photograph as 'a kind of primitive theater, a kind of *Tableau Vivant,* a figuration of the motionless and made-up face beneath which we see the dead'[74]. Here Barthes mortifies the photograph, which for him is not so much a preservation of life, but a masking of death. By taking an impression of a moment in time, the photograph is an 'image which produces Death while trying to preserve life'[75], writes Barthes (perhaps not-so coincidentally,

---

[71] C.S Peirce., 'What Is a Sign?', *The Essential Peirce,* op. cit., p. 7
[72] A Bazin and H. Gray, 'The Ontology of the Photographic Image' *Film Quarterly* [JSTOR], vol. 13, no. 4, 1960, pp. 4-9, Accessed June 2, 2020, p. 7.
[73] R. Barthes, op. cit., p. 34
[74] Ibid, p. 32
[75] Ibid, p. 92

Barthes wrote *Camera Lucida* just after his mother's death, which was a significant loss for him).

The rhetoric of death has been carried over from the photographic image to the digital image, wherein the authority of the photographic index is threatened by the digital. The motif of death can be discussed in relation to a rhetoric of the 'death of the index' in contemporary image discourse. The indexical category of the death-mask is one that can be investigated later in this paper, in the context of the digital. Is there such a thing as a 'digital index', a 'digital death mask'[76]

Digital Proxies

Just as the photographic image acts as a mask that, in attempting to 'preserve life', indicates death, the digital medium, too, functions as a mask, standing in for the presence and proximity of the body. The digital medium and digital interfaces are often used to simulate and 'stand in for' analogue experiences of presence. Contemporary filmmaker, digital artist and culture and media theorist Hito Steyerl, who is also the cofounder of the Research Center for Proxy Politics at the Berlin University of the Arts, notes a contemporary phenomenon she deems a 'cult of presence'[77]. Steyerl argues this 'cult of presence' has come about not in spite of, but due to new technologies of remote presence: 'the demand for total presence and immediacy arises from mediation; or more precisely the growing range of tools of communication including the internet', writes Steyerl[78]. This recalls Benjamin's quote, discussed earlier, in which he states that, 'every day the urge grows stronger to get hold of an object at very close range by way of

---

[76] Here I would like to thank my advisor Lila Lee Morrison, Ph.D., for prompting me to use this metaphor as a major theme in this thesis.
[77] H. Steyerl, 'The Terror of Total Dasein: Economies of Presence in the Art Field', *DIS Magazine* [web magazine], http://dismagazine.com/discussion/78352/the-terror-of-total-dasein-hito-steyerl/, Accessed 5 April 2020, para. 15.
[78] Ibid, para. 10

its likeness, its reproduction'[79]. In light of the increasing possibilities for Virtual-presence, the contemporary 'cult of presence' represents a yearning for 'unmediated communication…a seemingly unalienated experience and authentic encounter between humans'.[80] This fetishization *of unalienated, unmediated presence* relies on its very scarcity, brought about by increasing possibilities for Virtual presence. The cult of embodied presence has grown out of an economy that is increasingly reliant on what Steyerl calls 'junk time'—time where one can occupy, at least partially, multiple roles and places at once, through the assistance of internet technologies and interfaces. In this sense, digital Virtual presence and interaction are seen as 'junky', inauthentic and spoiled versions of the increasingly contested category of Real, embodied presence.

Marshall McLuhan, echoing a statement made by prior theorists[81], stated that 'all media are extensions' of 'our human senses'[82]. We can conceptualize digital proxies similarly as media that act as extensions of our embodied selves, acting in their stead. Digital proxies act as tools in facing 'classic dilemmas arising from an economy of presence'[83], mediating between our embodied selves and Virtual presence. A cheap stock image, an automated email response, a ready-made digital avatar—all are examples of proxies that act as digital stand-ins or masks that assist us in simulating Real, embodied presence. They are digital surrogates for our own fleshy bodies, when our corporeal existence in space cannot be guaranteed. Digital interfaces and possibilities of Virtual presence thus challenge understandings of not only the stability of the Real, but also of embodied, human co-presences and interactions. I will return to this idea

---

[79] W. Benjamin, 'The Work of Art In The Age of Mechanical Reproduction' (1935), in *Illuminations,* ed. Hannah Arendt, trans. Harry Zohn, New York: Schocken Books, 1969, p. 218.
[80] H. Steyerl, op. cit., para. 5.
[81] Prior to McLuhan's formulation of the concept within the context of the 20th century, Ralph Waldo Emerson and Henry Ward Beecher made similar statements at the end of the 19th century.
[82] M. McLuhan, 'The Medium is the Message', *Understanding Media: The Extensions of Man* (1964) [web document], https://web.mit.edu/allanmc/www/mcluhan.mediummessage.pdf, accessed 2 June 2020, p. 11
[83] H. Steyerl, op. cit., para. 22

of the death mask as an index, and this idea of digital proxies/masks, in the work of Ed Atkins, which will be discussed in the following chapter.

Chapter Conclusion

In an attempt to prevent theoretical atrophy, the previous chapter has aimed to delimit the terminological and theoretical contestations of the digital image, which appear seemingly endless today. While the previous chapter may have felt a tedious and meandering route to the empirical material of this essay, I feel this route was called for, before I can effectively analyze these works of digital art. The complex ontology of the digital image calls for a reconsideration of concepts, debates, and understandings that have been taken for granted prior to the post-internet, post-digital age. I feel it is necessary to delimit, discuss and define a host of interrelated terms, concepts, and debates that the digital image has resurrected—particularly since the technological turn of the 1980s and in the post-internet, hyper-digitalized world. Philosophical concepts such as the Virtual and the Real can be reconsidered in regard to the digital. In turn, we can reconsider related concepts such as the 'index', 'materiality', and 'the integrity of the image'.

