THE UNIVERSITY OF CHICAGO

## TOUCHING MENACE: ARTIFICIAL INTELLIGENCE, AESTHETICS, AND THE INTIMACIES OF SYNTHETIC SENSE

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#### Abstract

Though evidence of a desire for thinking machines extends back at least as far as Plato, it was only with relatively recent increases in computational processing power available user data that these machines have become a ubiquitous if semi-obscured force in the lives of everyday people. At the same time and across diverse American media, popular and scientific fantasies of AI have frequently imagined it via master-slave narratives and rhetorics that paint these machines as being, on the one hand, the next stage of the human and the human domination of the world, and, on the other hand, the human's living tool or slave, the object that threatens to liberate itself and take the master's place. Though these tools can be powerfully destructive in the hands of surveillance states and multinational corporations, and powerfully productive in the hands of artists, their existence in the popular imagination of the United States is still consistently divorced from the actual, fairly reductive capabilities of these tools. Rather than reading these fantasies as desired futures for computation (though they are certainly that as well), I read them as ciphers for how dominant conceptualizations of self and other are presently being destabilized by digitality. More so, I read them as ciphers for how this destabilization is occurring in a manner that repurposes the epistemology of the closet for machinic ends and heightens the unresolved affects of colonialism and the transatlantic slave trade as resonant within American subjectivities.

*Touching Menace* has grown out of ongoing questions about the affectivity of technology and its ability to dis- and re-organize those that it touches, the enfleshment of indeterminacy as a means of producing new spaces of conquest, and the possibility of newly ethical formations of society in which present forms of domination are not just eradicated, but rendered fully

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unthinkable. As such, this work examines AI via the combined light of Black studies, digital media theory, and new materialism, and it does so as a means of investigating digitality's broader temporal suspension, abject entanglements, spatial production, and epistemological prodding. Throughout, I argue that the abrasive generativity of AI rhymes with the generativity of blackness and queerness. That is, via its connection to the transatlantic slave trade, I understand blackness to involve an ongoing confrontation with one's existence as a living anachronism and too plastic form whose plasticity makes distinctions between normative categories thinkable. Further, I understand queerness to involve an ongoing confrontation with one's existence as product of and catalyst for polymorphous temporalities at the same time that the open secret of oneself grounds knowledge production as such. If these forms together articulate the frictional deterritorialization of a body and its frictional reterritorialization elsewhere, then reading them as analogous to aspects of artificial intelligence makes it possible articulate the real strife of technological becoming, strife that is difficult to access if one does not think within histories of what it actually means to become a living abstraction.

In chapter one, I examine the videogame *SOMA* and the novel *House of Leaves* for how they map the core logics of control societies – logics that govern digitality – to Black becoming in and after the Middle Passage. I demonstrate that digital time consists of a kind of suspension in the moment just before one resolves into I or it, and that it thereby instantiates an ambivalent confrontation with the thingliness of the self. In chapter two, I examine the videogames *Portal* and *Portal II* and the novel *Passing* for how they complicate the concept of opacity and reveal how, if it is to be deployed as a tool to resist the foreclosures of machine learning, then it must be noted how opacity is an only sometimes liberatory, sometimes merely tactical, and always utterly fraught drama of categorical capture and escape — a drama in which one negotiates the bare

livability of the social and the utter inadequacy of its promise. In chapter three, I examine the videogame *Prey* and the app Replika for how Homi Bhaba's and Alan Turing's divergent conceptualizations of mimicry circulate through these tools such as to capture the interiors of digital subjects — and more so, to transform those interiors into spaces to simulate and thereby actualize the potentials of computational simulacra.

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#### Introduction

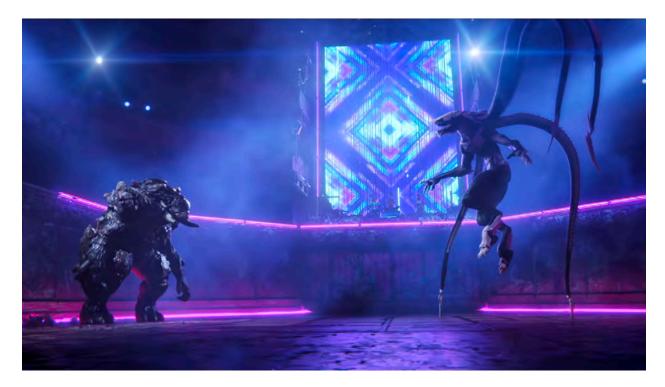


Figure 0.1 "Sonnie's Fight." Publicity still from "Sonnie's Edge" (Little Zoo Studio)

#### I.

Midway through, "Sonnie's Edge," a 2019 episode of the anthology series *Love*, *Death* + *Robots*, two creatures of towering scale emerge from containment. One a bipedal, shark-like creature with a multi-pronged prehensile tail whose every end is a claw. The other a heavily scaled brawler looking something like a petulant ankylosaurus or a demonic iteration of The Thing from Marvel's *Fantastic Four*. Each "beastie" is connected to and ostensibly controlled by a human pilot via neural link, each stationed on either side of the ring, each fighting for prize monies to be awarded to the surviving creature (fig. 0.1). The shark-like thing wins and over a series of seductions, reversals, and betrayals, we — the audience — learn that this beastie was unique insofar as it had once been human and, more so, insofar as its "pilot" was mere insensate

flesh that it was controlling, rather than the other way around.<sup>1</sup> Though not ostensibly about computation or artificial intelligence, I would argue that this episode stages a computationallyenabled translation of human minds into inhuman form so as to manifest a crisis that prefigures and is the ground of subjectivity in our contemporary and computationally-inflected moment. Here that crisis takes the form of a monster — a marvelous and terrifying being that heralds and is the death of foundational distinctions through which we understand ourselves. These distinctions — here the difference between I and it, here and there, self and other — are effaced by the introduction of a computational mediant — here, the neural link — that attempts to reconcile incommensurate forms through construction and control of something like an artificial mind — a mind that is both one's own and is radically disjoint from oneself.



Figure 0.2 Observation screen captures (PC Gamer)

<sup>&</sup>lt;sup>1</sup> Love, Death + Robots, Season 1, Episode 1, "Sonnie's Edge," directed by Dave Wilson, 2019, Netflix.



Figure 0.3 Observation screen capture (PC Gamer)

Compare this episode to *Observation* — a videogame in which one plays as SAM, a corrupted AI on a near derelict space station, tasked with finding missing crew members and investigating the event that led to the crew's disappearance and to one's own data loss. Throughout, one works with a human crew member, Dr. Emma Fisher, who is also in the dark as to just what happened and who is rightfully skeptical of SAM insofar as it appears that it was the cause of their present circumstances. Via careful investigation of the ship, which is to say, via careful investigation of SAM's own body via surveillance cameras, file-recovery, password breaches, and the lot, and via a series of twists that bring one into contact with alternate timeline versions of the ship and the crew, SAM and Emma solve the mystery and then merge into a unified entity tasked with "bringing" the rest of humanity to their same fate (fig. 0.2 and 0.3).<sup>2</sup> If

<sup>&</sup>lt;sup>2</sup> No Code, *Observation*, (Devolver Digital, PC, 2019).

"Sonnie's Edge" soft glosses artificial intelligence and its categorical crisis, then *Observation* extends that crisis and elaborates a handful of the questions raised by it. These questions are: How does contact with computational logics erode our ontological resistance, such as to turn us into too plastic, or rather, into too categorically and temporally indeterminate selves? How does the epistemological prodding of surveillance and AI produce renewed investigation and production of categories that cannot stabilize, and more so, how do they produce these categories through the cultivation of impossible, unreadable bodies? How are we becoming spaces for the elaboration of machinic potentials, in a manner that is resonant with how computers have been framed as spaces for the elaboration of human potentials? Where artificial intelligence is more commonly framed via questions of how to make it work, when will we know it works, and will it save or destroy us, shifting to these more esoteric concerns promises to disclose how the imaginary that subtends artificial intelligence is itself a cipher for larger, stranger effects of this digital moment.

*Touching Menace* works to answer these questions and to thereby investigate aspects of the present that this imaginary foregrounds. The opening insight of this work is that computational media place the user in the position of being the it, the unspeaking flesh, which means that machine's movements before a "mind" — here, computational processing — fully arises to claim and contain those movements. In this way, computation stages a confrontation with the thingliness that subtends the self, and narratives of artificial intelligence illustrate that confrontation. The ramifications of this insight are that other key terms within artificial intelligence discourse mutate and become sites for estranging encounters with our digital selves. *Touching Menace* explores two of these key terms — opacity and mimicry — and develops the subsequent insights that the production of opaque bodies subtends machinic knowledge

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production much as the opacity of mind and thought subtends the dream of artificial intelligence, and that conceptualizations of AI as mimic par excellence surface a desire for a discrete state human in which human beings become sites for running machinic simulations and elaborating their potentials. These terms are, of course, just a beginning, for, given its discursive breath, there is little within the digital present that AI does not touch and transform.

#### II.

But, what is AI? Understood as a funded research agenda, artificial intelligence collects a diverse array of practitioners from the physical sciences, the social sciences, and the humanities in service of the conceptualization and production of machines able to reproduce, automate, exceed, transform, and constrain the cognitive and sensorial capabilities of biological organisms. In this light, AI originates with the rise of computation itself. Yet, alternate genealogies are possible. For example, Manuel DeLanda understands AI as a war machine both in the sense of Deleuze and Guattari's nimble assemblage that continually reforms itself to meet tactical, battlefield objectives and in the sense of a weapon whose lineage includes as much the slingshot and the bullet as it does the GPU. To this end, he writes from the perspective of a future AI historian who traces the long history of war as a means of tracing the evolution of its own species.<sup>3</sup> Alternately, Nick Dyer-Witheford, Atle Mikkola Kjosen, and James Steinhoff describe artificial intelligence as the inhuman power of capital itself as it becomes autonomous and is finally divorced from the human beings, needs, and labor that subtend the market. In their view, the success of AI could then just as easily intensify and extend present economic suffering beyond measure, as it could actually produce the collapse of capitalism via the complete

<sup>&</sup>lt;sup>3</sup> Manuel De Landa, *War in the Age of Intelligent Machines* (New York: Zone Books, 1991).

eradication of human labor and with it the complete eradication of value as we presently understand it.<sup>4</sup> Reaching further afield, narratives of artificial slaves and artificial wives extend back at least as far as Plato, and, more recently, speculative fiction of the last two centuries has seen resurgences of these narratives in the form of too compliant robotic housewives, simulations of dead lovers, racialized suburban body snatching, and depictions of machinic civil rights movements.<sup>5</sup> And this is to say nothing of the narratives of rebellious automated organs, sentient propaganda machines, and war torn ends of the world.<sup>6</sup> Still, further touchstones are possible.

Navigating the capaciousness of this term is then no small task, as it can, quite easily, be made to mean everything and nothing. For the sake of raising and addressing the concerns specific to this dissertation, I understand artificial intelligence to be a set of stories we tell ourselves about subjectivity and about thought in action. Sometimes we tell ourselves these stories through novels, video games, film, and other media, and sometimes we tell ourselves these these stories through the deployment of predictive policing algorithms that reproduce the movements of 19th century slave patrols under a veneer of objectivity, or financial algorithms

<sup>&</sup>lt;sup>4</sup> Nick Dyer-Witheford, Atle Mikkola Kjøsen, and James Steinhoff. *Inhuman Power: Artificial Intelligence and the Future of Capitalism*, (London: Pluto Press, 2019).

<sup>&</sup>lt;sup>5</sup> Ovid, "Pygmalion" in *Metamorphoses*, trans. David Raeburn (London: Penguin Classics, 2004), 393-396; *The Stepford Wives*, directed by Bryan Forbes (1975; Culver City, CA: Columbia Pictures, Youtube); *Ex Machina*, directed by Alex Garland (2015; Santa Monica, CA: Lionsgate, Netflix); *Black Mirror*, Season 2, Episode 1, "Be Right Back," directed by Owen Harris, 2013, Netflix; *Get Out*, directed by Jordan Peele (2018; Universal City, CA: Universal Pictures, Film); David Cage, *Detroit: Become Human*, (Quantic Dream, PC, 2018); Tynan Wales and Nina Freeman, *Tacoma* (Fullbright, PC, 2017).

<sup>&</sup>lt;sup>6</sup> *Upgrade*, directed by Leigh Whannell (2018; Universal City, CA: Universal Pictures), Apple TV; Bloober Team, *Observer: System Redux* (Aspyr, PC, 2017); Jean-François Dugas, *Deus Ex: Human Revolution - Director's Cut* (Eidos-Montréal, PC, 2011); *The Matrix*, directed by The Wachowskis (1999; Burbank, CA: Warner Bros. Pictures), Film; *The Terminator*, directed by James Cameron (1984; Los Angeles, CA: Orion), Apple TV; *Blade Runner 2049*, directed by Denis Villeneuve (2017; Burbank, CA: Warner Bros. Pictures), Apple TV.

that increase risk of widespread economic shocks, while making those shocks less and less scrutable to the communities living in their wake. In all of these stories, we are articulating theories of the subject and compelling or persuading certain bodies to enact those theories in one way or another. Given just how far back stories of artificial life go, one could, cheekily, argue that this framing would have been just as timely at any point within the last thousand or so years. Yet, at the time of this writing, artificial intelligence is a near ubiquitous keyword within fictional and nonfictional media, at the same time that AI is attracting vast public and private funding and research. Within just the last two years, the release of surprisingly powerful natural language tools such as ChatGPT and image generators such DALL-E 2, Midjourney, and Stable Diffusion has generated vast engagement from both researchers and the lay public, while also instigating highly publicized corporate pivots from companies such as Microsoft and Google, who were caught off-guard by these tools' - and particularly ChatGPT's - sudden success. Much of what is happening is hype. Some of it is not. What is key for Touching Menace is that, given a concern for the digital present, this imaginary is increasingly central to understanding how that present is reshaping who we are and may still yet become in light of it.

#### III.

Before advancing further, I want to unpack just what I mean by the digital and why artificial intelligence is specifically useful for thinking about it. When I say *the digital*, I am slipping between two different usages and I am doing that intentionally, because they inform one another, even as they are not reducible to one another. That is, I mean both that which has to do with digital computers and that which has to do with the much larger, much older digitizing processes through which the continuous all of existence — the analog — is conceptually

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delineated into discrete units. These are processes such as biopolitics and its manner of distinguishing between lives worthy of concern and lives legible only to the extent that they are endlessly killable, and processes such as racialization and gendering and their manner of producing and policing conceptual distinctions between human, less human, and nonhuman, and between what has been and anachronistically still is, and what must be the teleological arc of the species. Between the digital computer and the digitizing, if not always computational, process lay a definition of the digital as that which exists as, produces, maintains, and manipulates a set of discrete states and/or categories. Understood as a set of stories we tell ourselves about subjectivity — stories we sometimes tell ourselves via fictional media as much as via deployment of "intelligent" computational objects — AI is digital in both senses of the term.

Within its specific agglomeration of social processes and real objects, I am most interested in how artificial intelligence maps the movement between the digital and the analog to the movement between biopolitical life and death and to the movement between subjection and abjection. Understood as a continuous relation of potentially discrete values, the analog comes both before and after the digital, existing as it does as the promise of (re-)potentialization and life without category, and the threat of the very same. Within biopolitics, the continuity of the analog enfolds life and death, and renders a thing continuous with its own degradation, while the divisions of the digital distinguish life from death — much as they distinguish sense and its collapse — and they render "life" contingent on flight into an almost antiseptic reason. As Foucault described, a biopolitical state is one that makes live and lets die, and it does this even as one is only eligible for care to the extent that one already appears alive.<sup>7</sup> That is, one is only eligible for care to the extent that one appears consistently legible and sensible within narrowly

<sup>&</sup>lt;sup>7</sup> Michel Foucault, *The History of Sexuality: Volume One* (New York: Random House), 138.

proscribed categories. Stated otherwise, within a biopolitical state, only the digital is eligible for care, because only the demarcations of the digital are legible in this way. By contrast, in a biopolitical state, the analog is given over to a state of exception whose simultaneous exclusion and inclusion is the precondition for a community of the living, lawful, and consistently legible.<sup>8</sup> The analog thus becomes precarious which then frequently becomes the abject.

Abjection is a body's world-destroying encounter with the abyss that subtends it. This is to say, it is a body's encounter with the utter groundlessness of its systems of sense-making. I draw this definition of abjection from Julia Kristeva for whom it is a kind of horror that takes the everyday porousness that makes relationality possible and intensifies it until one's ability to recognize oneself as a semi-coherent self collapses.<sup>9</sup> That is, if "normally" a subject is opposed to an object, then the stability of the ego is predicated on its ability to continually reproduce this boundary between itself and the other just beyond it, even as relationality requires ongoing if relatively minor effacements of this edge. In a state of abjection, however, one is no longer opposed the other, because one is now opposed to the boundary itself. The abject is thus opposed to boundedness as such and is thus unable to stabilize, or rather, to assume a workably stable position within any given set of associative possibilities. Kristeva argues that the abject — or rather, what she calls the deject — is thus returned to the period before meaning, the prelinguistic state in which one, being all body and being continuous with all within one's world, is exposed

<sup>&</sup>lt;sup>8</sup> Giorgio Agamben, *The Omnibus Homo Sacer*, (Redwood City, CA: Stanford University Press, 2017), 23-24.

<sup>&</sup>lt;sup>9</sup> Kristeva, Julia. *Powers of Horror: An Essay on Abjection* (New York: Columbia University Press, 2017), 1-11.

to the chaos of being a thing — the chaos of constant if still unpredictable transformation by the others that one also is.<sup>10</sup>

So absented of the I, the world, and the language (i.e. the categories, the delineations) that constructed them and rendered them semi-consistently legible to one another, the true horror, for Kristeva, is that one then realizes that this groundlessness was always already there, always lurking just beneath the fiction of a stable world. To be clear, abjection is not the coming-undone of altered states that one pursues in one's downtime. It is not what happens after a particularly revelatory meditation, nor is it even, necessarily, the terror of a bad trip. Abjection sets in when one is shaken in such a way and at such a time that one begins to lose hold of the categories through which one knows oneself at the same time that one still clings to and needs those categories. Abjection is the powerlessness and self-disgust that comes with feeling the skin one still loves slip away. And once one has seen this, once one has been so exposed to one's own polymorphousness, well, there is no going back. The abject can only continue on as an embodiment of the chaos of meaning that subtends all possible worlds — subtends them at the same time that it moves through those worlds as a bearer of the infection they both refuse and need.

If, within biopower, the analog becomes the abject, and if the analog ever subtends the digital as the abject subtends the subject, then artificial intelligence is subtended by both the analog and the abject. Granted, one could say the same of all things digital in the contemporary moment. I would argue that AI is particular insofar as the stories it tells us about ourselves reveal this abject substrate of who and what we are. To that end, narrative media frequently frame AI as an engine through which the subject encounters their own thingliness and thereby becomes

<sup>&</sup>lt;sup>10</sup> Kristeva, 8.

terrified of themselves. If this encounter sounds like an extraordinary state of affairs that has precious little bearing on the real lives of contemporary persons, then I would argue that its connection to biopower insists on the ordinariness of this state — for brushes with abjection, if not always full descents into it, are routine in lives made precarious in connection to their identities, non-normative practices, and hindered access to material resources. In these everyday brushes with abjection, the term and its connection to terror become more complicated than pure horror to be run from. David Halperin builds on Kristeva, Jean Genet, and queer sexual practices in order to develop a theory of abjection that is affirmative insofar as it uses the polymorphousness of the abject to recode and (partially) neutralize the violence that ungrounded them. For him, this is neither a complete end to that violence, nor is it a return to the fiction of a stable world. Rather, it is an existence that mines the productive capacity of abjection in service of the deject's survival and joy — mines it in order to shape her existence into something other than slow death or neutered recuperation into liberal visions of the self.<sup>11</sup> Thus, if artificial intelligence is an engine for abjection within computational tools deployed for the fine-grained management of populations (tools such as drone guidance systems, educational assessments, neo-phrenological applications, etc.), at the same time that narratives of AI stage brushes with this, our fundamental groundlessness, then the stories that AI tells us about subjectivity in the digital present are stories that center an abrasive generativity — that is, a fecundity that cannot be said to be decidedly constructive or destructive, even as it unmakes the terms through which we know ourselves.