Due to its Virtual, immaterial qualities, the digital image forces us to reconsider a given image's (analogue or otherwise) link to the Real, and how we define this link. The digital image also challenges us to reconsider what we mean by Real—Real bodies, Real presence, Real images—and what we mean by Virtual, in an age where Virtual presence is a prominent aspect of our daily lives, shaping our body-to-body and image-to-image relationships. Through a consideration of Peirce's index as it relates to the digital and its analogue predecessors, I have aimed to lay the groundwork for a sound and medium-specific reading of the digital representations of the body in the art of Ed Atkins.

Chapter 2: Proxies, Digital Death Masks and the Art of Ed Atkins

> 'The index is worse than the thing in itself, isn't it? I mean, like a blood
>
> stain, like your own shit on your finger…'
>
>   -Quote from *Death Mask V* (2019), Ed Atkins

As we have seen in the previous chapter, the index has often been conceptualized as contingent on matter and materiality. Thus, analogue media, such as the analogue photograph, have been labeled as categorically indexical, due to the analogue photograph's particular process of materialization. The analogue photograph's process of photochemical 'impression' on paper has afforded it highly physical, embodied qualities (with the photograph being likened to a *death mask*). The analogue photograph '[gets a hold of its object] at very close range by way of its likeness, its reproduction'[84]. As such, it has been categorized as having a direct index to its Real object, and, therefore, is regarded as a 'trustworthy' medium that guarantees the veracity of the objects depicted. The analogue photograph is conceptualized as a guarantee of an object's having-been-ness due to its likeness-via-physical-closeness (much like a *death mask*).

In contrast, because it lacks the same kind of material process of physical impression, the digital image has come to embody the 'death of the index' in contemporary discourse. Thus, the digital image comes to be seen as an empty sign, a semiotic corpse—*insofar* as the index is defined exclusively by physical likeness via material proximity. But, as the previous chapter has shown, Peirce's definition of what an index can be, is actually quite ambiguous. Thus, any

---

[84] W. Benjamin, 'The Work of Art In The Age of Mechanical Reproduction', op. cit., p. 218.

sign, even a digital one, has the potential to become indexical, to have an existential link to the object it represents—to have meaning. In retrospect, the analogue photograph thus appears to simply be a particular kind of index: its unique process of materialization is indeed indexical, but is not *definitive* of indexicality, as it is commonly made out to be. This is because, as we have seen, an index does not *always* take a material form, i.e. a stamp or footprint. This is evident when we take into account Peirce's original definition of the index, which tells us that 'anything which *startles* us is an indication [italics my own]'[85], and that an index merely 'marks the junction between two portions of experience'[86].

This reconsidered understanding of the index as flexible and the digital as capable of being indexical, will be made operative in this chapter through an analysis of my empirical material: the contemporary digital artworks by Ed Atkins. The previous chapter's mediation of the discourse of the index served to challenge the idea that the index is contingent upon certain kinds of images, and that new kinds of images 'kill' the index. The semiotic analysis laid out in the previous chapter will serve as a framework in showing how the digital *can* be indexical in ways that *do not* only rely on a *direct* proximity to the material Real. This chapter will attend to other modes of indication that are specific to the digital medium that are operating within the corporeal representations in the art of Ed Atkins. Understanding how the digital becomes indexical through representations of the corporeal, can help us to appreciate the potency of the digital image in digital art, and better understand this new medium and its unique modes of circulation, creation and viewing, and how they might change how we understand digital representations of embodiment, and our relationship to the digital interface, today.

---

[85] C.S. Peirce, 'What Is a Sign?', *Th Eessential Peirce,* op. cit., p. 8
[86] Ibid

The index will be reconsidered in the context of the digital medium, and the art of Ed

Atkins will serve as empirical material in examining how the index reappears or is *resurrected*

in the digital medium. Rather than seeing the index as '''dead'' in the digital age'[87], a reading

of Ed Atkins' works in relation to the semiotic discussion above will demonstrate how the

index 'reemerges as a particularly helpful category for understanding mediated information,
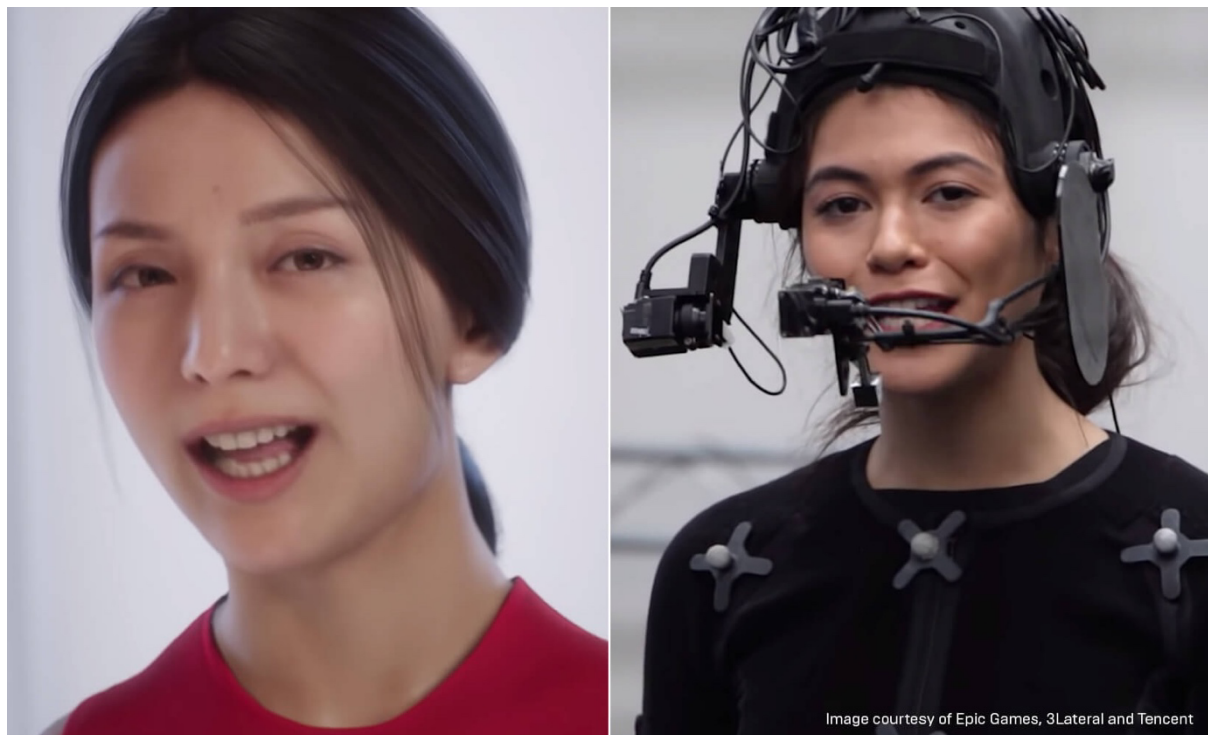
Fig. 2.1. The process (right) and result (left) performance capture technique. A human model's (right) facial and body movements are tracked and recorded with the device pictured, and then translated and mapped onto the digital face (left). Image courtesy of Epic Games, 3Lateral and Tencent. Source: https://www.unrealengine.com/en-US/tech-blog/choosing-a-performance-capture-system-for-real-time-mocap

''digital doubt,'' and experiences through virtual interfaces'[88], as Kris Paulsen argues. More

specifically, the concept of the index will be explored through a reading of the Atkins' digital

avatars *as a kind of digital index*. Both the visceral content of these corporeal representations,

and the unique form of the digital medium itself, and the *combination of the* two, render these

images as indices. The way Atkins utilizes the digital medium to represent corporeal imagery,

calls attention to not only the unique ontology and format of the digital medium, but also points

---

[87] K. Paulsen, op. cit., p. 83.
[88] Ibid

to the Real, material human body. The avatars in Atkins' animated artworks will be understood as *functioning as indices on two levels*: through a process of *digital masking/digital proxyism,* through *the digital abject*. Atkins' digital artworks expose the very instability of prior understandings of the index, and therefore call attention to the ambiguities and contestations of the relationship between the physical, Real body, and the digital, simulated body.

Artist Summary

British digital video artist/animator, educator and poet Ed Atkins investigates, in his words, 'the ways in which the very matter of the moving image has changed in recent years with the advent of digital technologies', and how these images 'conspicuously attempt to hold material, to perform as material, even as they turn to code and are spirited elsewhere'[89]. The bulk of Atkins' oeuvre features digitally-rendered animations of avatars and the environments they find themselves in. Atkins constructs his digital avatars out of from an open-source, database of publicly-downloadable-avatars—like digital *objets trouvés*. These avatars act as a sort of digital skin or mask (fig. 2.2), which Atkins then animates by using performance-capture technology (fig. 2.1). The performance-capture technique tracks and records the movements of a human subject (in this case, the artist himself), and then translates this information onto the animated figure. What results are digital, photorealistic avatars, voiced by Atkins.

---

[89] A. Atkins, 'Data Rot', *Frieze* [online magazine], 18 March 2016, https://frieze.com/article/data-rot, accessed 8 June 2020.

The majority of his films feature a white, male CGI avatar as the protagonist, presenting most often as a middle-aged man, though sometimes appears as a child, baby or elderly man. Atkins claims this is due to the fact that the avatar—whom he refers to simply as 'X'—act as a surrogate for himself; not in an 'autobiographical way', but in the sense that Atkins 'occupies the costume' of the avatar's digital flesh[90]. Like 'an emotional crash test dummy'[91], 'X''s body undergoes endless trials of physical and emotional decay and disintegration—bruised, flayed, dismembered, unraveled, uttering depressing poems or disjointed sentences. This grotesque corporeality is punctuated by X's gestures of tenderness—singing or humming, even weeping, pleading for empathy. The video works are also laced with other recurring CGI motifs such as

Fig. 2.2: Ed Atkins, *A digital rendering of human skin used in Ed Atkins' videos* [digital image], 2016, https://frieze.com/article/data-

random banal advertising slogans; spinning images of fruit; miniature corpses, bones, furniture and disembodied organs drizzled with otherwise-appetizing substances such as mayonnaise, ketchup or lettuce; an empty bedroom being sucked into a sinkhole. All are digital vestiges of banal or highly visceral associations and sensations. These visual motifs are also overlaid with distinctive, high definition sounds: either sound effects corresponding to the highly visceral processes depicted (the viscosity of squirting ketchup, splattering, squelching, the tearing of

---

[90] *ARS 17 – Ed Atkins* [video], Museum of Contemporary Art Kiasma, May 9, 2017, https://www.youtube.com/watch?v=F3vDyaZXx28, accessed 29 May 2020.
[91] N. Hoare, 'Ed Atkins on Abject Bodies, Incorporeality, and Digital Flesh', *Extra Extra* [web magazine], no. 10, para.22, https://www.extraextramagazine.com/talk/ed-atkins-abject-bodies-incorporeality-virtual-flesh/, accessed 12 May 2020

flesh described in uncomfortable auditory detail), or the intimate sniffing, coughing, breathing,

as Atkins speaks, sings, 'hmms' and 'umms' into the microphone. All of these animated

representations of highly visceral, palpable processes of decay and grotesqueness are

represented in a highly realistic, high definition digital format. This kind of digitally simulated

photorealism, or what one could call '*faux-torealism*'[92], mimics and recalls the realism that the

analogue photograph previously had authority over. The vestiges of analogue aesthetics of

realism find themselves incorporated—sometimes seamlessly, sometimes jaggedly—into the

digital fabric of Atkins' films.