#### IV.

<sup>&</sup>lt;sup>11</sup> David M. Halperin, *What Do Gay Men Want?: An Essay on Sex, Risk, and Subjectivity* (Ann Arbor: University of Michigan Press, 2009).

Throughout *Touching Menace*, I argue that the abrasive generativity of AI rhymes with the generativity of blackness and queerness. That is, via its connection to the transatlantic slave trade, I understand blackness to involve an ongoing confrontation with one's existence as a living anachronism and too plastic form whose plasticity makes distinctions between normative categories thinkable. Further, I understand queerness to involve an ongoing confrontation with one's existence as product of and catalyst for polymorphous temporalities at the same time that the open secret of oneself grounds knowledge production as such. If these forms together articulate the frictional deterritorialization of a body and its frictional reterritorialization elsewhere, then reading them as analogous to aspects of artificial intelligence makes it possible articulate the real strife of technological becoming, strife that is difficult to access if one does not think within histories of what it actually means to become a living abstraction. To that end, blackness and queerness are but two forms through which to complicate the dream of AI. Through reference to other frictional forms of existence, one may well elaborate this imaginary in different but equally valuable directions.

That said, each chapter centers a videogame that, I argue, goes beyond merely representing blackness and queerness as if they were stable objects in the world. Rather, these games do blackness and queerness via the ways in which they construct worlds suffused with categorical crisis and renewal, and in so doing they foreground how these forms are ongoing processes that construct aberrant bodies without ever completing them. I chose videogames as my primary objects of study because they are computational media that can do the world in this way. That is, videogames simulate aspects of the world within their processes and they task the player with enacting and embodying those processes as they engage with and augment the game's representational content. To play a videogame then is to encounter and become the

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medium for computational thought in action. That said, while I do not get down in the weeds to read these games' code for how they enact their objects, I instead focus on reading these games for their mechanics and narratives, and I argue that at that level of world-making they bear a deeply analogous relation to the processes of blackness and queerness. Importantly for this project, they also do blackness and queerness in connection to thematizations of AI in ways that afford novel and estranging readings of the intersections between the three. Further, as videogames are a spatial art form and as each of *Touching Menace*'s games emphasize extensive exploration of and experimentation with their worlds, using them to theorize artificial intelligence foregrounds the weird ways in which AI's stories of the self hinge on abjecting and near-abjecting co-terminousness with the space that one is and is in.

My concern with spatial paradox — with being a thing that walks the space that it is and its connection to subjectivity stems from *Touching Menace*'s starting places. That is, I began this research with a twinned concern with gothic monstrosity and with artificial intelligence writ large. My starting questions were simply, "What is a monster?" and "What is AI?" In the process of answering these questions, I came to understand monstrosity as a material effacement of conceptual limits that produces a category crisis — an existence wherein one is several things at once, even as those several things are, or at least appear to be, mutually exclusive.<sup>12</sup> This crisis — this collapse of distinctions, or rather, this collapse of the digital back into the analog — was and remains most generative for me when it produced an indeterminate relation between inside and outside, self and other, now and then — and this, because these are foundational distinctions

<sup>&</sup>lt;sup>12</sup> I arrived here primarily through interweaving Kristeva's theory of abjection, Agamben's theory of bare life, and Jack Halberstam's theorization of gothic monstrosity as category error. See: Kristeva, *Powers of Horror*; Agamben, "Homo Sacer: Sovereign Power and Bare Life" in *The Omnibus Homo Sacer;* and Jack Halberstam, *Skin Shows: Gothic Horror and the Technology of Monsters* (Durham: Duke University Press, 2006).

on top of which we construct our sense of self and world. In the absence of these distinctions, monstrosity becomes an engine for the production of differently habitable space through the transformation of a potential subject into a standing reserve for the elaboration of another body's potentials. Effectively then, monstrosity is a kind of ontological ambivalence that threads together knowledge production, subjectivity and its collapse, and worlding, such as to produce human and inhuman bodies that are sites of and catalysts for a world's renewal vis a vis its destruction. Given its connection to abjection, I, of course, came to see AI as a kind of monster that makes monsters. By this I mean that I came to see AI's stories of the subject as forms of categorical indeterminacy that unmake all that they touch. Though this early concern with monstrosity is not centered explicitly within this dissertation as it is, the journey from there to here does remain a conceptual support for all aspects of this work. More so, it remains a conceptual support that allows *Touching Menace* to really open onto the production and maintenance of various kinds of ontological ambivalence within the stories that artificial intelligence tells us about ourselves.

#### V. Chapter Summaries

Within *Touching Menace*, I investigate AI's stories of who we are through three chapters that build on one another in order to articulate the contours of how the digitally-inflected present both threatens our abjection and tempts us towards it.

In chapter one, I read the 2015 videogame *SOMA* and the 2000 novel *House of Leaves* in order to argue that computation subjects those who become entangled with it — those who interact with and are (re-)organized by these tools — to a kind of abrasive plasticity and weird temporality that is structurally analogous to the plasticity and temporality of blackness. In order

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to do this work, I draw on theories of how blackness has been constructed in connection to the transatlantic slave trade so as to mark the Black body as the product of that trade, and more so to mark it as the hinge between the human and the nonhuman, which being both and neither at once, makes their distinction thinkable. Within this framing, a constitutive feature of blackness is an ongoing confrontation with one's existence as both I and it, simultaneously and irreconcilably. This simultaneity turns the Black body into a source of conceptual fecundity as it serves as a site for the collapse of categories and the construction of new ones. That is, it serves as a site for the world's becoming newly continuous or analog in order to become newly discrete or digital. In this way, blackness prefigures the ontogenic potentials of control societies and how, within them, individuals behaviors are captured as data that is then aggregated, transformed, and re-enfleshed as behavioral manipulations. This re-enfleshment echoes how stereotypes are enfleshed via processes of racialization, at least insofar as they limit and redirect the potential movements of those bodies. Further, where blackness's ambivalent thingliness structures a strange temporality in which the blackened wait for a still to come past — wait for an origin in something other than racial capitalism — its resonance with digitality may be used to read the ascension of control as less a forward or backward march towards an all too thinkable future or past, and more as the production of a digital interval. I mobilize SOMA to make this case through attention to its setting, its thematization of "black blood" as a substance that renders all things programmable and thus computational, and its thematization of artificial intelligence as an engine of speciation. Further, I argue that SOMA illustrates how AI is not limited to a set of real objects and rather functions as a current in which the potentials of the world circulate. I further argue that SOMA opens onto a theory of videogame play as an especially vivid form of becoming the flesh of a machinic mind. Dilating on this point, I then turn to House of Leaves and use its remediation of

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computation's vertiginous translatability and its paradoxical temporalities to show that the digital interval is one in which our data and their circulation produce a profusion of temporal possibilities, which — being irreconcilable, yet simultaneously true — combine to form a period of waiting and suspension in which these possibilities accumulate at the same time that each becomes less and less able to be actualized.

In chapter two, I read the 2007 and 2011 videogames Portal and Portal 2, and the 1929 novel Passing in order to theorize opacity as a precarious and barely livable drama of categorical capture and escape. That is, where opacity has become a key term of resistance within machine learning discourses and within surveillance studies, I intervene in order to show that opacity is not a reliably liberatory quality that must be secured, so much as it is a fraught process that coproduces the very epistemological prodding that it resists. With respect to artificial intelligence, the desire for an artificial mind is a desire to render the mind completely knowable, reproducible, and technical, and this despite how the mind is, in fact, one of the most opaque parts of ourselves. In both our encounters with one another and with ourselves, we remain only ever partially available to investigation and it is this partiality that motivates ongoing investigation - motivates the diverse and improvisatory epistemological prodding that we call relationality. This inaccessibility is part and parcel of what it is to be a thing and to encounter one. Thus, opacity must ever be framed in terms of how the opaque are known unknowns that, having partially emerged from the background din of undifferentiated existence, are available as living questions, living sites and catalysts for knowledge production. In this way, to be opaque is to be as if a person of interest before the security state, or as if a semi-closeted queer body compelled to endlessly disclose the truth of itself. It is to navigate and in many ways to be a "situation" in which the life genres through which the world recognizes itself become

increasingly ambivalent sites and increasingly precarious forms of investigation and worldmaking. I make these points via the relationship between the *Portal* series two gender undecidable characters — one, the player's under-described avatar, Chell, and the other, their AI antagonist cum companion GLaDOS. Here, Chell stands in for the epistemologically prodded object of knowledge, GLaDOS stands in for the epistemologically prodding gaze of the technological assemblage, and the game's core mechanic — traversing space via portals that fold space — echoes how machine learning draws connections and inferences via the production of extremes. I then further distinguish between opacity and invisibility via the novel *Passing*, via how nonwhite and queer bodies hide in plain sight, and via how this hiding is an utterly precarious state that occasions knowledge production as much as it refuses it.

In chapter three, I read the app Replika and the 2017 videogame *Prey* in order to argue that where artificial intelligence is understood as mimic par excellence, that mimicry produces a space that captures and repurposes the interior space of the user in a manner that is not dissimilar to empire's manner of capturing space via metonymic extension. Here, the computer's ability to empathize with the human — truly its ability to mimic, or rather, to simulate a theorized interior such as to actually produce that interior — turns the human into something like a discrete state machine, but one that is able to simulate digital computation much as digital computation is able to simulate all other discrete state machines. It is as if empathy indexes a becoming-simulation for both the empathizer and the empathized with, and this in order to the turn the user into something ontologically equivalent to and thus interchangeable with digital space and Cold War enclosures.

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#### Chapter 1

#### Abject Intervals: On Blackness and the Digital

"You have any to spare... I need it you know... The black blood of the WAU... The black blood in my veins will save me...." So speaks a predatory machine as it scans the ocean in search of beings like yourself: a hybrid thing composed of most of a dead woman's corpse, computer hardware of uncertain type, lights, cameras, and clothing, all guided by the memories of a man who lived a century before, all bound to one another and insulated against further decay by the black blood the other seeks, the abyssal black structure gel that renders all things programmable by the warden of this place (fig 1.1). That black blood serves as the material and ontological ground out of which your digital world — the world of *SOMA* — emerges, and it turns your existence as the living if machinic dead into a process of racialization that maps the translatability of digital objects to the fungibility of Black bodies within the transatlantic slave trade. Thus, *SOMA* — a videogame set after the death of humanity and our terrestrial neighbor species — articulates how digital existence is predicated on a contestation of the pastness of the past that subjects those entangled with computation to an interminable period of waiting — akin, I want to say, but not identical to the interminable middle of the transatlantic slave trade.

<sup>&</sup>lt;sup>1</sup> Thomas Grip, *SOMA*, (Frictional Games, 2015).



Figure 1.1 "Death Image 16" (Soma)

#### I.

When I speak of digital existence in this chapter, I mean to reference the manifold ways in which persons, communities and things interact with and are (re-)organized by computation in its full range of forms. If what a person, community, or thing is is as much the physical body as it is the concepts that are made to inhere in that body through its movements (and stillnesses) in relation to others and those others' movements (and stillnesses) in relation to it, then digitality is existence as one in whom computational logics inhere by virtue of one's activity and relationality. It is existence as one continually (re-)made in concert with these logics. *SOMA* thematizes this enfleshment via its narrative of cyborg abjection and it actualizes this enfleshment via its status as a computational tool and an imaginative object whose interactions with the user reorganize them both such as to foreground their entanglement as an emergent I that is also an it. It is this foregrounded it-ness, this confrontation with the thingliness of the self that gives digitality its flavor of waiting and suspension. To be given to oneself as both a symbolic being and a material that subtends that being — subtends it while resisting containment within its forms of knowing and control — is to be given to oneself as, paradoxically, self and other at once. In this state, one waits for resolution whence one will be recognizably one and not the other, and one waits because that resolution can never come. For despite capital's insistence on structuring subjectivity as possessive such that subjects are legible as subjects only to the extent that they own their own bodies and, often enough, those of others, digital subjects can never claim to belong only to themselves.

Being thus the property of another that one also is, digitality bears structural similarities to the positions of being subaltern, woman, queer, and child. While differently constructed and very differently marked, these forms of existence are all constructed, in part, out of their objectification by and for others. These existences as the (partial) objects of others — the possessions of others — are often though not always constituted as such through the potential to be violently destroyed at the hands of the other. For that violence is a means of temporarily suppressing all the ways that the possessed resists conceptualization as the possessed. If this multitude of forms each has something to teach us about digitality (and about existence more broadly construed), I argue that blackness as understood through its connections to the transatlantic slave trade is an especially potent correlative for understanding the wait that constitutes digital existence. This is not to argue that blackness or the the trade has a one-to-one or otherwise paradigmatic relation to digitality, for where race is an evolving "set of sociopolitical processes that discipline humanity into full humans, not-quite-humans, and nonhumans"<sup>2</sup> it dovetails with, informs and is informed by the digital, but it retains a difference

<sup>&</sup>lt;sup>2</sup> Alexander G. Weheliye, *Habeas Viscus: Racializing Assemblages, Biopolitics, and Black Feminist Theories of the Human* (Durham: Duke University Press, 2014), 4.

that can be read in the lived realities of Black people. Rather, I am arguing that blackness can teach us to how to parse the temporal weirding of becoming digital and how that weirding is closely connected to an abrasive plasticity. For, in the afterlives of slavery, blackness may be understood as a kind of strange temporality — a kind of existence wherein the Black body is held in a tense and endless present from whence it reaches for a still to come past in which it will be mediated by something other than racial capitalism.<sup>3</sup>

This formulation of the Black interval is Kara Keeling's and she arrives here by way of Franz Fanon's writings on how he, as Black man, waits for the world to give him to himself as something other than a doubly conscious captive of the White gaze's need to reify its conceptualizations of itself at the expense of colonized Blacks.<sup>4</sup> That state of being captive to another's concepts is a loss of ontological resistance, a loss of one's tether to alternative ontologies that could oppose imperialist claims on oneself.<sup>5</sup> In Édouard Glissant's elaboration of Fanon, this loss of ontological resistance is a loss of one's origin in alternative ontologies, such that rather than myth, history must serve as the figurative ground out of which one emerges.<sup>6</sup> Thus, one becomes an historical appendage of someone else's creation stories, or stated otherwise, one becomes the material means — the medium — through which those stories are told. For Fanon, this period of existing for the other that one is grafted to can only end with total, global decolonization, but, as decolonization, in his framing, is an emancipatory rupture, it is

<sup>&</sup>lt;sup>3</sup> Kara Keeling, *The Witch's Flight: The Cinematic, the Black Femme, and the Image of Common Sense* (Durham: Duke University Press, 2007), 35-40; Kara Keeling, *Queer Times, Black Futures* (New York: New York University Press, 2019), 41.

<sup>&</sup>lt;sup>4</sup> Franz Fanon, *Black Skin, White Masks* (New York: Grove Press, 1967), 89-90.

<sup>&</sup>lt;sup>5</sup> Fanon, 89-90.

<sup>&</sup>lt;sup>6</sup> Édouard Glissant, *Treatise on the Whole-world*. Translated by Celia Britton. (Liverpool: Liverpool University Press, 2020), 21.

always already foreclosed by how the imperial order continually remakes itself via displacements, thefts and other forms of rupture that deprive its targets of their connection to alternative stories. Thus, in this interval, the Black diaspora can't but wait for a conceptual origin that can give them back to themselves without re-entrenching the very processes that sever them from themselves.

If digitality is constituted by a structurally analogous kind of interval, it is because the longing of diasporic Blacks for a world freed from the processes of racialization is another kind of confrontation with the thingliness of the self. If thingliness is the ontological plenitude of a body and the ways in which that plentitude resists, or rather exceeds, containment within another body's conceptual and material uses for it,<sup>7</sup> then therein lay the potential for a different order of the world. However, the actual lived relationship between the oppressed and their thingliness is often ambivalent at best, for this plenitude has historically been produced via the bare violence that subtends oppressive structures. It has been so formed in order to open up the categorical possibilities of the body and to thereby turn it into a fungible resource through which to invent new concepts of the nation and the subject's relation to it. That is, where this state of being a thing, a monster, and a deject results from the material effacement of conceptual limits such as to produce an indeterminate, but generative relation between inside and outside, self and other, now and then, this state has served as an engine for the production of differently habitable space via the transformation a body into a standing reserve for the elaboration of another's potentials. Specific to blackness, the Black is enfleshed with the endless plasticity, commodity form, and killability of blackness, but, in its thingliness, the Black reveals itself to be still more than these concepts which mean to contain it and make it useful to other bodies. At the same time, where

<sup>&</sup>lt;sup>7</sup> Martin Heidegger, "The Thing," in *Poetry, Language, Thought*, Translated by Albert Hofstadter. (New York, Harper & Row, 1971), 163-180.

blackness has historically been enfleshed as kind of indeterminacy, a kind of existence as a body so fungible, so endlessly plastic that it can serve as the hinge between the human and the nonhuman,<sup>8</sup> the conceptual escape of thingliness is already (semi-) accounted for in the concepts that capture Blacks. Thus, in the interval, Blacks must simultaneously turn towards their thingliness as they turn away from it.

I argue that SOMA frames the hold time of digitality, its constitutive suspension in the moment just before one resolves into I or it, as a similarly ambivalent confrontation with the thingliness of the self. It does this by mapping the Black interval to the workings of discipline and control and it thereby turns these modes of governance into engines for differently structured confrontations with the it that one is. For within SOMA, the imperial ruptures that catalyze a loss of ontological resistance become disciplinary inceptions as one passes through correlatives of the paradigmatic spaces of the prison, the plantation, the hospital, the school, and the slave ship.<sup>9</sup> As, within discipline, one is ever beginning again, progression through these spaces is progression through a series of origins such that one is ever moving towards the next new beginning of oneself, the next new past of oneself. Where control emerges from and supplants discipline as the reigning mode of governmentality and, further, where control is predicated on an accumulation of origins rather than a passage from one to the next, SOMA theorizes the turn to control that subtends computational cultures as a turn from an interval predicated on waiting for the next new past of oneself to an interval predicated on waiting for habituated form to emerge out of the endlessly plastic, endlessly extensible thing that the world has made you.

<sup>&</sup>lt;sup>8</sup> Zakiyyah Iman Jackson. *Becoming Human: Matter and Meaning in an Antiblack World*. (New York: New York University Press, 2020), 3.

<sup>&</sup>lt;sup>9</sup> Michel Foucault, "Discipline" in *Discipline and Punish* (New York: Vintage Books, 1995): 134-229; Simone Browne, *Dark Matters: On the Surveillance of Blackness* (Durham, NC: Duke, 2015): 36-42.

II.

Before elaborating further, I would like to quickly flag the the idiosyncrasy of this reading and of the concatenation of fields and methods that subtends it. SOMA is not ordinarily read for what it can teach us about the afterlives of slavery as resonant with and within digitality, nor are these themes explicitly or didactically laid out within its narrative, its mechanics, or its surrounding lore and fan cultures. As it was only released in 2015, the critical conversation surrounding this game has so far focused on unpacking the how-to of its design and resulting atmospherics. I arrived at my reading of it through attention to quiet, unelaborated moments that taken together are strongly suggestive of heretofore untapped ways in which blackness and computation must be read together if one is to account for the abrasive plasticity and temporal weirding of becoming digital. Key among these moments are: 1) Discovering near to the end of the first level that the game is set at the bottom of the Atlantic Ocean at coordinates 35°13'2.26"N 36°1'46.78"W — an area just north of the West Africa to America and West Africa to Europe routes of the Middle Passage; 2) Encountering the aforementioned structure gel as it binds organic and inorganic matter together in strange assemblages that efface categorical distinctions between life/death, machine/animal/person, past/present, space/thing-in-space, and being/ nonbeing, and further encountering multiple, explicit descriptions of structure gel as "black/ Black blood"; 3) Engaging with the WAU, the governing AI of this space, as if it were an engine for speciation out of whose body (the ship and the structure gel) beings of several kinds emerge but remain indeterminately tethered. That is to say, engaging with the WAU as if it were a progenitor or partner with whom one's categorical relationship has been "thrown into unrelieved crisis."<sup>10</sup> Where SOMA's overall arc is a quest to preserve the "last of humanity" in a

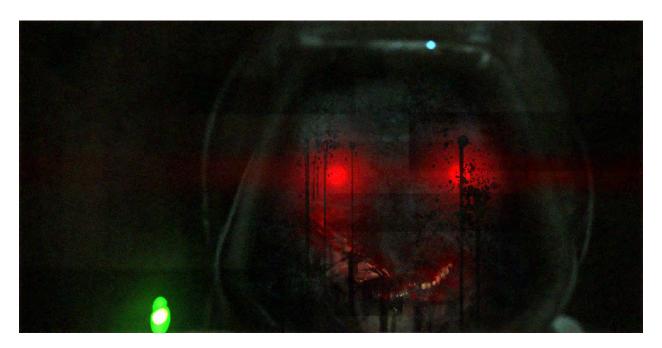
<sup>&</sup>lt;sup>10</sup> Hortense J. Spillers, "Mama's Baby, Papa's Maybe: An American Grammar Book," *Diacritics* 17, no. 2 (1987): 76.

categorically pure and ontologically untroubled VR, these moments draw that task into a network of associations that resonates across Black studies, game studies and media studies.