Fig. 2.3. A digital-mask-sandwich. Still from Death Mask 5*, Ed Atkins, 2019.*

---

[92] By using the word 'faux' here I do not intend to contribute to the essentialization of certain mediums as more or less truthful, but simply to distinguish between photorealism, which is a particular quality produced by the photograph, and the *simulation* of photorealism within digital media. The term 'realistic' would not suffice, because I wish to point out how these images appropriate and simulate analogue photographic and cinematic strategies of prior media. To maintain this distinction consistently, I found it useful to employ this term throughout this chapter.

Atkins' Avatars as Masks/Proxies

We can see the idea of the death mask as index taking on new, digital iterations in Atkins' avatars. We can understand this *faux-torealistic*, highly-corporeal avatar in Atkins' videos to function as a (death) mask or a proxy for the Real, mortal body. The artist's own material, Real body is inherently implicated in the process of digital-image making, wherein a digital impression of Atkins' three-dimensional body is literally codified into the avatar's digital body, allowing the artist to occupy the body like a costume. Just as a photograph or death mask acts as an imprint of an object or being's having-been-there, the digital avatar is an imprint of Atkins' Real body, of his corporeal having-been-there. Once the artist's Real body is translated into code, this code is animated into the body of the avatar, which acts as a digital surrogate of the corporeal Real in the digital medium.

These avatars become digital surrogates or theatrical masks of human vulnerability and decay, their expressions and bodies exaggerated to an extreme. For instance, in *Old Food*, we see a very depressed avatar of a little boy (fig. 2.4), dressed in what appears to be jester's clothing. He tumbles through a hole in the wall of an anonymous, decrepit white room, which contains a piano. He staggers, zombie-like, over to the piano, and begins playing a song— which is more like a series of discordant notes. He then begins to emotionally deteriorate as he plays. The sounds of his wet sniffling and sighs (sounds contributed, as always, by Atkins) are amplified. The sound of the huge tear drops escaping his eyes and splashing onto his hands is accentuated visually and auditorily, almost to the point of cartoonishness. The exaggeration of his tears through high definition sound effects is almost theatrical—and somehow, makes me as a viewer sad, empathetic even. But I also want him to stop crying; it is grotesque, and what does an avatar have to cry about anyway? He sometimes looks up at the camera pleadingly,

Figure 2.4. Stills from an excerpt of Old Food, featured in Death Mask 5, Ed Atkins

eyes welling with tears. There is something distinctly weird and voyeuristic about watching

this realistic, yet not entirely convincing avatar character in a moment of private, emotional

vulnerability. We see the familiar process of weeping, a signifier of loss and pain and emotional excess, represented in the form of immaterial, digital high definition animation.

The weeping boy's face, fixed in a morose frown, acts much like a theatrical *mask*, like the sad/happy face that has become an icon of the dramatic arts and the stage. It is a digital hyperbole of the literal, analogue processes of mourning. Real tears in themselves are indices of a loss, pain, so in this sense we could consider the maudlin child-avatar as an icon, rather than an index: an icon of 'sadness', 'loss'. But we can recall that, according to Peirce, all signs have overlapping semiotic functions (**'**In all reasoning, we have to use a mixture of *likenesses, indices,* and *symbols. We cannot dispense with any of them'*[93]). So, while this weeping avatar could be seen as an icon on some levels, it can *also* be read as an index on the basis of the impression-making process described earlier[94]. The morose avatar child is an index of human emotional vulnerability by way of the de facto digital impression of the artist's face implicit in the image making process, a kind of digital masking.

Furthermore, the weeping avatar acts as an index of a Real embodied process of vulnerability, by way of exaggeration. The digitally-exaggerated tears, punctuated by amplified analogue sound effects, '*startles* us is an indication [italics my own]'[95]. It calls our immediate attention to both the excessiveness of the digital medium, and our own human vulnerability. The obviously exaggerated visuals call attention to the Virtuality of the avatar itself (the stiff, Frankenstein-esque gait, his arms extended; the crocodile tears).

Furthermore, we could read something into the way the tragic character is dressed—in jester's clothing, as though comedically pointing to the fact that he is a Real body in costume, a digital masquerader of human vulnerability, a digital costume. But, even if the physical-

---

[93] C.S. Peirce, 'What Is a Sign?', *The Essential Peirce,* op. cit., p. 10
[94] Ibid, p. 7
[95] Ibid *,* p. 8

digital *mask*-making process were *not* inherent to Atkins' practice, these avatars would still function as avatars on a purely representational level. Atkins' avatars act as *proxies* of material experiences of embodiment, by digitally undergoing extreme experiences of decay, rot, and physical and emotional vulnerability. Atkins' avatars effectively 'resurrect' aspects of the embodied Real by depicting organic, visceral processes of the body, digitally. In Atkins' animations, we watch his avatars decay right before our eyes, in digital high definition and high speed. We are often granted close-ups of the avatar's face, as is the case in *Safe Conduct* (2016), a three-channel video work with sound. In this particular work, we witness the avatar up-close: so close, the texture of his flesh is exposed in all its rotten digital detail: he is unnaturally gray, his skin mottled (see fig. 2.4) and perhaps decaying, recalling the putrid skin of a rotting corpse. He hums nonchalantly to himself as he repeatedly tears off, like a *mask* (fig. 2.4), layer after layer off his digital face—only to reveal his own face intact underneath each time. This *faux-torealistic* digital rendering of flesh represent Real rot to extreme detail, and yet calls attention to the unique incorruptibility of the digital medium in the process of representing corporeality. In *Safe Conduct,* we witness the avatar unload various grotesque, humorous and banal objects into metal detector trays before they continue along a conveyer belt: his own (presumably) blood, intestines, teeth, and gigantic brain, a laptop, a roast chicken, miniature corpse versions of himself. At one point, his decapitated head sings, unphased, in one of the trays. Sometimes the avatar looks directly at the 'camera', singing and smiling slightly. This digital dissection is punctuated by extremely realistic, highly visceral sound effects. Squelching, splattering, and tearing sound effects are edited in accordingly. The sounds themselves are fairly loud and high-resolution, to the point that it almost gives the sensation of someone whispering in your ear—a repulsive kind of intimacy. An auditory closeness is achieved, while the medium prevents physical closeness. Indeed, Atkins himself notes that this

incorporation of amplified analogue sounds 'lends weight' to the digital imagery: without the incorporation of analogue sound, he states, CGI animation feels 'weightless and limp'[96].

The hyper-visceral sounds and the high resolution, photorealistic animation together make the digital carnage palpable, recalling the slippery flesh of an organ or the rotting smell of a corpse. But this corporeality, as expressed through *faux-torealism*, is exaggerated to impossibility and absurdity. The digital bodies are pushed and pulled to the extreme. Their incorporeal digital-being becomes apparent through their excessive visual physicality, their attempts at appearing Real. Throughout Atkins' films, avatars are repeatedly contorted and twisted into impossible poses and positions (in *Ribbons,* 2014, the avatar literally deflates); when we see them walk, they appear stiff, stumbling and insufficient.

Atkins of course has made a conscious choice to construct his avatars and environments in *faux-torealistic* format: he could have chosen to represent his characters in a low resolution, cartoonish or more expressive form. But something different occurs when we see a bloody organ, rotten flesh, or tears represented to the extent of the digital medium's capabilities—that is, in a way that looks *almost* analogue, but obviously is not due to the extremity of what is represented. Atkins intentionally pushes the limits of his own medium, and in doing so, exposes it for all its insufficiencies. Atkins represents these human bodies digitally to the extremes of the digital medium's capabilities of realism. In doing so, these avatars call attention to the mortality of the Real, organic body, while simultaneously accentuating the incorruptible, immaterial Virtual digital medium.

These processes of disintegration and vulnerability—represented in a medium that, housed in code, is essentially incorruptible—is a means of *re-inscribing* and *pointing to*

---

[96] *Ed Atkins – Safe Conduct* [video], Museum of Contemporary Art Kiasma, March 31 2020, https://www.youtube.com/watch?v=eIBQ0gdFSe8, accessed 23 March 2020

material processes, states Atkins of his artworks: 'Debilitation of any kind—though particularly when one gets ill—is a way of re-instigating physicality, materiality'[97]. Atkins debilitates his avatars through trials of digital decay, thus 're-instigating' notions of physicality, while also re-instigating its lack.

The Index as Interface, The Avatar as Interface

The corporeal and the incorporeal/the Real and the Virtual, are hybridized through Atkins' blending of corporeal imagery with the immaterial texture of the digital. The index's 'relegation….to the myth, illusion, and ideology of realism'[98], has in part lent to the idea that the photograph, with its particular ability to produce an almost exact likeness to its object, as the last standing index. But, in observing how digital images become indexical in Atkins' works, it becomes clear that photorealism is not a definitive aspect of indexicality, but is in fact a particular quality of the analogue photograph. As it exists now, digital media—such as Atkins avatars—emulate the realism of a photograph quite well; but this is not where their indexicality lies. As Mary Anne Doane writes, 'While realism claims to build a mimetic copy, an illusion of an inhabitable world, the index only purports *to point, to connect, to touch, to make language and representation adhere to the world as tangent* […] [italics my own]'[99]. The indexicality of Atkins' avatars lie in their ability to *point* to the Real, not through 'mimetic copy', but by joining two tangents—the immaterial digital and the corporeal Real—through the simulation of the Real. If the 'index is an interface' as Kris Paulsen asserts it to be, then these incorporeal/highly corporeal avatars act as an interface where these two registers (incorporeality/corporeality) meet and *blend* together. An interface, such as a computer

---

[97] R. Whitby, 'ED AKINS', *MAP* [online magazine], vol. 25, 2011, https://mapmagazine.co.uk/ed-atkins, accessed 20 March 2020
[98] M.A. Doane, 'Indexicality: Trace and Sign: Introduction', *differences*: *A Journal of Feminist Cultural Studies* [Duke University Press], vol. 18, no, 1, May 1 2007, p. 6
[99] Ibid

interface, aids human navigation of digital platforms that would otherwise be illegible to most users. We can recall that McLuhan stated that 'all media are extensions' of 'our human senses'[100]. Thus, we can see an interface as a tool and therefore as an extension or *proxy* of corporeal presence and processes. Atkins' avatars act as interfaces/proxies, in that they aid both the viewer and the artist in navigating corporeal experiences within a digital territory— *mediating the two registers* of the Virtual/digital and the corporeal/Real.

The Digital Abject

Atkins' avatars mediate between the corporeal experience and the digital medium, by not only joining but *blending* the two together. This blending, I would argue, renders them distinctly *abject*, as Julia Kristeva defines the term. In her book *The Powers of Horror* (1980), philosopher, feminist critic and literary critic Julia Kristeva defined the abject as a feeling of repulsion brought on by an apparent disintegration of meaning, as a result of the corruption and blending of normative distinctions and hierarchies, such as those between ourselves/the subject, and an Other. Heavily informed by psychoanalytical theory, Kristeva's *abject* was explored extensively in feminist art in the 1990s, wherein the female body—which has historically been deemed non-normative in relation to the male body—became a central site for the artistic abject. Abject bodies, then, are those bodies that threaten the stability of what a normative, in-tact and acceptable body is. The abject body is a body that is wounded, leaking, debilitated, sick, bizarre, excessive—as opposed to normative bodies that are in-tact, clean,

---

[100] M. McLuhan, 'The Medium is the Message', *Understanding Media: The Extensions of Man* (1964) [web document], https://web.mit.edu/allanmc/www/mcluhan.mediummessage.pdf, accessed 2 June 2020, p. 11

stable, pure, ideal. The abject 'disturbs identity, system, order'; it is 'the in-between, the ambiguous, the composite'[101], according to Kristeva. 'Abjection is above all ambiguity'[102].