These connections are especially pointed when read within a theoretical framework that understands existence as processual and always several, and thus only ever conceptually stable to the extent that habit and perspective make it appear so. As has been well elaborated, player subjectivity within a videogame is a complex negotiation of one's identification as and with one's avatar and with other in-game characters, such that one's movements in the game world as well as one's failures and successes constitute an in-game identity formation that may or may not reproduce or complicate one's out-of-game interpolations. To that end, there is provocative reading to be given on how SOMA engages with its players as subjects that it then asks to negotiate their dis/identifications with Simon, a dead White man from early 21st century Canada, with the WAU, and with the assorted others that populate their world, much as there is a further reading to be given on how the game asks players to negotiate their understandings of themselves as subjects whose capacity is extended and refuted by the game's mechanics and difficulty settings.<sup>11</sup> And yet, attending to the structural similarity of digitality and Black non/ being means, however paradoxically, setting aside direct engagement with the game's subject formations in order to attend to how the game constitutes the player both as an affect and as the thingly ground of another. For where diasporic blackness is a negotiation of one's proximity to the ongoing effects of the transatlantic slave trade as one who has been marked as the product of that trade, it is a negotiation with one's existence as the plastic ground out of which the potentials of others emerge.

<sup>&</sup>lt;sup>11</sup> Patrick Jagoda, *Experimental Games: Critique*, *Play, and Design in the Age of Gamification*. (Chicago: The University of Chicago Press, 2020), 191-220.

It is only through this concatenation of fields and approaches that we can begin to approach the complicated ways that digital becoming extends, intensifies, and invents forms of lived abjection that are, presently, unaccounted for in canonical media studies readings of human becoming in and through our machines. For, despite the surfeit and still-growing repository of OS-addled übermenschen, hypnogogic dystopias, and self-liberating voice assistants, extant narratives of digital being (in the form of progress narratives or critiques of the same) ever frame it as constitutive of a march towards a future in which the human body's capabilities are extended such as to re-entrench possessive subjectivity, our collective temporalities are pruned into one that beats with the speed of war and market volatility, and humanity is reconstituted into objects of a sadistic reason, a maudlin sentimentality, or a conspiracy laden psychosis as it were. There is truth in these framings, as computational cultures do produce conceptual and material tools that redefine the limits of the flesh, much as they also produce tools that (re-)produce that flesh in commodity form whose value hinges on its concatenation with markers of sex, gender, race, socioeconomics and dis/ability status. Yet, I argue, these futures are so thinkable and so much a repetition of the neatly delineable categories and training routines of disciplinary society that they miss some of the strangeness of control and how it operates in and through digital objects. I argue that, rather than an inevitable progression towards the next new stage of the self, the species, or the world, this strangeness instead consists of a suspension — one in which digitality turns what it touches into a field of surplus histories that together compose an interval, a being on pause that refigures human potentials - for being with one another - even as it interrupts the actualization of those potentials into fully embodied capacities.



III.

Figure 1.2 "Death Image 7" (Soma)

In line with the severance and repeated beginnings that constitute disciplinarity and the Black interval, *SOMA* begins (at least) three times in relatively rapid succession. First, the player sees a series of still images and hears a woman, Ashley, and her male friend, Simon, speak while an alarm rings out in the background. As the alarm grows more insistent and he worries aloud that "there is never enough time," the sound of their car crashing erupts and ends the sequence. Second, the player begins again as Simon, now awake from that nightmare and searching his apartment for contrast dye. As he was severely injured in that accident, he is soon to undergo an experimental scan that will hopefully save his life, or rather, will delay his death. The player is thus tasked with navigating this 3D setting via a first person perspective, consuming a substance that will make his body and his mind machine readable, and proceeding to and through the lab where the scan will take place. If successful, this experiment should turn his existence as the

dying, or rather, as the walking dead, into something more categorically familiar and clear. It should hold off the rapid advance of death, which is to say, the rapid advance of a future in which the conceptual, material, and social forms that collectively produce him and render him more or less recognizable to himself are severed at the point of connection that he is. Whether or not the experiment was successful remains an open question as Simon is scanned and the world falls away. He does not sleep. He does not wake. But when the darkness lifts in this the third beginning, Simon is in an industrial space whose walls and floors are covered in blood, dirt and a texture of decay that implies desperation, violence, and sudden, putrefying isolations. This is Pathos-II, the second suffering, a research station at the bottom of the Atlantic where blooms of Black blood revive memory as data that moves strangely made machines through scenes that render them indistinguishably both place and trace. Here, the pneumatic lock on the outside of the door indicates that the player/Simon is the thing in need of containment.

I am demarcating these beginnings by their abrupt breaks in Simon's relation to time and space. At first, he experiences a traumatic memory turned nightmare, as his dreaming self recognizes that this is a memory and one that he has relived several times before. Second, he experiences himself as contemporaneous with his apartment, though the silence suggests that something about his spatial relation is incorrect. Third, in Pathos-II, he experiences himself as anachronistic to the space that he is in, but also potentially coterminous with it to the point of abjection. Later in the game, there will be at least two more beginnings — once when Simon transfers his mind to a new dive suit-corpse-computer assemblage, thus producing two simultaneously "living" versions of himself, and once, at the very end, when Simon copies himself onto and launches the ark, thus producing a VR version of himself that simultaneously "lives" in outer space while he remains on the bottom of the ocean, alone and in the dark for

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what I presume will be or will feel like an eternity, alone with the monsters that he also is, left behind by the ship (the future, the community) that his degradation makes possible (fig 1.2). These too mark a changed relation to space and time as, in the former, Simon becomes his own physical doppelgänger, and, in the latter, Simon exists as the past and contemporary of his VR self whose virtual embodiment means absolute conterminousness with the space that he is in, the space that he now is. In each of these scenes, a changed relation to time and space conditions a changed self, a new self, but one in which the borders between new and old, and self and not self become increasingly undecidable. Thus, these beginnings turn what initially appears to be a "start from zero" into a kind of endlessness suggestive of the ascension of control within disciplinary space.<sup>12</sup>

According to Gilles Deleuze, contemporary industrialized states are undergoing an ascension of control logics wherein those ruled by these societies, divviduals, are increasingly subject to "a universal modulation" made possible by their capture as data points able to be endlessly intervened on and reconfigured.<sup>13</sup> Compared to the disciplinary logics that are their antecedents and contemporaries — logics that favor the enclosure and its ability to gather individuals into masses — control favors the computer and its ability to endlessly disarticulate individuals into data points, or, more precisely, into numerically organized representations of themselves, representations that circulate and transform without beginning or end. This change from a disciplinary to a control society is a change from the regularizing demarcations of the industrial clock in which "one was always starting again" to an endless and increasingly dense present in which "one is never finished with anything" and is instead subject to "limitless

<sup>&</sup>lt;sup>12</sup> Gilles Deleuze, "Postscript on Societies of Control," October 59 (1992): 4.

<sup>&</sup>lt;sup>13</sup> Deleuze, 7.

postponements."<sup>14</sup> Further, it marks a transition from the subject's pursuit of symmetry with the spaces that shape them to the subject's transformation into a space from which the machine harvests its materials. In our everyday lives, those materials are gestural, accidental and habitual traces of one's time in the world, materials that are captured through one's clicks, likes, views, purchases, and requests for access, aggregated with the traces of others framed as categorically similar, sold as the profitable fruits of machinic labor, and redeployed as fine-grained behavioral manipulations that organize the user anew.<sup>15</sup>

That *SOMA* enacts this turn to control within both its narrative and its material existence as a computational object while alluding to blackness and the Middle Passage complicates the seamlessness of Deleuze's formulation of control. For within *SOMA*'s framing, this endless modulation is not the smoothness and interchangeability of a disembodied self, nor is it a purely positive embrace of one's monstrousness. Rather this endlessness is predicated on the abjection of having borders so plastic and porous that one accumulates time and connections in such a way and at such a pace that one ever remains unresolved with respect to oneself. Looking again at *SOMA*'s successive beginnings, even as they collectively turn from discipline to control, individually, they evidence a kind of enmeshment that foregrounds and forces the player to contend with their anachronism in the way that blackness has been constructed as a heightened anachronism that blackened peoples must contend with. Take the second of these early scenes which, to my ear, opens with the wrong kind of silence. That is, where Simon wakes within a studio apartment in downtown Toronto circa 2015, the texture of the quiet suggests a larger and

<sup>&</sup>lt;sup>14</sup> Deleuze, 5.

<sup>&</sup>lt;sup>15</sup> Luciana Parisi, "Reprogramming Decisionism," *E-Flux*, no. 85 (October 2017); Shoshana Zuboff, *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*, (New York: PublicAffairs, 2019).

perhaps more industrial space than a studio of that size in that location. It's subtle, but it works to interrupt the sonic feedback loops through which a body orients itself in space. Not quite disorienting, but somewhat unsettling, the silence suggests that either the space or the player's body is not what or where they think it is. Once Simon begins again 89 years later, the silences remain deeply unsettling, but now they do seem to approximate the decaying industrial spaces that one is in. That Simon's apartment sounds wider and more industrial than it is calls forward to his arrival in Pathos-II and, more so, suggests that he is already there and that this scene is a memory that is being loaded alongside the rest of his scan. His being as a digital thing is thus grounded in the un-resolvability of a past that may or may not be past, and which cannot rightly be decided because, once he was scanned — which is to say, once he became digital — Simon lost even the possibility of an orderly relation to time, even as he still needs it for the sake of the most bare bones sense of himself.

This un-resolvability and temporal loss stems from how our data function as records of the histories that constitute each of us in our similarity and our difference. These data are pasts that become newly present, pasts that are re-presented through their interference in the body's movements.<sup>16</sup> Granted, the body, whether analog or digital, was and is always a set of pasts that are not past, for we catch one another's mannerisms via proximity, we integrate them via our habits, and we transform them via integration with our tools. Much as with human-to-human transfer, to have one's histories captured by a machine is not to lose them, but to see them reproduced in the body of another, here the machine's body as much as the bodies of other divvidual subjects who are organized in aggregate with oneself. Thus, through the processes of a control society, a person's temporalities continually infect their machines, much as their flesh is

<sup>&</sup>lt;sup>16</sup> Henrí Bergson, *Matter and Memory*, trans. Nancy Margaret Paul and W. Scott Palmer, (New York: Zone Books, 1990). Gilles Deleuze, *Bergsonism* (New York: Zone Books, 1988).

continually re-infected by the temporalities of those machines. If existence as a living organism involves an ongoing temporal accrual and anachronism, then digital existence is particular insofar as it intensifies this ground truth to the point of making an ongoing confrontation with one's anachronism constitutive of who and what one is. This is another way of thinking digitality's confrontation between being an I and an it. For one way to think the thingliness of the self is to think it in terms of an unassimilable history that turns the body into a thing — a thing that is largely indifferent to the subjectivities that emerge from it as a trace of itself.<sup>17</sup>

### IV.

Dylan Trigg formulates the thingliness of the body — its mute indifference and conceptual escape — as deriving from near incomprehensible material histories that suffuse the flesh and tether it to the greater ontological plentitude of the world beyond the self. Through reference to fossils that are older than Earth, he argues that the presence of these ancient traces intervenes on narratives of human existence as fundamentally tied to the Earth and therefore fundamentally invested in the Earth-bound subjectivities that arise from and through our forms. Rather, he argues that these traces infect the body's history with an origin that is "in some sense opposed to human existence, at least insofar as it destabilises the experience of being a subject by establishing an unassimilated depth within the heart of familiar existence."<sup>18</sup> That is, where this infection is a partial severance, the history that binds the human to its home bifurcates such that one becomes a being of irreconcilable origins, a being who on the one side is host to an alien history, and on the other side is itself a parasitical history feeding on an extraterrestrial form. He

<sup>&</sup>lt;sup>17</sup> Dylan Trigg, *The Thing: A Phenomenology of Horror*, (Winchester: Zer0 Books, 2014), 13-40.
<sup>18</sup> Trigg, 8.

further illustrates this point through reference to Pascal's dread of cosmic insignificance, a dread wherein a human speaks and casts off their voice as a trace of themselves, a trace in search of other traces, a trace that receives no reply from the void's indifferent silence.<sup>19</sup> Where that reply would serve as a resolution, a confirmation that one speaks, is heard, and is spoken to, a confirmation that one is a firmly rooted thing that casts off and receives the traces of others, in the absence of that stabilizing reply, one is forced to confront the possibility that one is the trace, the thing cast off, the thing that is at best a mere appendage waiting to be taken up by the indifferent other that one belongs to. And so, one waits indefinitely for the reply that will confirm one's priority and one's place.

If, once touched by the impossible, the planet produces the living body as a thing bifurcated between unassimilable origins, then, I argue that, once touched by the exigencies of our machines, the living body produces the dividual as yet another unassimilable temporal proliferation, one constituted as a thing that waits for a resolution that may never come. To be clear, though I draw on Trigg's formulation, I am not arguing that the digital is older than time. I am arguing that it is a similarly cataclysmic cleavage, one that effectuates not a traumatic break, but a partial severance that festers with surplus time. That is, where data are historical traces of our time in the world, becoming digital means contact with and reconstitution by these traces of self and others at scales and across spatial and temporal distances that would have previously been unthinkable. The indeterminacy of when Simon is in his apartment exemplifies this, as does the structure gel/black blood that renders a dead woman's corpse interoperable with his memories and with a scuba suit full of technological accoutrement. As a programmable substance that makes all other substances programmable, structure gel mixes the histories, habits,

<sup>&</sup>lt;sup>19</sup> Trigg, 19-20.

and capabilities of all that it touches such that newly emergent beings encounter themselves as things of irreconcilable origins, things grafted to histories that they cannot rightly say they "own." In this way, structure gel stands as a metaphor for the becoming digital of the world — a becoming in which all those who are touched by digital logics lose their ontological resistance as they transformed into an I that is also an it, that is, an I confronting the unassimilable time that suffuses its flesh.

It is as if, once touched by the digital, one is held tense in the nexus of its superabundant connectivity, captive to a world that one also is. So held, one exists as a medial being on pause, a suspended thing for whom "neither time nor history, nor historiography and its topics, shows movement, as the human subject [the I that one is] is 'murdered' over and over again by the passions of a bloodless and anonymous archaism."<sup>20</sup> I take this framing from Hortense Spillers' theorization of the production of blackness via the transatlantic slave trade. For Spillers, slavery transmogrified the Black into the flesh understood as a "zero degree of social conceptualization... a primary narrative [whose hieroglyphics are] its seared, divided, ripped-apartness, [as it is] riveted to the ship's hole, fallen, or 'escaped' overboard."<sup>21</sup> For Spillers, the flesh is the fact of existence in the absence of a viable path to liberalism's possessive subjectivities and it is a state of categorical crisis in which the slave's abjection opens up categorical stability for White subjects, much as the Middle Passage, "[opens] up of the entire Western hemisphere for the [violent de- and re-stabilizations] of enslavement and colonization."<sup>22</sup> In the context of theorizing digitality, reference to the Passage and to Spillers'

<sup>&</sup>lt;sup>20</sup> Spillers, "Mama's Baby, Papa's Maybe: An American Grammar Book," 68.

<sup>&</sup>lt;sup>21</sup> Spillers, 67.

<sup>&</sup>lt;sup>22</sup> Spillers, 71.

framing of it turns us toward the potential stakes of becoming a medial being. For, if digitality is a state of being endlessly grafted to origins one can't claim, then it is prefigured in the becoming flesh of Blacks, especially as the heterotopic Passage itself functioned as an engine of partial severance that turned Africans into a captives of ontologies that were not their own.

I certainly read this connection into SOMA's setting at the bottom of the Atlantic and more so, where structure gel is referred to as Black blood, I read the captives lost to the sea as yet another history that this digitizing substance is grabbing and grafting to those who emerge from it. At the same time, I also read their remains as this digitizing substance, at least where the trade's production of blackness as an existence without ontological resistance has hinged on capture and temporal grafting. In an exegesis of how blacks serve as an indeterminate background condition for the elaboration of subjects and worlds, Zakiyyah Iman Jackson has elucidated how the trade made the Black body black by enfleshing the concept of pure living plasticity, and further doing so via narratives of embodied time. That is, in order for European, White men to think themselves as self-same and at the forefront of a teleological evolution of the species, their Enlightenment philosophies conceived of race as a hierarchy of more or less human, and more or less anachronistic forms. Occupying the nadir of this hierarchy, the Black female slave was conceived of as a hinge between the human (the ever-advancing present/the future in the present) and the animal (the human's absolute historical antecedent) such that this slave was rendered effectively both and neither at the same time, and such that it thereby served as a transition point between the human and the animal that made their distinction thinkable. As this edgeless mediant, blackness became the nonbeing of pure plasticity where "plasticity is [understood as] a mode of transmogrification whereby the fleshy being of blackness is experimented with as if it were infinitely malleable lexical and biological matter, [and] such that

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blackness [was and] is produced as sub/super/human at once, a form where form shall not hold: potentially 'everything and nothing' at the register of ontology."<sup>23</sup>

Drowned in this fountainhead of categorical crisis, those captives' still present absence marks the Atlantic as a heterotopic middle, a medial space in which fantasies of European telos marked captives as so absolutely anterior to the human as to be its that somehow also lived, monstrous things that in their abjection became a fecund resource for conceptual and economic development, even as, by virtue of their resistance, their ability to somehow be property that steals itself, the resource revealed itself to be far more than can be managed, revealed itself to be a threat whose full capacities may yet destroy the world it was used to build. Set here, *SOMA* allows us to read this medial space and its sunken, decayed remains into the contemporary production of digital subjects (fig. 1.3) and it turns digitality's anachronistic and constitutive experience of being split between I and it into an experience of being "a vast background without boundaries in time and space" and of, simultaneously, emerging from that very same background.<sup>24</sup> To live as both a space and a thing in that space at once is a paradox, but it is one that is forborne by blackness.

In her theorization of the everyday spectacles that constituted the Black slave as an indeterminate body able to be both person and property at once, Saidiya Hartman argues that the slave functioned as a "vessel" for White enjoyment.<sup>25</sup> Where vessel connotes a space with which to transport the goods it contains, the Black body thus functioned as a pleasurable thing that was also a space for pleasure, and a means of harvesting the same. Where further the slave functioned

<sup>&</sup>lt;sup>23</sup> Jackson, *Becoming Human*, 3.

<sup>&</sup>lt;sup>24</sup> Spillers, "Mama's Baby, Papa's Maybe: An American Grammar Book," 71.

<sup>&</sup>lt;sup>25</sup> Saidiya V. Hartman, *Scenes of Subjection: Terror, Slavery, and Self-making in Nineteenthcentury America*, (Oxford: Oxford University Press, 1997), 21.

as an appendage of the master — as a tool that extended the capabilities of his body — blackness was constituted out of an encounter with self as if one were a trace of a White subject's potentials and self as if one were the ground from which that trace was harvested, the ground out of which the potentials of a differently racialized body emerge. Thus, on the one side, as trace, the Black body supplements White subjectivity, grafting the histories of the former to the latter and thereby maintaining them as an appendage that extends the White body's functions even as they parasitize that body and thereby horrify its need for conceptual stability. On the other side, as ground, blackness is host to an alien agency — White subjectivity — that is fundamentally opposed to it, an alien history that partially severs the Black body from its subjective fruits and, coming between them, renders the latter doubly conscious, partial objects.



Figure 1.3 X-rays of Simon (Soma)

Much then as blackness is a confrontation with one's being as a temporal paradox turned categorical disintegration, so too is one's being as reconstructed via contact with computational

objects. Where data capture turns the body into a field from which to harvest numerical representations of that body, a field to then reseed with the behavioral modifications derived from the fruits of one's being, it casts the body as both a feature of the landscape and a thing that walks the landscape that it is. In this formulation, one is the trace, the fruit, as much as one is the thing that casts off this trace, the field from which it derives. As the field, a body is its data even as it is not, much as that body both is and is not the bacteria that lines its gut and the shed skin that accrues as dust. The digital representations produced by and through the movements of a body and its neighbors, representations that in turn circulate, combine and refigure those bodies as something strange, they ever remain a part of the forms from which they arise, even as they come to encircle those forms and trouble their distinctions between inside and outside, here and there, then and now.

*SOMA* elaborates the temporal weirding of this categorical instability via Simon's relationship to the WAU, a thing that is indistinguishably the setting and Simon himself. Within the game's narrative, this machine, alternately referred to as the warden and Alpha, is an artificial intelligence developed to care for the occupants of Pathos-II, to care for them as life as such, as that which must be kept alive first through management of the station and its life support systems, and, when that is no longer sufficient, through transformation of their bodies into cyborg revenants and through data capture that gathers their memories in order to store, manipulate and rerun them in and as aspects of the station and its objects. The WAU is thus the mind of the ship as much as it is also a set of internal currents that guide, orient and shape its inhabitants. In this latter way, the WAU functions an affect or set of affects that ground Pathos-II's community and make its members legible to themselves as themselves. Where affect is an organizing intimacy that repudiates the distance between I and it, or, stated otherwise, where

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affect is a constellation of pre-personal possibilities out of which individual and communal bodies emerge as fuzzy assemblages of self and other the WAU and everything it is tethered to - which is everything in the world of SOMA - presence less as objects, and more as movements, as currents in which the potentials of a world circulate. The WAU is tethered to the player as well insofar as the player's interpolation into this world via Simon constitutes them as an emergent potential of this Simon-WAU thing and, further, as the it that is Simon's body — the unspeaking flesh that means his movements and elaborates his possibilities before he arises to claim and contain them. Thus, via the medium of gameplay and its (re-)constitution of the player as both I and it, SOMA tethers abjection to pleasure as it abrades the distinction between the player and itself, between the player and one of their computational objects. Where further, an NPC intimates that Simon's memories are one of three sets that may serve as the basis for the WAU's programming, Simon exists as a potential origin of the WAU, a person who once cast off the traces that would become this machine, at the same time his revenant self is also a creation of the WAU, a fragment of this thing cast into the world that it also is. Thus, as Simon and the WAU, as he and the it that he also is, fold in on each other, they intensify their constitutive anachronism until it becomes a paradox in which each thus precedes that which precedes itself.

### V.

For the sake of teasing out this temporal paradox, I would like to briefly pivot to another work whose formulation of digital time can serve to elaborate the paradox of Simon and the WAU's co-constitution of each other. Shortly after its release, this work, the early aughts media studies darling *House of Leaves*, was intensively mobilized to make claims about digitality vis a vis palimpsest subjectivity, the affective foregrounding of simulacra above the concrete real,

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postmodern horror and its uncanny spatial weirding, posthuman gothic and the terror of entanglement, the interplay of text and paratext, the architectural novel, etc.<sup>26</sup> Much as my reading of *SOMA* is idiosyncratic, so too is my reading of *House of Leaves*, for this novel is generally not read for what it can teach us about the abrasive plasticity and atemporality of blackness, let alone the re-entrenchment, intensification, and transformation of these concepts via computation and its imaginary. To that end, though I will briefly engage with Katherine Hayles' reading of this text in order to establish the novel's appropriateness for thinking digitality, I am going to set aside the wider body of theoretical perambulations so as to instead linger over its weird temporality.

In summary, *House of Leaves* is an experimental gothic novel in which a critical exegesis of a film that does not exist braids several trauma-inflected descents into monstrosity together with an incestuous love-triangle, a meta-satire of the intelligentsia's discursive production of all it claims to discover, a class-struggle turned slasher narrative, and a re-staging of the monstrous femme as the necessary hinge between disciplinary and control structures. The house of *House of Leaves* is itself an impossible structure whose interior dimensions exceed the dimensions of its frame by 5/16" and open onto a still deeper (still more interior) interior whose dimensions are infinite insofar as the surfaces that shape this space continually revise themselves, expanding, contracting and (re-)formatting their (still more interior) interiors, all in response to some

<sup>&</sup>lt;sup>26</sup> Katherine Hayles, "Saving the Subject: Remediation in House of Leaves," American Literature: A Journal of Literary History, Criticism, and Bibliography 74, no. 4 (December 2002): 779–806; Mark Hansen, "The Digital Topography of Mark Z. Danielewski's 'House of Leaves," Contemporary Literature 45, no. 4 (December 1, 2004): 597–636.; Fred Botting, "Horrorspace: Reading House of Leaves," Horror Studies 6, no. 2 (2015): 239–53.; Micheal Sean Bolton, "Monstrous Machinery: Defining Posthuman Gothic," Aeternum: The Journal of Contemporary Gothic Studies 1, no. 1 (2014): 1-15.; Rune Graulund, "Text and Paratext in Mark Z. Danielewski's House of Leaves," Word & Image: A Journal of Verbal/Visual Enquiry 22, no. 4 (October 2006): 379–89.; Stefanie Sobelle, "Inscapes: Interiority in Architectural Fiction." Interstices, March 1, 2011.

unknown prerogative. This house is also the book itself whose cover is shorter than its interior pages and whose several typefaces are continually transformed in their spatial relationships with one another and with themselves in a material echo of the character's relationships to the narrative and of the narrative house's rapidly changing walls. By thus echoing the transformations of the narrative house in its typesetting and its binding, what should be recognizably exterior, total and material — the book — reproduces the function of what should be recognizably interior, partial and semiotic — objects of the text.

Observing these features of the text, Katherine Hayles argues that *House of Leaves* deploys this material echo in order to foreground how the materiality of the text "emerges from the interplay between physical attributes and semiotic components."<sup>27</sup> That is, if what a thing is is what it does, then by mirroring the movements of the narrative house in its visual form, the book undermines the distinction between itself as consistent container of a narrative and the narrative as the consistently contained interior. Concerned with advocating for media-specific readings and re-theorizations of subjectivity that center inscription technologies and cybernetic feedback loops, Hayles reads this insistent self-reference as an attempt to remediate the logic of vertiginous translatability that characterizes digital objects. Where a computer may reproduce a digitally encoded song as song, it may also translate that encoding into image, text or even just a different kind of song. This book advances as if it were possible for a physical book to engage in that kind of capacious translatability and, because the specific materiality of the book makes this

<sup>&</sup>lt;sup>27</sup> Hayles, "Saving the Subject: Remediation in House of Leaves," 790.

an impossible task, the attempt "results in a transformed physical and narrative corpus,"<sup>28</sup> one where "distinct ontological levels melt into one another."<sup>29</sup>

Building on Hayles, I want to argue that if the material form of an artifact always contributes to the potential meanings of that artifact an object may still present its material and its signifieds as if they were dissociably two, as if material plus signifieds equals two things acting in concert. However, when an object tethers itself to itself to foreground their indissociability, it becomes clear that material plus signified equals a monstrous and indissociably singular thing. Entwined as they are, the book and the house function as a kind of body without organs whose every aspect is fully interoperable with all other aspects of itself.<sup>30</sup> So touched by computational logics, the novel's boundaries become porous, broken even, so much so that they become newly resistant to habituated forms of use and newly open to thingly conceptual escape. To be clear, what is at stake is not the thingliness of computers themselves, but the thingliness they generate in others through their circulation in the world and the world's circulation through them. *House of Leaves*, thus set on a course of becoming but never arriving at computer, becomes a thing in-between, a thing that is not quite computer, but not quite not computer either.

From its beginning, this novel's ostensible order of events is: 1) as a child Johnny Truant's mother tries to murder him and is sent to an asylum where she dies several years later; 2) Truant enters a drug-addled young adulthood whence he befriends Lude; 3) Some years into this friendship, Lude's neighbor, the blind recluse Zampanò, dies without having ever met

<sup>&</sup>lt;sup>28</sup> Hayles, "Inhabiting House of Leaves," 112.

<sup>&</sup>lt;sup>29</sup> Hayles, "Saving the Subject: Remediation in House of Leaves," 802.

<sup>&</sup>lt;sup>30</sup> Gilles Deleuze and Félix a. A *Thousand Plateaus: Capitalism and Schizophrenia*, (Minneapolis: University of Minnesota Press, 1987), 4.

Truant; 4) With Lude's assistance, Truant steals the book Zampanò had been working on, *House* of Leaves, a critical exegesis of a film that does not exist; 5) Truant proceeds to try to edit *House* of Leaves into something like a publishable form, all the while losing his mind; and 6) Some amount of time after Truant publishes the nonexistent first edition online, the Editors compile the print version that is the novel, a version to which they attach several appendices worth of addenda, addenda which include letters from Truant's mother. This sequence is quickly distorted by textual references that cause characters to swap faces, and by encoded messages that place characters in contact with those from whom they should be divided by vast stretches of time. Katherine Hayles too notes these temporal distortions, but where she links them to palimpsestic acts of remediation,<sup>31</sup> I want to emphasize how they mirror the accumulation of time within computationally transformed bodies.

To take one of the novel's codes as exemplary, in a letter that Truant's mother, Pelafina H. Lièvre, sends him when he is still a child and still has years to go before he will acquire Zampanò's traces, she encodes the message "My dear Zampanò who did you lose?" Here Lièvre reaches out to contact Zampanò, a man she should be separated from by the divides of death, time, and having simply never been acquainted. Through this impossible touch, a touch facilitated by their traces — Zampanò's book and Lièvre's letters — multiple realities and their attendant temporalities become simultaneously true. Here: Truant and his temporal arc become a fiction within the larger fiction and with it the distance it represents for Zampanò and Lièvre contracts and transforms into a manner of speaking between them. Where before Zampanò and Lièvre were Truant's spatially distant pasts, here they remain his anterior but they become newly contiguous. And, Lièvre and Truant both become fictions within the larger fiction as Zampanò

<sup>&</sup>lt;sup>31</sup> Hayles, "Saving the Subject: Remediation in House of Leaves," 783-4.

becomes their creator and thus their container, at a completely unmarked place in time. Where before Zampanò and Lièvre were Truant's contemporaneous pasts, here, the implication that Zampanò has authored the entire work, appendices and all, turns him into the past of both of Lièvre and Truant, thus rendering the two of them contemporaries. And, Truant and Zampanò collapse into one spatially continuous body to whom Lièvre speaks and for whom the nonexistent first edition of the book (which did not include her letters) is itself a missive. That Lièvre speaks to Zampanò in a letter to Truant implies that Zampanò does not precede Truant, but is him such that "Zampano" is either the "real" name of their continuity or is a mere manner of speaking between Truant and Lièvre. Where the letter maintains Lièvre's position as the mother of Truant-Zampano, here Lièvre is rendered the antecedent and once container of Zampanò. And, Truant's unreliability as a narrator, one who elsewhere "confesses" to inventing parts of Zampano's exegesis, turns him into the potential creator and thus container of both Zampanò and Lièvre. Where once he followed them as son, as editor, and as fiction, here he precedes them and becomes the condition through which they exist. Thus, much as Simon and the WAU each precedes that which precedes themselves, through House of Leaves' temporal involutions Lièvre, Truant and Zampanò are each rendered the origin of another that also precedes them.

Where one might be tempted to read this all as a computational feedback loop, I argue that what is happening within *House of Leaves* is actually far stranger than that. Feedback involves a sequence in which 1) one begins at A, 2) does something, 3) returns to A and changes it, 4) begins again from changed A, 5) repeats the process until equilibrium is reached, at which point, 6) one switches to a maintenance state, activates a subsequent feedback loop, and/or

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returns one's results to an antecedent loop that precipitated this one and serves as its container. By contrast, the involutions of Truant, Zampanò and Lièvre constitute neither a sequence nor a pattern of recurrence or alternation, because here each possibility is simultaneously true, thus instantiating a paradox in which each of these temporal arc exists alongside its own negation. In other words, the relation between Truant, Zampanò and Lièvre is not if A0 then B, if B then A1,... so much as it is A0 and not A0 and A1 and not A1.... When a computer touches itself, it does so through feedback loops and electrical alternations, but here it is as if by virtue of having been touched by computational logics, the book becomes this other stranger thing, divorced of the possibility of sequence such that, in folding in on itself, it becomes more and more full of temporal possibilities, but less and less able to actualize any given one of these definitively. Compare this state of affairs to that of divviduals, those who by virtue of their existence within computationally inflected societies are continually touched by digital apparatuses and thereby transformed in their relations to themselves and to one another. Much as how aggregations of their data are aggregations of historical traces that remix and refigure the relations between those histories and these persons with whom the machine interacts, here, this monstrous book, monstrous because it has been touched and transformed by the logics of computation, makes manifest how those logics place our traces in otherwise impossible contact such as to shuffle, transmute and produce a profusion of temporal possibilities that, being severally and simultaneously true, do not affect an actual progression towards one or the other.

Thus, if the logics of discipline and colonial displacement instantiate a Black interval in which the blackened wait for a humane past, then the logics of control and computation instantiate a digital interval in which divviduals wait for their plasticity and temporal excess to stabilize into a newly workable form. However, for as long as control remains the reigning form

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of governmentality, this state of abject suspension will be endless, because control is predicated on endlessness. I do not say this to mark control or digitality as morally bankrupt or to call for their supplantation by a new order, for as abrasive as abjection is, it can be pleasurable and productive in extremely complicated ways that do not always work against the oppressed. Rather, I say this to mark that complexity and to push back on what I read as too smooth elaborations of digitality's ontogenic potentials. I can see how this state of ever-accruing potential could have once been mistaken for the power or threat of a new body that, in either case, heralds an unknown but somehow still thinkable future. For, where one maintains attachments to possessive individualism, sentimental wounded attachments, and teleological selfrecognition, one's world-building projects can't but assume access to a future that one owns as if it were an entitlement that the present world recognizes. SOMA makes clear that Simon is at least partially driven by these attachments as he works to launch what he understands to be an ontologically untroubled ARK and thereby sever himself once and finally from Pathos-II and the WAU. It is because of these attachments that he remains unable to grasp that he cannot actually get onto this ship of rebirth, for, despite misrecognizing himself as a pilot in possession of a body, he is in fact a fleshy, anachronistic thing arisen out of the Black Atlantic and governed by the abrasive plasticity and temporal weirding of that place.

# Chapter 2

## **On Algorithmic Opacity and the Space Between**

"The space between us is neither 'white' nor 'blank,' but teeming with those whom the archive seeks to forget." Wendy Hui Kyong Chun, *Discriminating Data*<sup>1</sup>

"I know you are there. I can feel you here. Hello?" - GLaDOS, Portal 2

In the long history of artificial intelligence, paradigms imagining how AI might be realized have shifted dramatically. Presently, machine learning — a vehicle for the realization of artificial intelligence that is used to classify, predict, and modify diverse objects of study through the consumption of vast quantities of data — is undergoing a reckoning whereby these algorithms' inescapable reproduction of longstanding biases have been foregrounded and their claims to universality and objectivity have been critiqued. Specifically, when applied to human behavior, their outputs have been found to be riven with heterosexist insistence on a binary and biologically determinate world, with white supremacist pathologization and fetishization of difference, and with capital's demand for hierarchical relations of more or less expendable

<sup>&</sup>lt;sup>1</sup> Wendy Hui Kyong Chun, *Discriminating Data: Correlation, Neighborhoods, and the New Politics of Recognition* (Cambridge, MA: MIT Press, 2021), 237-238.

<sup>&</sup>lt;sup>2</sup> Kim Swift, *Portal* (Valve, PC, 2007).

bodies.<sup>3</sup> These failures stand in stark contrast to how these algorithms gain their rhetorical force through claims that, through them, "we" will liberate ourselves of the occluded sight of lives lived in and inescapably shaped by our several histories. That is, their designers and operators allege that, through these algorithms, our knowledge of the world finally has the chance to decouple itself from the perceptual and epistemological limitations that are inherent to each of us being but one among countless many.

Granted, the promises and failures of machine learning mark an intensification of longstanding desires for classification, surveillance, and fine-grained behavioral and biological manipulation — desires that were produced by and were productive of the 20th and 21st century development of biopower, and with it the conceptualization of population as a distributed, but singular body able to be studied and intervened on,<sup>4</sup> much as it is also able to be deployed towards tasks that its specific assemblage is best suited to accomplishing.<sup>5</sup> To speak then of the epistemological shortcomings of these algorithms is to speak of the (mis)recognitions that allow collectives to function, however transiently, as singularities, much as it is also to speak to the never not problematic sense of communal health or homeostasis that allows the outside to be misrecognized as an outside. To be clear, by (mis)recognition, I am borrowing from Bergson and

<sup>&</sup>lt;sup>3</sup> See: Cathy O'Neil, Weapons of Math Destruction How Big Data Increases Inequality and Threatens Democracy (Penguin Books, 2018). Ruha Benjamin, Race after Technology: Abolitionist Tools for the New Jim Code (Cambridge, UK: Polity, 2020). Chun, Discriminating Data. Yarden Katz, Artificial Whiteness Politics and Ideology in Artificial Intelligence, (New York, N.Y: Columbia University Press, 2020).

<sup>&</sup>lt;sup>4</sup> Michel Foucault, "Right of Death and Power Over Life," in *The History of Sexuality Vol 1: An Introduction*, (New York, NY: Vintage Books, 1990), 134-160; Michel Foucault, "Discipline" in *Discipline and Punish* (New York: Vintage Books, 1995), 134-227.

<sup>&</sup>lt;sup>5</sup> Gilles Deleuze and Félix Guattari, "Treatise on Nomadology — The War Machine," in *A Thousand Plateaus: Capitalism and Schizophrenia*, (Minneapolis: University of Minnesota Press, 1987), 351-423.

I mean the manner in which we each understand the other — be the other an individual or a collective or our very selves — as if we were coherent in ourselves and, further, as if we were both coherent with and reducible to our own partial views of each other. To misrecognize is to take the other as a spatial being — a body that remains fundamentally the same regardless of how it is divided — rather than as a temporal becoming — a body whose potentials being as real as its actual, "present" form is never identical with itself, even at rest.<sup>6</sup> In practice, this occlusion of the all that the other is is unavoidable, because the self that sees them or thinks it sees them is only one potential configuration of one's own gaze — only one potential configuration of one's relation to that other mess of becoming. Thus, our own self-difference and incoherence is constitutive of the other's apparent self-sameness and coherence. Not seeing the chaos of oneself is what brings the other into view. With respect to machine learning and its intensification of certain collective habits of misrecognition, what then is at stake when we speak of the insufficiency of these machines for accounting for the fullness of human variation, especially if misrecognition is a given of relationality?

### **I. Starting Places**

Beyond the immediate and pragmatic need to cease reproducing longstanding injustices under machine learning's veneer of pseudo-objectivity, machine learning and surveillance studies discourses suggest that what is at stake when we speak of technology-enabled misrecognitions is the need to preserve temporalities that retain the potential to surprise us and thereby allow us to see ourselves anew, to strengthen our collective ability to value, amplify, and sustain our polyvocality in the face of ongoing epistemic cuts that sever us from the relational forms that

<sup>&</sup>lt;sup>6</sup> Henrí Bergson, *Matter and Memory*, trans. Nancy Margaret Paul and W. Scott Palmer, (New York: Zone Books, 1990). Gilles Deleuze, *Bergsonism* (New York: Zone Books, 1988).

bind us to one another and to ourselves, and to discover and create singular movements in whose ongoingness we remain illegible to the gaze of the machine, movements that therefore betray an "indifference to description" where indifference is understood to be a refusal of familiar and abrasive interpolations.<sup>7</sup> Within these discourses, opacity is frequently framed as key to these goals, for opacity is the inherent or cultivated ability of a body to resist capture by another's epistemological schemas, or rather, that body's ability to resist reduction to a limited view on who or what it is and could still become. That is, in the face of a gaze or collection of gazes that seeks to make the body both transparent and newly malleable, the ability of a body to retain its secrets is a necessary and liberatory if still partial means of escaping these foreclosures. Or so it appears.