Given this definition, we can see abjectness arise as a central visual device and characteristic in Atkins' artworks. The particular abjectness of these digital avatars lies in the fact that they are a *'composite'* of corporeal imagery, analogue audiovisual appropriations, and the immaterial surface of the digital. Atkins' digital bodies are abject in both form and content: in content, they undergo abject processes of organic decay—leaking, rotting, excessive. In form, they are digital and falsely-photorealistic, to the point of excessiveness. Thus, these avatars blend the normative distinctions between the physical body and the immaterial digital register. A particular *digital abjectness* arises, I would argue, out of the *blending* of two registers—the corporeal Real schema and the simulated, immaterial Virtual medium—within Atkins' artworks. It is in this blending of two registers that these bodies become indexical *through their abjection.* As such, Atkins' avatars 'disturb' the 'identity, system, order' of previous understandings of the index as stable, truthful and contingent upon material impression. 'Abjection is above all ambiguity'[103], states Julia Kristeva in her essay *Approaching Abjection.*

The avatars present as undeniably abject digital bodies: mottled, rotting, wounded, decapitated, contorted, leaking tears and embarassing-sentimentality, grotesquely vulnerable. But they are abject not just in the content of their representation, but in the *medium*. Along with the meeting of They call attention to the processes of mortality and decay that we fear occurring

---

[101] J. Kristeva, op. cit., p. 3.

[102] Ibid.

[103] Ibid.

in our own Real bodies, and yet, their digital flesh is incorruptible. As such, they recall the threat of immateriality and lack of indexicality and hence trustworthiness, that has come to be associated with the digital medium. These abject avatars recall analogue processes of the Real that we all know and undergo (decay, loss, leakage), yet these bodies are out of our control, not Real. As such, these abject avatars make viscerally-apparent the anxieties implicit in our experience of the Real—rot, death, vulnerability, loss—as well as the anxieties implicit in our interactions with the Virtual—alienation, distance, untrustworthiness, falseness, automation. If abjectness is anything that is a composite, a grotesque meeting and blending of two registers, and an indication can simply be the meeting of two registers or junctures of experience, then these avatars become indexical in their abjectness, and abject in their indexicality. These abject digital bodies 'mark the junction between two portions of experience'[104], thus rendering them as indices.

As I have observed earlier, Atkins' operates the digital medium in such a way that analogue qualities of indexicality are emulated through *faux-torealism*. When this analogue mode of representation is simulated in the digital and used to depict grotesque, embodied processes, the result is the blending and meeting of Virtual (digital medium) and Real (photorealistic technique, corporeal imagery). The artist notes that this blending and meeting of analogue and digital registers to depict the grotesque results in a particular abjectness. He states, 'High Definition digital video, with its exorbitant and grotesque depictions of surface, feels in a particular, peculiar way—feels, that is, repulsive and excessive'. What we can draw

---

[104] C.S. Peirce, 'What Is a Sign?', *The Essential Peirce,* op. cit., p. 8

from Atkins' own analysis of his work is his use of the word 'feel', here. While I have aimed

to do the work of unpacking the semiotics and unique ontology of Atkins' artwork, we must

recall that feeling and affect are in themselves relevant information and data. You might

recall that I opened this essay with an account of my colleagues' and my own *feelings* and

reactions—varying from disgust and repulsion to fascination and emotional affect—towards

Atkins' artworks. In fact, my initial interest in dissecting the semiotics of the digital medium

came out of a curiosity about my own very embodied response to the image's in Atkins'

Fig. 2.5 Ed Atkins, still from an excerpt from Safe Conduct *(2016), in* Death Mask V
(2019)

artworks. Surely these artworks, so visceral and vulnerable in its content, can be analyzed on

the basis of the feelings that arise when we encounter them. Thus Atkins' avatars are clearly

abject on a 'flat' material and theoretical level. But abjectness is also a *sensation* of disgust

that arises when we encounter certain images, bodies. Acknowledging the embodied

sensations that arise when encountering the unique abjectness of Atkins' artwork (in both

form and content) pays witness to how the digital medium, so often relegated to the

'objective' corners of culture and society, can be used to do as art always does—touch us in some way. As such, these avatars in their abjectness, function as indices insofar as Peirce defines them, both as something that joins two registers of experience, and acts 'upon the nerves of the person addressed', '[forcing our] attention'[105] into linking these two registers. We can say that with the qualities of abjectness in these digital representations, and *embodied feeling* of abjectness in the viewer, these avatars function as digital indices in particular ways.

The digital avatars of Atkins' animations become indexical, on the one hand, by way of masking or acting as proxies for the body, and on the other, by way of 'startling' into indication through abjectness. This masking is achieved through of digital-material impression or 'masking' (having a physical relation to the object in question, the body), as well as through undergoing processes of loss, vulnerability and decay in the digital-stead of both the human viewer and artist, and in leu of analogue processes. If the index is a meeting point, or an 'interface', as Kris Paulsen calls it, then the digital avatar in Atkins' works functions as an interface where two 'junctures of experience' (to quote Peirce) meet[106]. These junctures of experience are the embodied Real and the immaterial Virtual, which are indicated through the image of the digital avatar's body. When we see the digital avatar rot, decay, and become 'debilitated' before our eyes in fast-forward, two registers of experience are indicated: the experience of the mortal corporeality of our own Real bodies, and the immaterial digital simulacrum that is the avatar's body. The avatars points to the medium itself, rather than the thing the medium is showing.