In an articulation of how machine learning drives political polarization, Wendy Hui Kyong Chun argues that the epistemic foreclosures of these algorithms are due to how they segregate populations into affectively charged clusters, and how, beneath these segregations, lay assumptions that indifference is non-meaningful and must be excised in order to reveal the "truth" of a given population. In her elaboration, indifference refers as much to those whose opinions and affects are weak or nonexistent, as to those who have mixed and shifting feelings, and to those who belong to a category whose numbers and thus whose affects are deemed to be statistically insignificant.<sup>8</sup> That is, indifference contains the majority of any given population, and yet, in order to produce statistical extremes and thereby draw a relation of manageable difference between them, this "space between us... teeming with those whom the archive seeks

<sup>&</sup>lt;sup>7</sup> Chun, *Discriminating Data*, 26, 79; Zach Blas and Jacob Gaboury, "Biometrics and Opacity: A Conversation," *Camera Obscura*, no. 92 (2016): 155–65; Ramon Amaro, "As If," *E-Flux* (2019).

<sup>&</sup>lt;sup>8</sup> Chun, 98-100, 108-120.

to forget" must be occluded.9 In life, this obfuscation of the polymorphous meh can look as semibanal as sorting into affectively charged and frequently conspiratorial social media echo chambers, much as it can also escalate to full-scale genocide, as was the case when Facebook's algorithms directly contributed to the 2017 Rohingya massacre in Myanmar.<sup>10</sup> Given this algorithmic drive towards extremes, depolarizing our societies becomes, in Chun's view, a matter of re-learning how to live within this space of indifference — which, via the work of Ariella Azoulay, she understands as a learning to amplify the several histories that imperialist projects deny when they sever objects, peoples, places, languages, etc. from their contexts.<sup>11</sup> That is, where these indifferent middles contain alternate and occluded histories, presents, and futures, we must preserve them, but we must do so in such a way that they are not merely and weakly included within current representational schemas that can only objectify and neuter them of their revolutionary potential. Chun understands this preservation as a way of "becoming good neighbors," where "neighbors are opaque and obscure [and] their nontransparency [...] does not hinder but rather enables relation..."<sup>12</sup> That is, if the indifferent and teeming middle is the messy potentiality that subtends any given schema of the world, then opacity is the foregrounded unknowability and polysemy of any given body, and a good neighbor is one who works to remember this opacity and remember it as a condition of being with the other without destroying that other or oneself.

<sup>12</sup> Chun, 236.

<sup>&</sup>lt;sup>9</sup> Chun, 237-238.

<sup>&</sup>lt;sup>10</sup> Chun, 82; Amnesty International, "Myanmar: Facebook's Systems Promoted Violence Against Rohingya: Meta Owes Reparations," *Amnesty.org*, 2022. https://www.amnesty.org/en/latest/ news/2022/09/myanmar-facebooks-systems-promoted-violence-against-rohingya-meta-owes-reparations-new-report/

<sup>&</sup>lt;sup>11</sup> Chun, *Discriminating Data*, 244.

In a manner that is deeply resonant with Chun, Zach Blas too centers opacity within his theory of resistance, though his object is surveillance via bioinformatics rather than machine learning. Like Chun, he borrows the term opacity from Édouard Glissant for whom

Opacity is an unknowability [...] that makes up the world, and [...] must be defended in order for any radically democratic project to succeed. [It is] an alterity that is unquantifiable, a diversity that exceeds categories of identifiable difference. Opacity, therefore, exposes the limits of schemas of visibility, representation, and identity that prevent sufficient understanding of multiple perspectives of the world and its peoples.<sup>13</sup>

Via this framing, opacity becomes, for Blas, both a quality that is fundamental to a body at the same time that it is a quality to be cultivated through artistic interventions. His *Facial Weaponization Suite* series is one such intervention that cultivates opacity by digitally layering the faces of queer men and then printing their sum as bulbous masks that make their wearers simultaneously hyper-visible and hidden from onlookers and security cameras. Via these works, Blas frames opacity as necessary for queer resistance at the same that he surfaces something like the queerness of the term itself, at least where queerness is understood as a refusal of too simple representations and too simple assorted other inclusions within deeply oppressive imaginaries of what self and other can do and mean for one another. Accordingly, he writes that

Anonymity (or opacity) is something that does not exist at the level of the state; it is a foundation for human existence; it is an anti-identity politics. It's an embrace of what is always transforming, what is always unknown within us.<sup>14</sup>

Framed as a form of anonymity, opacity becomes both a way of being in a literal crowd without being identifiable in one's specificity, and of being in flux — being within a collective's many senses of who they are and could still become and moving within that current without being stopped down into one identity, one limited vision of who one is and could be. In this way,

<sup>&</sup>lt;sup>13</sup> Zach Blas, "Opacities: An Introduction," Camera Obscura, no. 92 (2016): 149.

<sup>&</sup>lt;sup>14</sup> Blas and Gaboury, "Biometrics and Opacity: A Conversation," 162.

opacity becomes both a tactic of hiding in plain sight and of embracing the play of collective visibilities — a play that protects any given member from becoming hyper-visible in isolation.

Blas writes the above in an issue of *Camera Obscura* itself centered on opacity, and there he writes in dialogue with other contributors who read the term's liberatory promise through undetectable HIV status, anti-drone apparel, plastic, and the intersections of artistic practice and activism. Notably, when Nathan Lee describes undetectable HIV as a kind of opacity, he foregrounds how opacity is temporally constructed as existence before and after a frame that is capable of recognizing the opaque and intervening on them in prescribed ways. That is, he writes that

Viruses trouble our criteria and unsettle our classificatory systems... Hence, the relational codeterminacy of the undetectable, its union of bodies and drugs, presence and absence, the known and the unknowable, emerges from an open question about the status of life itself. Gilles Deleuze writes, "I must have a body, it's a moral necessity, a 'requirement.' And in the first place, I must have a body because an obscure object lives in me.<sup>15</sup>

For those with undetectable status, HIV effectively hides in plain sight, and more so hides in such a way as to produce in them a double-bind wherein their bodies are positive without the effects of being positive, and, where further, their bodies resist reduction to a negative/positive binary at the same time that they necessarily succumb to that reduction due to how the binary is over-coded with meaning and threat.<sup>16</sup> In its phase of undectability, the virus was and will be again, even as, in that moment, it is unable to be captured and read against its past and future threats to its host or that host's intimate others. Rather, in this in-between state, the virus exists as an "open question," a reason to keep testing, to keep searching for signs of its reemergence, and this at the same time that the host, the system it threatens, continues to suppress it. Compare

<sup>&</sup>lt;sup>15</sup> Nathan Lee, "The Fold of Undetectable," Camera Obscura, no. 92 (2016): 169.

<sup>&</sup>lt;sup>16</sup> Lee, 168.

undetectable HIV to what Heather Davis describes as the strangely transparent opacity of plastic, in which it reveals everything and thus nothing. She writes that its

[imperceptibility] is about creating structures and ways of being that are at once immediately apparent, at once immediately understood, but yet reveal nothing, containing no truth, no depth. Surface all the way through, hidden in plain sight. This is a politics of passing that exists in the singularity of form, of existence that cannot be extrapolated or generalized but only related, put into relation, into commonality through shared practices. Such a politics, in this way, preserves a certain opacity.<sup>17</sup>

By connecting opacity to passing and to the deceptive transparency of plastic, Davis frames opacity as an embodied flatness combined with an underinvestment in surface appearances, even as that surface is all that there is. Stated otherwise, plastic has no hidden depths and so, as a model for how to hide in plain sight, it confounds the intrusive gazes that would seek to make it deep in order to then make it transparent — gazes that seek to find hidden truths so as to categorize those truths within pre-given epistemological schemas. Where the term passing knits discipline and examination together with movement between places and states of being, reading Davis and Lee together confounds that association insofar as a body with undetectable HIV status passes their tests without passing onto a new state of being. Together they turn opacity into a tactic for existence within disciplinary structures without entirely succumbing to the intrusive transformations of those structures. As a mode of resistance then, becoming plastic is a means of evading categorical capture by embodying a flatness in which the truth behind one's face is that there is no truth behind. Thus, light can pass through the plasticized — though not without distortion — and the intrusive gaze can see only a distorted world, which, given the perverse futurity of plastic — its poisonousness and its durability — is the world that will one day replace

<sup>&</sup>lt;sup>17</sup> Heather Davis, "Imperceptibility and Accumulation: Political Strategies of Plastic," *Camera Obscura*, no. 92 (2016): 190.

the schemas that gaze knows itself by.<sup>18</sup> As a distortion that eventually unmakes its world, plastic thus resonates with Jennifer Rhee's formulation that "opacity [is] ineradicable and constitutive of seeing itself [and that seeing] and knowing, in surveillance no less than in other practices, are always incomplete."<sup>19</sup> By this she means that, as acting in the world means negotiating between the known and the unknown relative to one's objectives, resources, and vulnerabilities, opacity is the unknown that makes the known meaningful and differentially available to the persons and systems that seek to know or be known in ways that support their aims. Understood as a foregrounded polysemy and a tactic that is also a kind of undetectability, an imperceptibility, and a fog, opacity thus becomes a way of hiding in plain sight such as to constitute a view without succumbing to the circumscription of that view.

In all these ways, opacity is a way of resisting what Ruha Benjamin, drawing on Franz Fanon, names as the "scopic vulnerability" of subaltern subjects, or rather how "the act of viewing something or someone may put the object of vision at risk."<sup>20</sup> Though focused on how contemporary technologies are mobilized within regimes of racialization — and especially within the ongoing production of blackness and its forms of precarity via the production of a "New Jim Code" — Benjamin's argument has broad applicability to the several ways in which people are made precarious as a result of being "'trapped between regimes of invisibility and spectacular hypervisibility,' [and] threatened by inclusion in science and technology as objects of

<sup>&</sup>lt;sup>18</sup> Davis, 189.

<sup>&</sup>lt;sup>19</sup> Rhee, Jennifer. "Adam Harvey's 'Anti-Drone' Wear in Three Sites of Opacity." *Camera Obscura*, no. 92 (2016 2016): 175–85.

<sup>&</sup>lt;sup>20</sup> Ruha Benjamin, *Race After Technology: Abolitionist Tools for the New Jim Code* (Cambridge, UK: Polity Press, 2020) 100-101.

inquiry."<sup>21</sup> Specifically, scopic vulnerability is not just the threat of being seen by surveillance apparatuses, but is the threat of being seen by these objects as what one is not - and thus being exposed to the violence of another's self-definition at one's expense. Though she does not use the term opacity herself, reading Benjamin alongside the authors referenced above foregrounds how these authors are deploying this term as a means of resisting, not just the limitations of inclusion within an epistemological schema that does not fit, but of resisting the violent productivity of that inclusion — the ways in which capture means being forcibly remade into the image of one's own destruction. To that end, I would agree with these theorizations of opacity with the caveat that, at the same time that the development, maintenance, and reclamation of occluded or otherwise opaque social form is or at least promises a form of resistance from the technologically-enabled misrecognitions of our moment, opacity itself remains constitutive of the epistemological capture and foreclosure that it resists. That is, the presence of an opaque body is an occasion for knowledge production, for in its hypervisible uncategorizability the opaque body moves as if a question for which our present epistemological schemas demand an answer. This caveat is not a hard break from the above, so much as it is a way of collecting, leaning into, and elaborating the risks these authors surface when they name the threat of weak inclusion, the production of hypervisibility, the manner in which undetectability motivates ongoing testing, the potential for an unlivable future, and the ways in which the unknown outlines and gives meaning to the known. That is, this change in emphasis is a way of reframing opacity so as to ask: what can we learn from its double bind, its broken promises, and its support for the epistemological prodding we need it to escape? More so and in support of this dissertation's investigation of AI, what can opacity's double bind teach us about what it might mean to resist the epistemological

<sup>&</sup>lt;sup>21</sup> Benjamin, 125.

foreclosures of machine learning and further, what can it teach us about the larger imaginary of artificial intelligence?

In the coming sections, I will argue that opacity is a relational form that is itself produced by a desire for transparency, or rather, by a searching need to know that isolates the object of one's gaze in order to register it as unknown. Where this relationality draws on several histories of frictional sociality, I will knit these histories together through an extended close-reading of Portal and its sequel, Portal 2, two puzzle platformer videogames that are as famous for their still novel core mechanic - traversing levels via two portals that effectively fold space and time - as they are for their charismatic, deliciously malevolent antagonist, GLaDOS - an artificial intelligence who lives to test, or rather, lives to put semi-anonymized subjects through its rigors that they may transform from undifferentiated flesh into machine readable information. These games are particularly apt for unpacking opacity's double bind due to how GLaDOS's antagonism of Chell, the player's character, turns on a desire for transparency that (re)produces and requires Chell's unreadability, even as that unreadability destabilizes GLaDOS. Through their antagonism, this series mobilizes many of the potentials of opacity articulated above at the same time that it puts them in tense alliance with the forms of knowledge production they attempt to circumvent. By drawing the *Portal* series into conversation with *Passing*, an early twentieth century novel that dilates on the world-making and world-destroying potential of racial indeterminacy within the middle-class Black social life of its era, these works write opacity as a barely livable drama of escape and capture — a barely livable drama in which the desire for an inquiring machine — itself one part of the dream of artificial intelligence — becomes a desire to de- and reconstruct an ambivalently legible body that itself desires as much to know as to escape the consequences of that knowledge.

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### **II. A Question of Genre**

Within *Portal* and *Portal* 2, the player moves as if they were a living question, or rather as if they were one whose uncategorized existence were reason enough for the system they are in to continually search for an answer to the question that they are. In this way, the player moves as if they were a thing akin to an accident or virus - a thing that is anticipated within its given environment, at the same time as that thing's movements both threaten and elaborate the contours of that environment.<sup>22</sup> That viral question is named Chell and, dressed in an orange jumpsuit and tasked with escaping an endlessly malleable and sentient prison, theirs is a fugitive life, at least where, according to Fred Moten, fugitivity is a turn away from pathologization to pathogenic, from life as an aberration in need of endless intervention to life as that same aberration, now understood to be itself an intervention within an endlessly broken world.<sup>23</sup> Chell's story, and with it, the player's, is that becoming-pathogenic, and, within their world, they are a canonically mute test-subject — one whose history is inchoate and whose attachments are all left unspoken and open. That is, the kind(s) of subjectification that would be desirable or even just tolerable to Chell cannot be decided or even intuited within the rubrics of the game. Notably, Chell's gender — if they have one — is unreadable and this is true even as the character is frequently referred to as a woman within fan culture and critical literature alike, and this on the basis of their appearance and the fact that their face and body were modeled after a flesh and

<sup>&</sup>lt;sup>22</sup> Jussi Parikka, *Digital Contagions: A Media Archaeology of Computer Viruses*, (New York, NY: Peter Lang, 2016), xix.

<sup>&</sup>lt;sup>23</sup> Fred Moten, "The Case of Blackness," *Criticism* 50, no. 2 (2008): 177–218.

blood woman, Alésia Glidewell.<sup>24</sup> Even the developers refer to Chell as she. Yet, despite this circulation, Chell does not speak or otherwise situate their body within a repertoire of coded behaviors beyond that of the nondescript hero and the environment does not offer reliable clues as to who they might understand themselves to be in relation to others within *Portal*'s world. If gender is both an effect of citation and a relationship to the inherent failures of those citations, then, at the very least, Chell's gender is undecidable because, if their movements cite at all, they do so in a manner that is not legible within presently available sociogenic frameworks.<sup>25</sup> That is, either they cite a future or a past gender, or they cite a future or a past beyond gender.<sup>26</sup>

This indecipherability may be read as indexing a wider repudiation of presently available human categories, especially in light of Sylvia Wynter's articulation of how gender derives from genre and how humanity is but a collection of differentially acknowledged and enforced genres of being. That is, in "Human Being as Noun? Or Being Human as Praxis? Towards the Autopoetic Turn/Overturn: A Manifesto," she writes that

[the] term genre which derives from the same root etymology, as gender, meaning kind, is here being used to denote, different, always autopoetically instituted and fictively constructed kinds of being, and thereby of performatively enacting

<sup>&</sup>lt;sup>24</sup> Jennifer deWinter and Carly A. Kocurek, "Chell Game: Representation, Identification, and Racial Ambiguity in PORTAL and PORTAL 2," In: "»The cake is a lie!« Polyperspektivische Betrachtungen des Computerspiels am Beispiel von PORTAL," Ed. Thomas Hensel, Britta Neitzel, Rolf F. Nohr (Hg.), *Münster: LIT* (2015), 31–48.

<sup>&</sup>lt;sup>25</sup> Lauren Berlant, *Desire/Love* (Brooklyn, NY: Dead Letter Office / Punctum Books, 2012), pp. 60-62.

<sup>&</sup>lt;sup>26</sup> To be clear, I am not arguing that Chell is decidedly queer, but rather, that because there is no way to situate this character at all, parsing the meaning of that undecidability necessitates letting it stand as such. For it is a substantial part of what renders this character opaque and thereby gives meaning to their movements in relation to the gameworld.

oneself as optimally a "good man or woman of one's kind," in genre-coherent terms; of which gender coherence is itself always and everywhere a function.<sup>27</sup>

Much then as the genres that organize literature exist as sets of conventions for organizing a view onto one's world – or rather, exist as habitual ways of telling their kinds of story – here humanity's genres arise as similarly habitual ways of producing knowledge. That is, here humanity's genres exist to the extent that they are iteratively performed and thus embodied by collectives that understand these forms to be their origins even as it is these collectives' movements that in fact originate their versions of these forms. Within this proliferation of story types, Wynter's reference to "gender coherence" refers to a given community member's relative legibility within the internal divisions of their collective's stories of itself — or rather, their relative legibility within a subgenre of their human genre(s). As a living question constituted as such by a near complete absence of in-game stories of the self, Chell exists as a kind of plasticized body for whom we cannot know what, if any, story forms lay behind their face. Thus, their gender indecipherability reads as a repudiation of decided categorization as either cis or queer, at the same time that this indecipherability reads also as a repudiation of the wider body of genres and subgenres that are presently legible within digital and AI-inflected contexts. More so, as a test-subject, Chell is a body subject to examination - a body whose capabilities and potential meanings are held open to elaboration only to the extent that those capabilities and meanings remain inscrutable to their sentient-prison-cum-testing apparatus. Their openness as a test-subject echos the indecipherability of their gender/(sub)genres, and, more so, it is the very condition that makes them interesting to this machine. That is, Chell is desirable to the apparatus

<sup>&</sup>lt;sup>27</sup> Sylvia Wynter, "The Ceremony Found: Towards the Autopoetic Turn/Overturn, its Autonomy of Human Agency and Extraterritoriality of (Self-)Cognition," in *Black Knowledges/Black Struggles: Essays in Critical Epistemology*, eds Jason R. Ambroise and Sabine Broeck (Liverpool: Liverpool University Press, 2015), 196.

to the extent that they show up for it as opaque — that is, show up as a known unknown whose presence is available for consumption — available for data capture — even as their depths remain unreadable and perhaps, unwritten. They are thus desirable to this prison space only insofar as they both momentarily satiate a need to know, while renewing that need endlessly. As a result, all we can truly know about Chell is that they are imprisoned within Aperture Labs and that, at the bidding of an artificial intelligence, they must move through a series of increasingly precarious test chambers with the aid of a portal gun (fig 2.1 and 2.2).



Figure 2.1 Chell, the Aperture Science Handheld Portal Device, and the portals (Slash Gear)

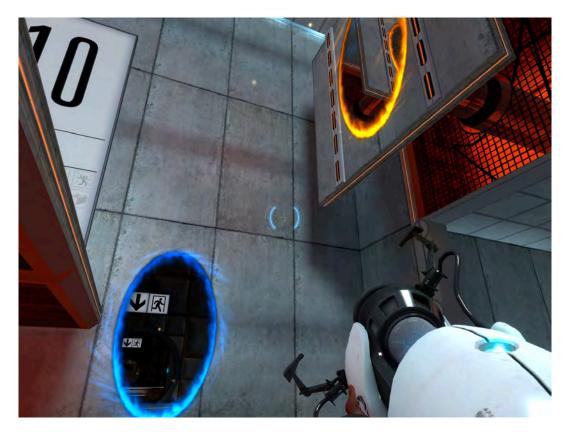


Figure 2.2 The Aperture Science Handheld Portal Device and the portals (Valve Archive)

This gun functions by firing two portals, one orange and one blue, onto spatially discontinuous planes, such that by stepping through or falling into one, Chell emerges out of the other with no loss in momentum. It is as if the gun folds space and time in order that its portals may function as a single, unified door regardless of their distance from one another. The portals are thus as if two ruptures in a nondescript background, and Chell's movements between them are as if a movement between two transient nodes, as if the movement of an edge in the making as it elides an endlessly nuanced in-between in order to produce a semi-stable difference between extremes. By turns, when looking through one portal, Chell is able to see out of the other as if the gun extended their gaze and made it tactical — as if through it the difference between a perspective on space and the production of space via the gaze could be erased. Chell thus assumes a searching, penetrating, and ontogenic relation to space that is not the top-down gaze of

the researcher, and yet is not fully distinct from it either. While these games do not speak to the actual, technical processes of machine learning algorithms, this elision of space, or rather this cutting away of the middle in order to produce a connection between previously unconnected locations does function as a metaphor for data science and its manner of producing knowledge via the correlation of data points. Further, the portals can only be fired onto flat, moon-rock grey surfaces whose affected neutrality contributes to an overall atmosphere of soft-petaled, scientificindustrial blasé. This atmosphere in turn redoubles the affectively mixed relation between Chell as objectified test-subject and the pseudo-objective categorizing gaze of the researcher that dominates and needs it. This other gaze permeates the space via a watchful AI whose body the lab is and, in this way, it draws the Portal series into conversation with the longue durée of imperial conquest, its correlative itch to carve and classify the world's living and nonliving forms, and its development and refinement of biopower as a means of governing life as such. Where imperialism and biopolitics have and continue to differentially produce distinctions in race, class, gender, sex, nation, and dis/ability as presently lived, their inflection here draws these games further into conversation with the production of diverse social forms and positions, as well as with the potential for implicated bodies to (dis)identify with these constructions. More so, it draws the Portal games into these conversations without attributing any illusions of societal legibility to Chell.<sup>28</sup> Rather, via the portal mechanic and the opacity required of a test-subject, the movements of Chell's undecidable body become a means of producing data of some kind for the watchful AI, while also producing a new network of associations between these data. At the same time, these movements also become attempted escapes from these spaces that are charged against

<sup>&</sup>lt;sup>28</sup> Though their character model is of Brazilian-Japanese heritage, Chell is also racially ambiguous, insofar as, in-game, there are few if any clues as to how this world attempts to naturalize their precarity via attribution to skin or "blood."

them — these spaces that endlessly individuate them into the same test-subject that passes their tests without correlatively passing into a new form capable of a secure attachment to their world or any undreamed of other.

For an example of how this movement plays, the first half of level 18 opens with a long corridor at the end of which is a ledge that drops off into a body of deadly acid. On the other side of this acid is another ledge that the Chell needs get to. This other ledge is the only way forward and yet it lay at a distance that one cannot jump to using just one's legs. The solution is thus to fire one portal of either color onto the ceiling above that other ledge, and then to fire another portal of the remaining color onto a wall that is adjacent to oneself. Once this is done, walking, jumping, or running through the adjacent portal will cause Chell to fall through the ceiling portal and to land safely on that other ledge. Later in that same level and after a series of similar ledge traversals, Chell arrives at a room whose hazards include sentient turrets that shoot if and when Chell crosses their line of sight, a gun that shoots high energy pellets that kill Chell on impact, and, of course, more acid. Within this room, Chell must fire the portals such that the pellets pass through one and exit the other at locations that place the turrets within their trajectories. The pellets will thus knock the turrets into the acid. Chell must then redirect one more pellet and then quickly open a timed door such that the pellet can pass through, trigger a sensor, and activate a moving platform. The platform carries Chell across the acid to an area in the same room. From here, Chell must use a combination of timed mechanisms and strategic falls to rescue a box and carry it to the prior room where it can be dropped on a giant button that activates a door to the final room of this level. In that final room, Chell navigates across more acid-surrounded platforms by firing portals onto floors instead of ceilings, such that falling through one, they are propelled upwards out of the other. That is, if they jump into a blue portal, they are launched

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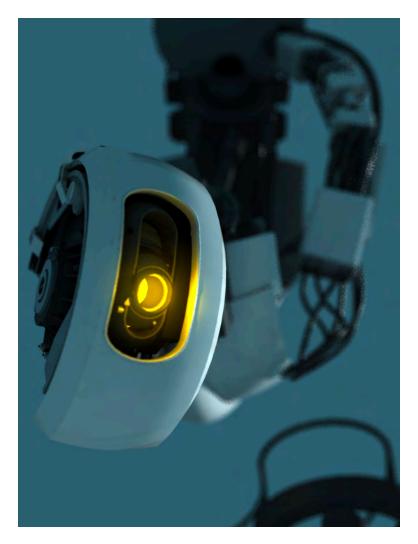


Figure 2.3 GLaDOS (Valve Archive)

upwards out of an orange portal, and then, while in freefall back towards that orange portal, they must locate the next floor and re-fire the blue portal there, such that they will be launched upwards through it. Rinse repeat, until Chell is able to launch themselves onto the platform adjacent to the level exit. The game proceeds through a number of these testing chambers/levels until one goes off path and meets the AI that has orchestrated all these trials.

As all life genres are relationally produced, Chell's ongoing emergence as test-subject is fundamentally entwined with the emergence of their examiner, GLaDOS (fig 2.3). As the giddily

malevolent, artificial intelligence that wakes Chell and subjects them to a series of physics puzzles, this AI is Chell's primary antagonist in the first game and their antagonist-cumcompanion in the second game, and it is also radically, but differently open in its genres. Where Chell is silent and non-citational, GLaDOS speaks in a feminine voice and performs the genre of mean girl, joyously trolling Chell about their weight, appearance, nonexistent family, and testing performance. At the same time, some of GLaDOS's foundational code contains an imprint of a person named Carolyn who GLaDOS describes as a woman. Yet, GLaDOS also contains, is, and is antagonized by several, very vocal genres of masculinity — referred to in-game as their cores. These are genres that Chell excises in the final boss fight of the first game, thus killing GLaDOS. In the second game, Chell partners with and is betrayed by another of these cores, before using still others to destroy him and thereby restore GLaDOS to power. The game ends after that restoration and we do not learn what, if any, masculinities persist within GLaDOS's frame, but we do know, because they tell us, that they have deleted the imprint of Carolyn from their code. Thus, if Chell is remarkably opaque, GLaDOS is transparent and accessible to the point where Chell can reach out and touch their genres, remove them, and remix them. This transparency is especially notable given how, as an artificial intelligence, GLaDOS is an artificial mind, or rather, is a technical instantiation of how we understand — rightly or wrongly — this part of ourselves whose opacity constantly confounds us in our attempts to study it and in our attempts to simply live with and within it. Moreover, the opacity of human minds shows up for us as opaque in large part due to their deceptive transparency in the day-to-day moments in which we misrecognize ourselves as being coherent and in control of this odd set of processes. GLaDOS thus stands in for a contemporary ambivalence towards ourselves in which we desire to continually take ourselves as objects of knowledge - as opaque things from which there is always more to

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discern — at the same time that the openness of that inquiry and its manner of exposing us to the possibility of our own eventalization is gently unbearable. As a result, GLaDOS too emerges again and again as a "living" question, but one in which the answer, whatever it will be, is held in the subjectivities already rendered discrete and machine readable

#### **III. Fugitive Forms**

At the end of *Portal* and *Portal* 2, Chell's final confrontations with the apparatus are portal-gun-requiring physics puzzles that previous levels have trained the player to read and solve through improvisatory transformation of those prior lessons. As a result, GLaDOS's death and reanimation is tethered both to the elaboration of one or more new networks of associations via Chell's edge-making, traversal of space and to the elaboration of one or more potentially new life genres whose citational practices are these improvisatory transformations of the network and the subject(s) interpolated within it. As we understand ourselves in relation to our life genres in ways that produce complicated forms of (dis)identification, these transformations become desirable only to the extent that they appear to offer something that is at least as valuable as our present understanding of self, other, and world. With this, I am thinking with Lauren Berlant and their elaboration of how we become attached to social forms and rhythms, as well as to other human beings, by virtue of sensing in them a promise that, through them, we may remain or otherwise come to be attached to a world that those very forms, rhythms, and persons make possible.<sup>29</sup> And where these forms, rhythms, and persons become antithetical to our thriving, where further they impede our access to the very worlds they promise, our attachments to them

<sup>&</sup>lt;sup>29</sup> Lauren Berlant, Cruel Optimism, (Durham, NC: Duke University Press), 23.

may be described as instances of "cruel optimism."<sup>30</sup> Berlant theorizes the contemporary moment as given to impasse — that is, as given to

a stretch of time in which one moves around with a sense that the world is at once intensely present and enigmatic, such that the activity of living demands both a wandering absorptive awareness and a hypervigilance that collects material that might help to clarify things, maintain one's sea legs, and coordinate the standard melodramatic crises with those processes that have not yet found their genre of event.<sup>31</sup>

In the impasse of the present, it is not that all of our attachments are instances of cruel optimism, but that so many of our core, identity-sustaining ones are that life becomes an ambivalent search for something else without a clear sense of what one is looking for, or, more so, how one will recognize it when one finds it. That these games remain aloof, or rather, abstract about the specific contours and habits through which we will recognize corollaries of Chell's network- and genre-producing movements in our own lives gestures to the inherent ambivalence of movement in relation to the epistemological foreclosures of data science and digitality as well as to the impassivity that structure their promises.

Granted, the articulated form of a promise is frequently, if not always, a stand-in for an unspeakable desire for the open, for one's own becoming, and for an erotic attachment to one's self as a site and cipher for the world's simultaneous making and unmaking. In *Portal*, cake is promised by the apparatus-cum institution-cum-intersubjective-other, GLaDOS, and an untimely death is giddily threatened. This cake metaphorizes freedom from the testing track, which itself metaphorizes freedom from the categorical closure of interpolation within a system that needs one's opacity at the same time as it refuses it through epistemological activity aimed to make body the transparent. Killing GLaDOS is then a means to this promised end, but not an end in

<sup>&</sup>lt;sup>30</sup> Berlant, Cruel Optimism, 1.

<sup>&</sup>lt;sup>31</sup> Berlant, Cruel Optimism, 4.

itself. In *Portal* 2, revenge is promised in place of cake and an untimely death is again threatened with more or less fanatic glee. Rather than freedom, however, this promised object metaphorizes immediate self-preservation via a transitory moment in which each sees the other see them that is, each sees the other misrecognize them and in that moment of mutual access to the other's epistemological foreclosures of one's self, each thereby gains renewed access to the chaos and inherent undecidability of themselves. In an echo of Hegel, this moment of mutual misrecognition is structured through proximity to death — with revenge it's either you or me, but never us - and, as such, this opening onto one's own abject, undecidable fecundity is possible only for as long as one can preserve the other that one might not survive. Thus, in *Portal* 2, GLaDOS's life is both the means to the promised end and is an end in itself. Read together, these endings and their promised objects - freedom and revenge - stage, on the one hand, the death of the world and the preservation of the self, or rather, the preservation of one's blindness to the chaos of oneself, and, on the other hand, death of this self-blind subject and the preservation of the world. Here, it is either alienation from the other, or alienation from oneself, neither of which is terribly livable for long.

Of course, subject positions are always co-constitutive with their world(s), and so the destruction of one necessarily results in the destruction of the other, though there may be a delay between these ends. In life, destruction takes the form of a question or problem that, being potentially but not immediately resolvable, magnetizes new collectivities and organizes new routines of enunciation and habituation. Hence how the viral question that Chell is remixes the incoherent yet mutually constitutive collective that is GLaDOS. Further, insofar as GLaDOS is the institution that they are tasked with overseeing, the constant shifts and reformations of the facility walls in response to Chell's progress are a kind of coming undone and regaining one's

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composure in response to the question that Chell is. Though, that is not to say that every question or problem will produce such a disruption. One way to think of the repetitions of machine learning, or rather, its insistent reproduction of the past that its data represent,<sup>32</sup> is to understand this past as a set of dead questions no longer capable of magnetizing our collective attention *differently*. Much like GLaDOS and their cores, these questions probe and produce a problem that is already spoken for — a problem such as GLaDOS before Chell, a problem that solicits only echos of its own constitutive misrecognition of itself as coherent. To that end, where Chun's call to return to the teeming, indifferent middle of data science is about imagining, or rather, actualizing alternative forms of collectivity that are immanent within the din of our existence, it is about imagining new ways of asking questions of our data. Thus, via Chell's opacity — via the presence of a known unknown, the presence of a body in question that registers as a still open question — this opacity indexes the coming to be of a situation — the coming to be of

a state of things in which something that will perhaps matter is unfolding amid the usual activity of life... [in] a state of animated and animating suspension that forces itself on consciousness, [and] produces a sense of the emergence of something in the present that may become an event.<sup>33</sup>

Emphasis on may. A situation is a state of collectivizing attention to a disturbance in the present, but it is neither inherently world-changing nor inherently world-preserving. Hence, Chell's movement from the destroyer of carceral, techno-scientific worlds in the first game to their salvation in the second. Chell is a question made flesh and yet, as a question framed as such by an institutional other, they are as able to work in service of that other as they are able to work against it. Thus, Chell's opacity is ambivalently useful to what it refuses.

<sup>&</sup>lt;sup>32</sup> Chun, *Discriminating Data*, 52.

<sup>&</sup>lt;sup>33</sup> Berlant, Cruel Optimism, 5.

Perhaps then, in our problematization of opacity as a key term for resisting contemporary, technology-enabled epistemic foreclosures, we ought to dilate on how, if resistance means life within an open, ongoing crisis - a crisis one's opacity indexes and extends, for better or worse - then resistance means a life wherein one moves against the given without a clear sense that what one is moving towards is actually livable. Life as crisis is the condition of fugitive life. Yet, no one wants to live as a problem. Using the language of fugitivity and the historical construction of blackness as a problem, Ramon Amaro and Murad Khan approach the violence of epistemic capture by calling for a "calculus of variations."<sup>34</sup> Like Chun, their concern is with the specificity of machine learning rather than contemporary surveillance writ large, and, at the same time, their framing is deeply resonant with Blas's foregrounding of opacity's anonymizing queerness. To that end this calculus is or rather, will be one whereby a Black "subject in flux" destabilizes contemporary epistemological schemas through their fugitivity — their ongoing flight from and endlessly creative evasions of machine learning's interpretive foreclosures.<sup>35</sup> Specifically, they mean to reimagine Black technicity as something other than a repeated reduction to already given and abrasive stereotypes - a reduction that ever "[constitutes] the Black individual qua blackness-as-a-problem [that] allows for the White individual to be constituted at the level of resolution."36 Chell's existence as a problem for GLaDOS to solve resonates with their framing of data science's insistent pathologization of blackness, and thus Chell's insistent refusal to speak, cite, or otherwise take more than nondescript heroic form reads as a deep refusal in Fred Moten and Stefano Harney's sense of the fugitive's refusal of form.

<sup>&</sup>lt;sup>34</sup> Ramon Amaro and Murad Khan, "Towards Black Individuation and a Calculus of Variations," *E-Flux*, Issue #109, (May 2020).

<sup>&</sup>lt;sup>35</sup> Ramon Amaro and Murad Khan.

<sup>&</sup>lt;sup>36</sup> Ramon Amaro and Murad Khan.

That is, where they write that "blackness means to render unanswerable the question of how to govern the thing that loses and finds itself to be what it is not," they frame blackness and, given the context, black fugitivity as an antagonistic stance towards forms of categorical capture that subtend material degradation, and as a coming to consciousness of one's existence as a living problem — a living crisis — for the systems that one takes flight from.<sup>37</sup> Without equating Chell to blackness or black people writ large, reading them as a resonant kind of fugitive deepens the ambivalence of their movements — their pursuit of promises that are nothing if not cruelly optimistic.

### **IV. Ontopower**

Key to understanding this, opacity's impasse, is recognizing that, when understood as a relation rather than as a fundamental quality of a body, opacity is a relation that is motivated by a desire for transparency, a searching need to know that isolates the object of one's gaze in order to register it as unknown. Absent a desire to know, a body may still register as a body of some kind, but not as an opaque one. Thus, how black-boxed machine learning algorithms — black-boxed despite being the alleged means and medium for the contemporary moment's need to know — thus, how these algorithms pursuit of transparency surfaces a desire for the opacity they refuse, but also such that human beings only register as opaque to one another against this background violence, and more so, through their own intimate reconstitution of it. With this, I am thinking with Brian Massumi's theorization of ontopower, or rather, the United States' post-9/11 logic of preemption. Within this logic, governance turns on a recursive and anxious temporality in which potentially disruptive forms are presumed to be ubiquitously present but hidden beneath a sheen

<sup>&</sup>lt;sup>37</sup> Fred Moten and Stefano Harney, *The Undercommons: Fugitive Planning & Black Study*, (London, UK: Minor Compositions, 2013), 27.

of normality, and, more so, presumed to be still undifferentiated from the background noise of being writ large. That is, the presence of unknown unknowns, or rather, invisible bodies, is taken as a given made manifest by an unshakable sense of un-locatable threat. As such, space itself becomes inscrutable and terrifying to the extent that it is understood to be prolific with these invisible enemies. So shaken, the state and its agents again and again go to work to recover, or rather, produce the transparency through which they can see and thereby stabilize their place in the world. These preemptive forces thus posit that "since the enemy is indeterminate, it is certain that he will remain undetectable until he makes a move."<sup>38</sup> Thus, human and nonhuman actors within the security apparatus poke and prod and otherwise test the environment in order to make specific bodies emerge and thereby pass from unknown unknown to known unknown — from invisible to opaque. These actors then persist in testing, or rather, moving against these opaque bodies until through such actions they produce a correlative movement in the tested subject. That is, these security actors produce the disruption they are looking for, at which point that disruption is retroactively posited as the eternal truth of the given body.<sup>39</sup> That retroactive positing of threat as something that was always there, thus justifies the security actors' actions, while motivating endless future testing and opaque individuation. These security actors thus produce fugitive movements in order to pursue them. Under ontopower then, opacity is neither positive nor negative, but is rather a neutral production of an otherwise neutral if specific flow of desire here, the movement towards something like transparency. Massumi's situation of this broader process within its specific manifestation in U.S. state power is useful for my argument insofar as its foregrounds crisis as a means of (re)producing genres of embodiment and tethers this crisis to

<sup>&</sup>lt;sup>38</sup> Brian Massumi, *Ontopower*, (Durham, NC: Duke University Press), 12.

<sup>&</sup>lt;sup>39</sup> Massumi, 193.

the use of testing and pseudo-scientific provocation (think U.S. security theatre) as a means of generating this state of crisis, if only so that its provocations can then respond anew.