Chapter Conclusion

---

[105] C.S. Peirce, 'What Is a Sign?', *The Essential Peirce,* op. cit., *p. 5*
[106] C.S. Peirce, 'What Is a Sign?', *The Essential Peirce,* op. cit., *,* p. 8

What we see playing out in Atkins' works is that the index is not 'dead' or corrupted by the digital. It is simply a new kind of indexicality at work. Where the photographic index, the death mask, is an impression of time passed, the digital index is an impression of this impression. Instead, the digital index, the avatar, is a reanimation of the analogue-photographic index. If the photographic index is like a death mask, an impression of what once was, then Atkins' avatars are the photographic death mask exhumed and reanimated into incorporeal digital being. Therefore, we can say that the index is not dead, it simply has taken on a new life. The index can, in fact, live on in the digital. The digital Virtual medium, by incorporating the analogue into its fabric of ones and zeros, is capable of making a direct link to, and effectively mediating through the digital, the Real. This particular kind of digital indexicality is visualized in Atkins' avatars.

While the index has previously operated as a semiotic register analogous with truth, visual integrity, and the material Real, the digital medium points to the mask of semiotic and material certainty. Just as the photograph was, according to Barthes, an 'image which produces Death while trying to preserve life'[107], Atkins' digital avatars manage to point to corporeality digitally, thus demonstrating the adaptability of the index, and how it can in fact exist in the digital realm. Aas such, Atkins' images expose the flexibility of the index itself—but it does not kill the index. Instead, the digital effectively resurrects the index as a valuable category for understanding how new kinds of images mediate between the Real and the Virtual, the corporeal and the incorporeal, proximity and distance. I believe that Ed Atkins' digital indices do not seek to guarantee a 'truth', as the common understandings purport the index's purpose to be. Atkins' work does not remove the mask to reveal a Real underneath, but rather points to the mask of representation itself, revealing only the instability and vulnerability of the ever-changing understandings of index, the Real, the Virtual, and ourselves. These grotesque and

---

[107] R. Barthes, op. cit., p. 92

digitally-vulnerable digital bodies are like a prick on the finger. One does not think of the blood that is always coursing through our bodies, until we are pricked, and that blood presents itself, permeating the surface of our skin through that tiny seeping puncture, and we remember what we are—bodies, trying to navigate the layers of the world and representation.

Chapter 3: Conclusion of the Thesis

This thesis aimed to answer two questions: first, the overall research question, how is the category of the index understood in relation to digital media? In order to answer this question, this thesis engaged with debates about how the index functions in the digital image and the analogue image, in order to highlight overall crucial theoretical and methodological concepts within the field of digital media. The results of this inquiry found that the analogue photograph has been conceptualized as being categorically indexical, based on its particular process of image-making, which is contingent on material proximity and a material impression. In contrast, the digital image, due to its immaterial process of image making, has been posited as bringing about the 'death of the index'. However, a closer reading of Charles Peirce's semiotic theory, facilitated by an analysis of debates and ideas brought forth by other theorists in the particular research area of the index and the digital image, demonstrated that the index is still, in fact, very much alive even among digital media. However, the digital index simply operates in unique ways that do not rely on a direct physical relationship or imprint.

Chapter one's inquiry and hypotheses about the index were then made operable within a reading of Ed Atkins' artistic representations of corporeality using high-definition, faux-torealistic digital visualizations. In analyzing these artworks, I have aimed to answer the question, how do these digital representations of the body understand and mediate the digital and the Real body, and can these representations become indexical? The results of this analysis have shown that Atkins' artworks reappropriate aspects of analogue-indexicality, while employing particular visual strategies that the digital medium allows, in order to render his digital avatars as indexical. Atkins' avatars, through hyper-corporeal imagery as

represented through faux-torealistic digital textures, act as indices of the corporeal Real, as well as indices of the immaterial corporeal digital surface of the image themselves. In becoming indexical in this way, and by appropriating analogue modes of indexicality without being directly grounded in materiality, Atkins' avatars point to the inherent instability and mutability of the index, and of concepts of the Real and materiality in themselves. This reading of Atkins' art and how it becomes indexical through a medium-specific practice, demonstrates how digital representations of the body can mediate the corporeal Real and Virtual, digital images.

The digital index rejuvenates prior conceptions of the most fundamental questions of what it means to inhabit a human body. In reconsidering how long-held notions of what the 'index' means, and how it can take on new meaning and functionality within the digital image, we can begin to think of new ways to understand (im)materialities. New phenemological questions can be considered in light of the analysis of this thesis, such as, how do the digital and other Virtual technologies codify themselves within the schema of the corporeal body, and vice versa? What implications do these codifications have on how we interact with one another, with digital and Virtual objects and entities? From these questions and considerations emerge, or re-emerge, interesting problematics for the practice of art making and image circulation: How to approach a material, and bodies, that are immaterial? Can we make this material even more tangible, more accessible and more transparent for all viewers and practitioners? Can the digital be utilized as a voice for a diversity of bodies, and disembodied/embodied experiences? Such questions can be considered not only on a purely theoretical level, but, I believe, through continued practical and applied experimentation with the digital medium within an art and media context. In an age when so many bodies and autonomies are consistently under threat,

while simultaneously growing increasingly interconnected, these questions are potent and warrant further exploration.

Bibliography

Atkins, A., 'Data Rot', *Frieze* [online magazine], 18 March 2016,
https://frieze.com/article/data-rot, accessed 8 June 2020.

ARS 17 – Ed Atkins [video], Museum of Contemporary Art Kiasma, May 9, 2017,
https://www.youtube.com/watch?v=F3vDyaZXx28, accessed 29 May 2020.

Barthes, R., *Camera Lucida: Reflections on Photography,* New York: Hill & Wang, 1981.

Baudrillard, J., *Jean Baudrillard, Selected Writings*, ed. Mark Poster, Stanford; Stanford
University Press, 1988, pp.166-184.

Bazin, A., Gray. H. 'The Ontology of the Photographic Image'[JSTOR] *Film Quarterly* 13, no.
4 (1960): 4-9. Accessed June 2, 2020.