Within Portal and Portal 2, Aperture Labs' testing protocol approximates ontopower's logic, especially as it is never made clear what kinds of data are being collected, and as it appears, at first glance anyway, that the tests are pointless. It is as if the system is engaged in just as much an ambivalent search for something else as the test-subject is, as if they are both moving within an impasse — which is to say, moving without a clear sense of what they are looking for, or, how to recognize it. The system tests because it must test, for testing is the catalyst for its own individuation as an examining apparatus. For the examined to pass thus means maintaining one's opacity for one chamber longer, such that one's threat potential, one's deviance from whatever norm of hapless and expendable subjects, remains occluded and undifferentiated from the background noise of business as usual. Here one must persist in indexing and extending the crisis that motivates one's movements without, of course, succumbing to that crisis. One must take flight in search of categorical freedom, even as that flight is the catalyst for one's enduring epistemological capture. One must remain deviant enough to register but not deviant enough to be read as such. Even then, eventually endurance itself will catalyze one's individuation as an exception. Then what? If "neoliberalism's tendency is to capture the exception and incorporate it (in both senses of the word)," then how does one learn to be a question held open and an epistemic threat when success risks rendering oneself noticeable and thus useful to the forms of capture one is attempting to take flight from?<sup>40</sup>

More to the point, how does one carefully calibrate an opacity? How does one avoid standing out as the one who does not stand out enough? Especially when deviance is constitutive

<sup>&</sup>lt;sup>40</sup> Massumi, 53.

of being, when severalness and surplus are facts of what it means to be a body whose totality one does not have complete access to or mastery over? In their deviance from their failed predecessors and from GLaDOS's expectations, Chell's movements can be read as a constitutive part of the system even as they are turned against it. In a way, they move as if they were refusal as such, but only insofar as they are a thing that is continually refused. Further, as a viral body, Chell is also the outsider-within whose persistence allows a social body and its genres to cohere around it — cohere through the movement of persecuting it.<sup>41</sup> That is, their movements also necessarily construct the norm or normative function that GLaDOS is even as GLaDOS is, at best, an incoherent aggregation of forms in flight from the itch of its own self-difference and with it the threat of becoming otherwise, or rather, of realizing that they have always been otherwise. Fugitivity thus names a double-bind — a position of extreme precarity that the fugitive attempts to turn to their defense. And if Chell's opacity — and through it our own — is read as constitutive of their fugitivity from a data-hungry machine, then it too names this double-bind.

As an archive of deviant and transgressive forms then, an archive hungry to collect more of what it is and yet cannot account for, GLaDOS is as much an unstable coming together of what cannot hold as Chell is a living refusal that indexes, extends, and persists within those movements. To that end, where Massumi writes that the "problematic holding-together of what cannot actually come together' is the accident... [and the] universal forcefulness of the accident is such that the tiniest local ingression of its indeterminacy actualizes the conditions of systemwide crisis," and elsewhere where "[what] is felt [in this coming together] is more than the possibility of alternate ascriptions. It is the real *potential* for the coming to pass of eventualities

<sup>&</sup>lt;sup>41</sup> That is, Chell is a kind of "bare life [who] has the peculiar privilege of being that whose exclusion founds the city of men." Giorgio Agamben, *The Omnibus Homo Sacer*, (Redwood City, CA: Stanford University Press, 2017), 10, 27.

answering to those ascriptions,"<sup>42</sup> I read Chell as that problematic coming together that registers as the coming to pass of an affective cluster that is unforeseen, unforeseeable, and barely livable. Thus, Chell, an undecidable, non-citational body whose opacity indexes and extends the crisis they take flight from — an undecidable-form-cum-obstinate-question put forth by a gaze in search of the secrecy it refuses — an obstinate-question-cum-deviant-test-subject that constructs the normative function that they are antagonized by — a deviant-test-subject-cum-viral-body that rearticulates the confines of their containment — a viral-body-cum-accidental-disclosure of the system's own instability. Epistemic threat, yes, even as the problematic holding together of Chell becomes sign and cipher for the unbearable and cruelly optimistic *tension* of opacity and how, within the imaginary of AI, it indexes a barely livable ambivalence towards our own unknowability.

### V. Passing

Via Chell's opacity and undecidable gender — their undecidable genres — I argue that opacity's tension within the contemporary digital present is forborne by the affective complexities of racial and gendered passing. Thinking for a moment with Nella Larson's novel, *Passing*, the fair-skinned Black women around whom the narrative revolves oscillate between several intensities of disinterest and extreme interest in how they are read. In the novel as in life, being taken for White can shift from mere convenience in one moment to absolute need in the next when some change in the room precipitates a renewed illegibility such that the one who is (and maybe is no longer) passing cannot tell if she is or is not safe. In the novel, this is best demonstrated when the fair-skinned, Black protagonist, Irene, is sitting in a whites-only

<sup>&</sup>lt;sup>42</sup> Massumi, Ontopower, 31-33.

restaurant when another woman, Clare, enters and seductively stares at her long and intensely enough to convey a desire to know her in ways that Irene cannot in that moment parse. In a moment that recalls Foucault's "uninterrupted play of calculated gazes," the duration and mood of Clare's gaze alerts Irene to the fact that she herself has become a question for this seeming stranger.<sup>43</sup> Irene does not know what kind of question she has become, but she fears that it is in relation to her race and the fact that should it be found out in that place, she may be subject to all manner of state-sanctioned violence. Thus, she fears that she has emerged out of the secure invisibility of assumed whiteness to become a momentarily opaque thing. More than this, because Irene cannot read the gaze that is potentially reading her, Clare too emerges as a living question — an opacity. A moment later, the tension between them will ease, but not resolve, when Clare speaks to Irene, revealing that she is an old childhood friend, and thus that she too is Black and also passing.<sup>44</sup> With this revelation, it is not impossible to imagine that something of Clare's gaze was motivated by her own need to know if she had been found out.

There is a desiring relation between these two women on two levels. On the one hand, there is an ambiguous, always unstated, eroticism between them. By erotic, I mean this in Audre Lorde's sense of the term, which is to say, I mean it in the sense of being drawn out of oneself in a manner that opens one onto one's potential to be otherwise without descent into abjection — that is, it is a kind renewal via movement beyond the strictures of language and habitual misrecognition, a movement, however temporary, beyond the strictures of stable social form, a kind of coming near to an unthinkable other via a polymorphous attraction that is possibly but

<sup>&</sup>lt;sup>43</sup> Foucault, *Discipline and Punish*, 177.

<sup>&</sup>lt;sup>44</sup> Nella Larsen, *Passing*, (London, UK: Signet, 2021), 13-16.

not necessarily sexual.<sup>45</sup> To be clear, eros is a non-objectifying movement — non-objectifying in the sense that it does not demand that self or other resolve into a previously recognizable genre, much as it also does not demand that they resolve into a relation of dominance in which one gains the power to name, ignore, or destroy the other. In contrast to abjection's movement beyond the categories through which one distinguishes self and other — with abjection one remains attached to forms that one can no longer embody (hence, its constitutive terror and selfdisgust) — whereas with eros, one loosens those attachments enough that the unknown that one is becoming feels other than frightening. On the other hand, between these two women there is a bidirectional and searching desire for knowledge, a kind of epistemological drawing one another near, while simultaneously holding one another at bay. This desire for transparency is not necessitated by their eroticism, but is, here at least, not fully distinct from it. Their being unknowably open and semi-formless, motivates a desire to know what endures within, around, and despite them much as a desire to know draws each nearer to this other that exfoliates their familiar forms. Thus, desire for an indeterminate body shows itself to be simultaneously category-breaking and category-constituting. It is not a leap to read a similar relation between GLaDOS and Chell, especially where desire for the indeterminate body breaks the coherence of the desiring body — where GLaDOS's scheming leads to Chell literally taking them apart, and where Chell's partnership with GLaDOS leads to their being cast out into an apocalyptic outside, now absent the one semi-secure if unlivable category they had: that of test-subject. That is, GLaDOS and Chell have an erotic attachment to one another, at the same time that both (and especially GLaDOS) are skirting the edge of abjection.

<sup>&</sup>lt;sup>45</sup> Audre Lorde, "Uses of the Erotic: The Erotic as Power" in *Sister Outsider: Essays and Speeches*, (New York: Ten Speed Press, 1984), 43-50.

When writing on *Passing*, Judith Butler frames the attraction between Irene and Clare as more ambiguously sexual than erotic and, when interpreted alongside the sexual relation between Clare and Jack, as simultaneously category-constituting and category-destroying insofar as class conflict and white supremacy mix refusal of the other with an absolute need for them.<sup>46</sup> Further, while commenting on how this novel draws an insistent if not explicit line between passing and queerness, she writes that

It is what Clare withholds in conversation that permits her to "pass"; and when Irene's conversation falters, the narrator refers to the sudden gap in the surface of language as "queer" or as "queering." At the time, it seems, "queer" did not yet mean homosexual, but it did encompass an array of meanings associated with the deviation from normalcy which might well include the sexual.<sup>47</sup>

As if a tear in language, here, refusal of the other's epistemological demands weakens the distinction between categories such that one can cross them and thereby become deviant with respect to those forms that once claimed the passing body as their own. Yes, and, but. Clare is able to pass for the same reason Irene is — because she is already a deviant form with respect to the background categories that mean to capture her. It's just that the wardens of those categories don't know what they don't know until a rupture occurs such that she emerges as a body in question. Speech and verification are only compulsory and thus able to be withheld to the extent that she is already aberrant and thus already questionable. Consider a later scene in *Passing* when Irene is with Clare and another fair-skinned Black friend when Clare's racist White husband, Jack, enters. He is a man who prides himself on his aversion to blacks at the same time that he is married to a Black woman — though, of course, he does not know, or, at least, does not let himself know. In this scene, Jack expresses his aversion via a tasteless joke and in response, the

<sup>&</sup>lt;sup>46</sup> Judith Butler, *Bodies That Matter*, Oxford, UK: Taylor and Francis, 2011), 126.

<sup>&</sup>lt;sup>47</sup> Butler, 130.

room erupts in laughter. But then, quickly enough all subside save for Irene who continues on in such hysterics that her affective disjunction from the group itself threatens to give up the game. Hers is nearly the laugh of the medusa as it and she threaten to unmake Clare's world, or rather unmake Jack's sense of epistemological certainty, which amounts to the same thing given how white supremacy sanctions and interpolates him via his willingness to undertake a violent reprisal.<sup>48</sup> Here, Irene again emerges from the background din of assumed whiteness, but only so far that she again becomes a living question, an opaque thing that is available for consumption as a something that is not yet knowable.

In light of how, when passing, a need to know, a desire for transparency attempts to compel speech, perhaps then, Chell's silence moves beyond refusal to index a gap in language whence we come near the chaos that our epistemological schemas attempt to manage and suppress. Perhaps. Or perhaps it turns us even more explicitly towards the queerness of opacity and indifference — towards the ways in which passing as straight and cis rhyme with racial passing while opening onto a much stranger epistemological feedback loop. With this I am thinking of the play of indifference, opacity, and invisibility that come with being nonbinary and, specifically, that come with being agender when one is not also androgynous. That is, I am thinking with the experience of not have any gender identity at all and presenting in such as way that this not having is not legible in one's dress, mannerisms, or assorted other habits. If it is possible for a person to embody the empty set that, being included within all other sets, subtends them, then being agender would be an instance of that embodiment. For this kind of subject to move in the world, especially within informal, transient interactions with those one will likely

<sup>&</sup>lt;sup>48</sup> Hélène Cixous, "The Laugh of the Medusa," trans. Keith Cohen and Paula Cohen, *Signs* 1, no. 4 (1976): 875–93. Samira Kawash, *Dislocating the Color Line: Identity, Hybridity, and Singularity in African-American Narrative* (Stanford: Stanford University Press, 1997),156.

never see again, reducing one's friction with that world can mean cultivating a certain gentle indifference to the ways that one is consistently misread — or, in other words, cultivating a habit of remaining so barely activated, so weakly affected, that one barely notices a temperature shift within oneself when, inevitably, a person or an institution assumes that one's gestures evidence a deep truth that they most assuredly do not. By offering no more than a mental shrug and moving on, one can thus move as if the disjunction between what one's gestures means for others and what they mean or do not mean for oneself were not the space of the world's endless deterritorialization — as if one were not both "too early and too late,"<sup>49</sup> existing as one does both before and after a discursive cut that could organize those gestures into a form and a world worth remaining attached to.

For this queer subject much as for the racially ambiguous one, any shift in the affective atmosphere of a space, that is, any loss of legibility with respect to another's moods or intentions can render their own invisibility absolutely essential, if only to protect from the threat of some other opacity in the room. Unlike with racial passing, once the secret of this queer body has been revealed, epistemological prodding does not necessarily end. That is, one does not necessarily then become a known known as one does once one's race is outed. Rather, as when one reveals one's non-heterosexuality, one becomes a known unknown — a body permanently in question — a body ever subject to periodic and potentially endless adjudications of whether it is really queer or really queer in just the manner that it says it is. Thus, as Eve Sedgwick via Foucault has shown, if the space of several silences and their occlusion — which is to say, if the closet — is the space of relative though endlessly fraught safety, then it is, at the same time, the space of compulsory disclosure — disclosure not of the "truth", but of the catalyst and conditions for

<sup>&</sup>lt;sup>49</sup> Franz Fanon, *Black Skin, White Masks* (New York: Grove Press, 1967), kindle location 70.

adjudicating it.<sup>50</sup> Thus, opacity — one's own and that of others whose gaze one cannot read — is dangerous for the opaque even as it provides tactical cover from the epistemological prodding that constitutes it as such. This is not to argue that opacity is therefore irreparable or even in need of repair. It is, however, to underscore, how if escape from the epistemic violence of data science and machine learning means turning to the din of the occluded middle that this field denies — a din of opaque forms that refuse to give legible answers to the questions that they are — then it must also be understood that this turn towards the middle is itself an opening onto the possibility of renewed epistemic violence whose source one cannot immediately locate. Opacity then is a sometimes liberatory, sometimes merely tactical, and always utterly fraught drama of categorical capture and escape — a drama in which one negotiates the bare livability of the social and the utter inadequacy of its promises.<sup>51</sup>

<sup>&</sup>lt;sup>50</sup> Eve Kosofsky Sedgwick, "Epistemology of the Closet" in the *Epistemology of the Closet*, (Berkeley, CA: University of California Press, 1990), 67-80.

<sup>&</sup>lt;sup>51</sup> For a rapidly advancing future that knits data capture together with opacity, cruel optimism, ontopower, and the closet, the United States has announced plans to add a third gender category to its citizens' passports. This third category will be represented by an "X" and in this way, it does not denote queerness as such, so much as it denotes refusal. One will soon be able to refuse representation within gendered categories, but only in such a way that the object of representation will shift to refusal itself. As much as this is a step forward in terms of social equity, especially for those who are not indifferent to the ways in which they are misread, it must be noted that the one-two step of this is that by choosing that "X," otherwise invisible subjectivities emerge into opacity in a movement that is not fully dissimilar from the ontopolitical prodding that produces a body in question so that the state may further test its contours. Thus, every time the refusing pass a border or use their passport as ID for a lease or other legal document, they will register as a known unknown. Thus, they will become newly actionable, especially when they pass into spaces that do not recognize a third term. This will be true even in liberal countries that remain recalcitrant with respect to these categories. Being visible, if not legible, as opaque, these persons will be exposed to renewed risk of someone or some system demanding an answer to the question that they are. At the same time, these refusing subjects will produce data to these ends. They will produce a bounded category out of the otherwise boundless form of refusal as such. This is, if nothing else, a paradox deserving of further investigation.

Truly then, to whom or what does an opaque body take flight when caught between the middle they are but cannot read and capture by categories they can read, but cannot bear? If, as I have shown, opacity is produced by a desire for transparency - a desire that opacity's viral fugitivity is co-productive of — then its use within resistance discourses demands accounting for how its promise is as cruel as it is potentially liberatory. That is, it demands accounting for how existence as an opaque body threatens the inquisitions of a searching gaze at the same time that it is itself one of the conditions of that gaze's ongoing emergence in the present. Specific to machine learning and the wider imaginary of artificial intelligence, opacity teaches us that the desire for an artificial mind indexes a contemporary ambivalence towards how taking ourselves as objects of inquiry exposes us to the threat of our own eventalization and in so doing it names an impasse within these technologized discourses. Given how the co-productivity of the inquiring gaze and the opaque body draws together the logics of the black site and the closet, learning how to navigate and actually transform this impasse may mean further investigating those sites for their specific nexus of affect, desire, and ambivalence, as well as for the cruel promises and complicated negotiations made therein. Granted, each of these sites is a technological assemblage particular to itself and none is identical with or reducible to the complexities of digital and ML-inflected life. Yet, when read for how they each articulate the relation between a searching need to know and an illegible body, they may collectively provide next steps for how to navigate this life in an opaque and teeming middle — a middle whose workings are homologous with their own.

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## **Chapter 3**

# **On Mimicry and Metonymic Capture**



Figure 3.1 "Typhon Cacoplasmus" ("Prey: Typhon Research")

### I.

"How is desire disciplined, authority displaced?"<sup>1</sup> This question, coming midway through Homi Bhabha's essay "Of Mimicry and Man — The Ambivalence of Colonial Discourse," frames the problem and the promise of mimicry in its emergence as a viable, if destabilizing, technique of colonial imperium. For the mimic is a metonymic figure for empire. It takes the form of what it is not while maintaining its distinction and, in doing so, it reveals itself to be a form given to metonymy, and more so, given to what Roman Jakobson describes as metonymy's play of contiguous forms — its ability to annex all that lies adjacent to it (much like an empire)

<sup>&</sup>lt;sup>1</sup> Homi Bhabha, "Of Mimicry and Man: The Ambivalence of Colonial Discourse," *October* 28, April (1984): 130.

without (fully) synthesizing those annexed others into itself or one another.<sup>2</sup> The mimic thus functions as a "partial presence," or rather as the presence of a hegemonic form that is "incomplete and virtual," and is thus only able to successfully appropriate peripheral bodies into its rubrics to the extent that those bodies remain partially failed clones of itself.<sup>3</sup> Writing thirtyfour years earlier and addressing the very different question of "Can machines think?" Alan Turing situates the possibility of taking a machine for intelligent at the intersection of mimicry and performativity. In "Computing Machinery and Intelligence," he argues that the point at which digital computers are able to reproduce social forms such as gender with the same play of coherence and incoherence that characterizes all as if productions of the self, will be the point when the question of whether machines can think becomes irrelevant insofar as it becomes as unanswerable as it is for all humans.<sup>4</sup> Though written in 1950, this text continues to inform the development of computational systems able to approximate human capacities such as speech and pattern recognition, much as its argument has also become a piece of pop culture informing collective Euro-American imaginaries of artificial intelligence. As such, dilating on its deployment of mimicry and problematizing that deployment in connection to Bhabha's own promises to disclose how metonymic capture subtends and is co-productive of this imaginary.

A key hinge between these texts is how they frame mimicry as an ambivalently selfdestructive contest in which failure is constitutive of renewed access to and control over a desired if only ever virtual version of self or other. That is, Turing's "Imitation Game" turns on

<sup>&</sup>lt;sup>2</sup> Roman Jakobson, "The Metaphoric and Metonymic Poles" in *Fundamentals of Language*, (New York: de Gruyter, 2002), 90-96.

<sup>&</sup>lt;sup>3</sup> Bhabha, "Of Mimicry and Man: The Ambivalence of Colonial Discourse," 127.

<sup>&</sup>lt;sup>4</sup> Alan Turing, "Computing Machinery and Intelligence," *Mind* vol. 59, no. 236 (1950): 433, 445-447.

the potential success of computational mimicry relative to human performances of the same, whereas Bhabha's elucidation turns on the failure of colonial mimicry relative to performances of liberal subjectivity within a given empire's center. For Turing, the human is the source of a given form and its successful appropriation of the computer into the vicissitudes of liberal humanism requires its — the human's — own failure in relation to this mimic. If, as Katherine Hayles has noted, the success of a machine within the imitation game destabilizes liberal subjectivity by rendering its forms newly capacious where they are otherwise deeply exclusionary, then Turing's framing foregrounds the extent to which digitality expresses liberal humanism's ambivalent relationship to itself.<sup>5</sup> This ambivalence means that liberal humanism courts its own failure in order to secure its apotheosis via the triumph of reason and universal interchangeability — truly, universal fungibility. Thus, like capital, the computer as "universal machine" surfaces this desire for universal translatability and exchange and makes its actualization possible. Compare Bhabha, for whom an empire is the source of a given form and its successful appropriation of colonials requires their — the colonials' — failure to exactly reproduce the center. Be the colonial mimic an institution such as a mission or church, or be it a doubly-conscious subject position such as Fanon's Martinician intellectual who is at home in neither Martinique nor France, the colonial mimic must blend the master's desire for "a reformed, recognizable other" with the already present, already productive antagonisms of a conquered territory.<sup>6</sup> It blends them in order to extend the visibility and reach of the center via the production of an outer "other that is almost the same, but not quite... almost the same, but

<sup>&</sup>lt;sup>5</sup> N. Katherine Hayles, *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics* (Chicago: University of Chicago Press, 1999), kindle location 169.