Benjamin, W., 'The Work of Art In The Age of Mechanical Reproduction' (1935), in
Illuminations, edited by Hannah Arendt, translated by Harry Zohn, New York: Schocken
Books, 1969.

Bolter J.D., Grusin R. 'Introduction: The Double Logic of Remediation', in *Remediation:
Understanding New Media,* MIT Press, 2000.

Borgmann, A., 'The Introduction to Holding onto Reality: The Nature of Information at the
Turn of the Millenium' [webpage], excerpted from pages 1-6 of *Holding On to Reality* by
Albert Borgmann, published by the University of Chicago Press, copyright 1999 by the
University of Chicago, https://press.uchicago.edu/Misc/Chicago/066258.html, accessed 17
June 2020.

Brown, B. 'Materiality', *Critical Terms for Media Studies* , ed. W.J. T. Mitchell and Mark
Hansen (Chicago: University of Chicago Press, 2010). Casemajor, N. 'Digital Materialisms:
Frameworks for Digital Media Studies', *Westminster Papers in Digital Culture* [online

journal], no. 10, 2015, pp. 4–17, https://www.westminsterpapers.org/articles/10.16997/wpcc.209/p.5, accessed May 2 2020

Christine, P. 'Introduction', in Paul, Christine (ed.). *Blackwell Companions to Art History: A Companion to Digital Art.* New York, John Wiley & Sons, Inc., 2016.

Deleuze, G., *Difference and Repetition* (1968), trans. Paul Patton (London: Continuum, 2006), in S. Weber, 'A Virtual Indication', *Digital and Other Virtualities*, ed. Antony Bryant and Griselda Pollock London: I.B. Tauris & Co Ltd., 2010.

Deleuze, G., Parnet, C. "The actual and the virtual". *Dialogues II*. Trans Eliot Ross Albert. London: Continuum. 2002.

Doane, M.A. 'Indexicality: Trace and Sign: Introduction', *differences*: *A Journal of Feminist Cultural Studies* [Duke University Press], vol. 18, no, 1, May 1 2007.

Ed Atkins – Safe Conduct [video], Museum of Contemporary Art Kiasma, March 31 2020, https://www.youtube.com/watch?v=eIBQ0gdFSe8, accessed 23 March 2020.

Goldberg, K., 'Introduction to *The Robot in the Garden: Telerobotics and Telepistemology In the Age of the Internet,* Introduction: The Unique Phenomenon of Distance', *The Robot in the Garden: Telerobotics and Telepistemology In the Age of the* Internet [website], https://goldberg.berkeley.edu/art/tele/intro.html

Golderberg, K., 'The Telegarden', *The Telegarden* [website], 2004, https://goldberg.berkeley.edu/garden/Ars/, accessed 4 June 2020.

'History of computer animation: CGI', *computeranimationhistory-cgi*, Last updated 2016-2017, https://computeranimationhistory-cgi.jimdofree.com/fight-club-1999/

Hoare, N., 'Ed Atkins on Abject Bodies, Incorporeality, and Digital Flesh', *Extra Extra* [web magazine], no. 10, para.22, https://www.extraextramagazine.com/talk/ed-atkins-abject-bodies-incorporeality-virtual-flesh/, accessed 12 May 2020

Holmqvist, C., 'Undoing War: War Ontologies and the Materiality of Drone Warfare', *Millennium: Journal of International Studies* [Sage Journals], no. 41, June 7 2013, p. 535–552, accessed May 12, 2020.

Huhtamo, E., Art in the Rear-View Mirror, in Christine Paul (ed.), *Blackwell Companions to Art History: A Companion to Digital Art.* New York, John Wiley & Sons, Inc., 2016.

Lefebvre, L. 'The Art of Pointing: On Peirce, Indexicality, and Photographic Images'*, Photography Theory (The Art Seminar, II),* ed. James Elkins, New York: Routledge, 2007,

McLuhan, M., 'The Medium is the Message', *Understanding Media: The Extensions of Man* (1964) [web document], https://web.mit.edu/allanmc/www/mcluhan.mediummessage.pdf, accessed 2 June 2020

Mulvey, L. 'The Index and the Uncanny: Life and Death in the Photograph', *Death 24x a Second: Stillness in the Moving Image*, Reaktion Books Ltd., London, 2006.

Jones A., Jones et al, 'The Body and Technology', *Art Journal* [JSTOR], no. 60, 2001, pp. 20-39, p. 20, accessed May 21, 2020.

Paulsen, K. 'The Index and the Interface', *Representations* [JSTOR], vol. 122, no. 1, Spring 2013, pp. 83-109, University of California Press.

Peirce, C.S. Philosophical Writings of Charles Sanders Peirce, ed. Justus Buchler, New York, 1955.

Peirce, C.S., 'What Is a Sign?', *The essential Peirce: selected philosophical writings*, ed. Peirce Edition Project. Indiana University Press. 1998.

Pointon, M. "Casts, Imprints, and the Deathliness of Things: Artifacts at the Edge." *The Art*

Bulletin 96, no. 2 (2014): 170-95. www.jstor.org/stable/43188871, Accessed June 6, 2020

Sigmund,   F.,   The   Uncanny',   1919   [web   document], https://web.mit.edu/allanmc/www/freud1.pdf, Accessed 5 February 2020

Sontag, S. *On Photography.* New York: Rosetta Books LLC, 1973.

Steyerl, H., 'The Terror of Total Dasein: Economies of Presence in the Art Field', *DIS Magazine* [web magazine], http://dismagazine.com/discussion/78352/the-terror-of-total-dasein-hito-steyerl/, Accessed 5 April 2020.

Weber, S., A Virtual Indication', *Digital and Other Virtualities*, ed. Antony Bryant and Griselda Pollock, London: I.B. Tauris & Co Ltd., 2010.

Whitby, R., 'ED AKINS', *MAP* [online magazine], vol. 25, 2011, https://mapmagazine.co.uk/ed-atkins, accessed 20 March 2020