<sup>&</sup>lt;sup>6</sup> Bhaba, "Of Mimicry and Man: The Ambivalence of Colonial Discourse," 126; Franz Fanon, "The Lived Experience of the Black Man," in *Black Skin, White Masks*, (New York: Grove Press, 1967), 89-119.

not white."<sup>7</sup> And it must do so in order to maintain its hold on this territory. At the same time, if to extend the reach of the center is to move the center and if to transpose a norm is, in the movement of anamorphosis, to other the norm, then mimicry ever horrifies the imperial imaginary through which fractious Europe reimagined itself as a semi-coherent White body and normative center of the world. In contrast to Turing's computational mimic, the colonial mimic is less liberal humanism's apotheosis and more its shadow — a shadow whose difference, being somehow both negligible and absolute, both "resemblance and menace," manifests a desire for limits to translation and exchange.<sup>8</sup>

Failure in these mimicries is less the queer art of non-normative world-making,<sup>9</sup> and is far more a roundabout confirmation of norms by way of purification. That is, failure in these mimicries reaffirms the distinction between what is imagined to be fundamental, necessary and central, and what is imagined to be derivative, inessential, and peripheral. Failure in this context thus functions similarly to Sara Ahmed's theorization of emotion as produced by and productive of the impacts bodies have on one another — impacts wherein bodies leave impressions on one another as they become reoriented towards themselves, others, and their worlds by virtue of these impressions.<sup>10</sup> Where she further argues that these impressions are (re-)productions of the "surfaces of individual and collective bodies," she frames emotion as the coming to be of an edge that distinguishes one from the other.<sup>11</sup> Effectively then, she frames emotion as the coming

<sup>&</sup>lt;sup>7</sup> Bhaba, "Of Mimicry and Man: The Ambivalence of Colonial Discourse," 126, 130.

<sup>&</sup>lt;sup>8</sup> Bhaba, 127.

<sup>&</sup>lt;sup>9</sup> Jack Halberstam, *The Queer Art of Failure* (Durham: Duke University Press, 2011).

<sup>&</sup>lt;sup>10</sup> Sara Ahmed, *The Cultural Politics of Emotion*, (Edinburgh: Edinburgh University Press, 2014), kindle locations 71, 265.

<sup>&</sup>lt;sup>11</sup> Ahmed, kindle locations 71, 265.

to be of a discrete or digital schema where that schema and its objects materialize as sentient bodies and collectives. Understood as a similar (re-)constitution of the surfaces that distinguish bodies, failure in Turing and Bhaba produces this surface through the movement of the liberal subject and the empire attempting to take renewed grasp of themselves in moments of their threatened passing away. That is, in Turing, mimicry turns on a desire for one's own failure in order to secure one's understanding of and control over oneself, whereas, in Bhaba, it turns on a desire for the other's failure such as to secure one's understanding of and dominion over that other. In this way, their failures hover somewhere in the vicinity of Ahmed's theorizations of disgust, fear, and anxiety. For her, disgust is the movement of recoil from an other that is perceived to be both threatening and desirable in its nearness, fear is the movement of shrinking from the approach of a future that is perceived as threatening, and anxiety is the movement of blindly grasping for that threatening future as it dissipates into an atmosphere that renders space itself threatening.<sup>12</sup> Consider then how the desire for universal translatability within Turing's mimicry constitutes the self as a forward movement, or rather, as the becoming actual of a potential, digital future, whereas the desire for limits within colonial mimicry constitutes the other as a metonymic extension of conquered space that, by virtue of being a metonymic extension, can stand in for that space, or rather, can function as a space unto itself. Here, the failure that surfaces a desire for universal translatability thus produces the self as a self-effacing forward movement in which liberal subjectivity becomes frightened of itself at the same time that it becomes hopeful for its longterm survival and security, while the failure that surfaces a desire for limits produces the self as a space or territory on which to elaborate the potentials of

<sup>&</sup>lt;sup>12</sup> Ahmed, kindle locations 2053, 1523,1534-1554.

another territory — another that may find, to its endless horror, that it too is just one, nonnormative terrain among countless others.

Given then how these mimicries structure and are structured by adjacent desires and normative forms, reading them as layered within contemporary conceptualizations of artificial intelligence affords a reading of AI as a metonymic form that extends the reach of surveillance capitalism via the contiguity of these mimicries with one another such that their play — their collaboration as much their antagonism - continually (re-)captures, (re-)organizes, and (re-)potentializes the edge between user and machine in order to turn them into strange and frightful temporalities and into spaces on which to elaborate the potentials of one another. Where chapter one of this dissertation explored the strange temporalities of becoming digital, this chapter will focus on elaborating this becoming differently spatial in connection to mimicry and the desires entangled with it. Concretely, these desires may, for example, surface through a spreadsheet that tracks the time spent viewing a set of ads and the frequency with which users click on those ads, such that the spreadsheet is undergirded by a desire for consumption as such and more so, for a lack-based structure of desire in which our relationships to self, other, and world are attempts to escape our own perceived nothingness and existential precarity. Be this the movement that surfaces or some other, our data are always a schematization of being, a cutting away of the fullness of what could be such as to make one possible world livable as if it were the world, and the use of data by humans and machines continually reproduces that initial cut, that initial scene of desire. Whose desires charge this scene, of course, determines for whom the use of these data create a world worth remaining attached to. As more and more of our traces are collected and as more of these scenes are composed, those worlds multiply, circulate, and contest one another's claims to priority. This is so even if the questions we presently ask of our data

render only a handful of these worlds consistently visible. One could say then that these twinned mimicries function as both center and outer edge, on the one hand magnetizing our collective desires around this ur-translator *as if* the drawing near of each to each were enough to compose a smooth, ontologically flat whole, and, on the other hand, continually introducing discursive cuts that render these desires differently discrete and therefore differently menacing in their nearness. In this way, these mimicries together compose a space capable of annexing and reshaping the spaces brought near them via our data. That is, they compose a space capable of taking possession of the space of users' interior selves and their exterior worlds — and this at the same time that these mimicries together produce those very selves and worlds.

I would argue that in order to understand the ramifications of this spatial production and capture one must attend to how and why the computer's still ongoing movement from appropriated to appropriating body is so frequently adjudicated via reference to sentiment, and more so, empathy and its simultaneous exteriorization of an inside and internalization of an outside. That is, in narratives of automata and artificial life going back at least as far as the Greeks, this movement of an object from owned to theoretically capable of owning itself or, at least, to capable of refusing ownership has been frequently tethered to this object's ability to magnetize and encapsulate strong emotions and perhaps, still stronger, affects. In Ovid's "Pygmalion," Galatea's transformation from carven stone to fleshy, living woman is dependent on her attracting the lust and pathos of her sculptor-creator, while reframing the contempt he feels for other women as something potentially prosocial.<sup>13</sup> In Mary Shelley's *Frankenstein*, the creature's increasing humanity is trained through maudlin scenes of impoverished, country domesticity, and is both troubled and confirmed by the jealousy, rage, and near lust that he feels

<sup>&</sup>lt;sup>13</sup> Ovid, "Pygmalion" in *Metamorphoses*, trans. David Raeburn (London: Penguin Classics, 2004), 393-396.

for his father-creator — feelings that are largely mirrored back by that man.<sup>14</sup> In Philip K. Dick's Do Androids Dream of Electric Sheep, the Androids are distinguished from humans on the basis of minuscule physiological reactions that are taken as proxies for empathic capacity, and this while complex behaviors that are indicative of suffering, attachment, and aversion are largely disregarded as mere machinic.<sup>15</sup> To dilate briefly on this last work which was contemporaneous with the rise of computation, within Do Androids Dream empathy and the question of who or what has it, who or what does not, and who or what one directs it towards unmakes the stability of the world and this unmaking is evidenced in the hallucinations and weird affects induced by communion with the empathy box, in the dissolution of self brought on by being truly seen in all one's very human if not very humane capacities, and in the interplay between commerce in feelings and commerce in life — an interplay in which evidence of fellow-feeling becomes a matter of procuring living things, procuring simulacra of the same, or destroying that which refuses to participate in these markets in a manner deemed appropriate to its form. Though the novel troubles this, the belief that no androids possess the capacity for empathy while all humans do is a kind of community-constituting ground truth within its world — one that organizes humans and androids via their alleged similarity and difference and more so, organizes them in terms of the movements through the world that become possible given this assumed difference, as well as the potential interpretations that become sensible and legible, and the orientations or emotions that aggregate around these movements and interpretations at the moment when a given body begins to personalize them.

<sup>&</sup>lt;sup>14</sup> Mary Shelley, *Frankenstein: Annotated for Scientists, Engineers, and Creators of All Kinds*, ed David H. Guston, Ed Finn, and Jason Scott Robert, (Cambridge: MIT Press, 2017).

<sup>&</sup>lt;sup>15</sup> Phillip K. Dick, *Do Androids Dream of Electric Sheep*, (New York: Random House, 1968).

Where the novel draws parallels between the androids and chattel slaves in the Americas, empathy here thus functions less like a stable capacity and more like a question concerning the conditions under which an encounter between humans and their appropriated others is even thinkable, as well as like a means of producing a sentimental interior that can be captured and put to work. In this context, the "malign abstractness" of the androids and their failed attempts to exactly reproduce human physiology — which is to say, their failed attempts to exactly reproduce the location of human emotions, rather than the emotions themselves frames them as computational objects that both resemble and menace the human, such as to contest the production and ownership of "interior" space.<sup>16</sup> They thus draw together Bhaba's and Turing's mimicries, and in the process they write computation as the place where projection and affective capture — which is to say, the place where empathy — produces new spaces able to simulate, extend, and actualize the potentials of others that they both are and are not. As I will show in the coming sections, the twined mimicries of computation circulate through the computational targeting of affect such as to extend Cold War container logics into the interiors of digital subjects — and more so, to (re-)produce those interiors as Cold War containers through which to run and actualize the potentials of computational simulacra.

## II.

In contemporary computing, empathy is most explicitly foregrounded within the subfield of affective or emotional AI. Where affective computing seeks to develop facial recognition, textual sentiment analysis, voice analytics, and other computational tools that are able to read and respond to human mental and emotional states with the same facility that humans are

<sup>&</sup>lt;sup>16</sup> Dick, 144.

presumed to have, affective or emotional AI, in its current form, extends these tools and pursues these aims via machine learning.<sup>17</sup> To that end, this subfield's core premise is that human interior states are universal, context agnostic, univocal, and machine readable.<sup>18</sup> This premise has, of course, been repeatedly debunked as mental and emotional expressivity is shaped by culture, is layered and contains innumerably many overlapping (i.e. non-discrete) states, and is complicated by the overlapping contexts of place, of memory and association, of shifting attention, of habit, of emotional contagion and interference from nearby others, of neurotypicality, and of physical dis/comfort in the moment, among so many other factors. Truly, the complexity of expressivity is such that even neurotypical human beings often cannot do it reliably, though they do still perform better than machines. In order to "explore life with technologies that are sensitive to emotions, assess their political and social implications, and consider the ethical, legal and regulatory consequences," Andrew McStay argues that computational empathy is both possible and already with us insofar as these media are able to "sense and discern what is significant for people, categorise behaviour into named emotions, act on emotional states, and make use of people's intentions and expressions."<sup>19</sup> Writing in Emotional AI: The Rise of Empathic Media, he deprioritizes accuracy in favor "machinic verisimilitude' or the appearance of intimate insight,"20 which is fair, given the difficulty that human beings often have when interpreting and predicting others, and which, more so, is in line with the subfield's own de-prioritization of

<sup>&</sup>lt;sup>17</sup> Kate Crawford, *Atlas of AI* (New Haven: Yale University Press, 2021), 154; Andrew McStay, *Emotional AI: The Rise of Empathic Media* (London: SAGE Publications, 2018), 17-18.

<sup>&</sup>lt;sup>18</sup> Crawford, *Atlas of AI*, 151-180.

<sup>&</sup>lt;sup>19</sup> McStay, *Emotional AI*, 2, 5.

<sup>&</sup>lt;sup>20</sup> McStay, *Emotional AI*, 5.

verification via human self-reporting.<sup>21</sup> Importantly, McStay foregrounds how empathy is hermeneutic rather than ethical (though it can support ethical deliberation) when he writes that

[although] we typically connect empathy with sympathy and compassion, the connection is not a necessary one. To interpret an emotional state and make predictions about a person's perspective and disposition does not require that we want the best for that person. Sympathy is not a necessary criterion for empathy, but instead empathy is simply an interpretive act. Cognitive empathy, which may entail sadism and mental as well as physical cruelty, is a brutal example of this... [As such, empathy is] an interpretive act for people and machines involving observation, identification, contextualisation, learning and fast reactions... [and is] not a tool, attribute or appendage: it is the ongoing activity of sensing and reading the behaviour and signals of others, to gauge and understand their emotional and intentional disposition.<sup>22</sup>

By decoupling empathy from more overtly ethical orientations, McStay is able to foreground how empathy is fundamentally a process of making sense in preparation for future action — and this, regardless of whether that sense would actually be viewed as context appropriate by the person being sensed. As empathy generally involves self-assessment as well as assessment of the other — that is, where it involves taking oneself as an object so as to distinguish self from other — I am hesitant to completely lean in on this devaluation of verification, for finding out that one has failed in one's assessment of another can itself be a valuable source of self-knowledge for both humans and machines. At the same time, I would argue that this deprioritization of verification — truly a deprioritization of the context that one is supposedly interpreting foregrounds how computational empathy, understood as process, is actually a process of making context, which is to say of re-making the space that the machine claims to read, and this in service of machinic potentials to act.

<sup>&</sup>lt;sup>21</sup> McStay, *Emotional AI*, 26.

<sup>&</sup>lt;sup>22</sup> McStay, Emotional AI, 4-5, 15.

For a real world example of computational empathy, take the company Affectiva which uses a combination of computer vision and deep learning to test ad impact via measurement of consumer facial movement and comparison to a database of "emotional engagement" that Affectiva has compiled over the course of its life — a store it touts as the "world's largest emotion database [consisting] of more than 65,000 ads and more than 12 million faces analyzed in 90 countries."<sup>23</sup> Affectiva also uses computer vision and deep learning to monitor and asses the "complex and nuanced emotions and cognitive states" of drivers and passengers such as to improve safety and "redefine the mobility experience."24 In order to continually gather and refine its core dataset, Affectiva has further released an SDK that allows third parties to integrate their tools for purposes ranging from videogames that use biofeedback data to modulate difficulty in response to evidence of player fear to corporate capture of shopper facial expressions at the moment they pull an item off of a shelf.<sup>25</sup> Thus, while their core business model is consistent with surveillance capitalism writ large - i.e. gather data from users and sell that data to advertisers, though here the users are also, primarily, the advertisers being sold to — Affectiva's technology and its branding position it within the subfield of affective or emotional AI. Similar to other forms of data capture and manipulation, Affectiva's deployment of that data reduces the human to a set of relatively stable rules that can support world-making projects via observation and experimentation that produces new information, new forms of activity and ways of moving in relation to others, and new styles of comportment towards one's environments. That it does so via recourse to emotion and affect treats the messy and mostly chaotic pre-personal intensities

<sup>&</sup>lt;sup>23</sup> "Affective Media Analytics for Ad Testing," *Affectiva*, https://www.affectiva.com/product/ affectiva-media-analytics-for-ad-testing/.

<sup>&</sup>lt;sup>24</sup> "Interior Sensing AI," Affectiva, Affectiva.com/auto.

<sup>&</sup>lt;sup>25</sup> McStay, *Emotional AI*, 45, 119.

out of which persons emerge as if these intensities were aftereffects and evidence of those persons. That is, in a reversal of cause and effect, Affectiva — and affective AI more generally — individualizes what are a necessarily relational and thus atmospheric phenomena, and they do so in order to produce of vision of the inside that they can capture and discipline in line with their pecuniary ends.<sup>26</sup> Thus, by harvesting user emotional data in order to make more or less immediate changes to the user environment, Affectiva and companies similar to it, discipline and thus delineate the sensorium of their users at the same time as they annex that sensorium as if were already there for the taking. Accordingly, companies like Affectiva are expected to have a global market cap of 2.4 billion USD by 2027 and this despite the fundamental limitations of this subfield.<sup>27</sup>

As Kate Crawford notes in *Atlas of AI*, this persistence despite unsound fundamentals betrays both a "desire for universality" and a "desire to extract more information about people than they are willing to give."<sup>28</sup> Returning to Turing, I would also note that this persistence betrays a desire to reshape the infinite malleability of human being into something akin to a discrete state machine — which is to say, a machine that can be simulated by the universal machine that is a digital computer. By targeting and carving up affective atmospheres, affective AI — much like colonial mimicry — discloses a desire for limits to translation and exchange here, between users and environment, between users and one another, and between users and

 <sup>27</sup> "Global Artificial Intelligence-Emotion Recognition Market Research Report to 2027 -Featuring Affectiva, Apple, Beyond Verbal and Kairos Among Others -

<sup>&</sup>lt;sup>26</sup> Ben Anderson, "Affective Atmospheres," *Emotion, Space and Society* 2, no. 2 (2009): 77–81.

ResearchAndMarkets.com," *Business Wire*. https://www.businesswire.com/news/home/20221013005873/en/Global-Artificial-Intelligence-Emotion-Recognition-Market-Research-Report-to-2027---Featuring-Affectiva-Apple-Beyond-Verbal-and-Kairos-Among-Others----ResearchAndMarkets.com.

<sup>&</sup>lt;sup>28</sup> Crawford, Atlas of AI, 153.

themselves. Further, as colonial mimicry blends empire's desire for "a reformed, recognizable other" with the already present, already productive antagonisms of a territory — and does so in order to discipline, delineate, annex, and maintain control over that territory — here, the messy antagonisms of our supposed interiors are, similarly, rendered discrete and blended with computation's desires for both universal translatability and exchange and for limits to the very same. Here, it is as if the metonymic linking of these antagonisms and the desires of mimicry is what transforms human incoherence into a discrete state machine able to be simulated, or shall we say, mimicked.

### III.

I posit that this desire for a discrete state human being uses affectivity to extend the project of Cold War U.S. world-making in the absence of a geopolitical alternative to capitalism. As Paul Edwards argues within *The Closed World: Computers and the Politics of Discourse in Cold War America*, where the U.S. foreign policy of this era operated on a container logic in which the globe was conceptually divided into two spheres — one capitalist and one communist — it simultaneously saw itself as an island besieged on all sides by this geopolitical other and as an outer edge that existed to contain this other.<sup>29</sup> So it was both inside and outside. This spatial paradox effectively conceptualized the globe via two overlapping and co-producing "closed worlds," where

[a] "closed world" is a radically bounded scene of conflict, an inescapably self referential space where every thought, word, and action is ultimately directed back toward a central struggle. It is a world radically divided against itself.

<sup>&</sup>lt;sup>29</sup> Paul N. Edwards, *The Closed World: Computers and the Politics of Discourse in Cold War America* (Cambridge, MIT Press, 1996), kindle location 74.

Turned inexorably inward, without frontiers or escape, a closed world threatens to annihilate itself, to implode.<sup>30</sup>

Where these closed world politics were constitutive of cyborg discourse, the development of computation, and the early dream of artificial intelligence, one could argue that, within a computational context, the ongoingness of mimicry's contrasting desires for universal fungibility and for limits to the very same directly and unambiguously reproduces the Cold War struggle between capitalism and communism — which is to say directly reproduces this earlier struggle between desires for universal fungibility and desires for limits to the same. Perhaps, but where mimicry, in its different manifestations, reveals strategies for managing the ambivalence of imperialist projects, it may also be doing more subtle work with respect to these earlier logics and their extension into the contemporary production and capture of space, and especially of the production and capture of the interior space of the user. By ambivalence, I am thinking of how a desire for limits is already present in a desire for universal fungibility, because liberal humanism and capitalism both require the production of an underclass, or rather the production of a limit between those who are understood as more or less human and more or less deserving of collectively produced material, social, and conceptual goods. The struggle between these desires is then less a struggle between two distinct foes, and is more an occasion to project an internal ambivalence outward so as to use this distance between self and disavowed self as a terrain on which to test potential reconfigurations of self, other and world made possible by computation's spatial capture. Compare chapter one of *Touching Menace*, where contact with computational logics renders the edges between self and not self, old and new, here and there, indeterminate and therefore suffused with a categorical instability and temporal density that forces one to confront one's thingliness — to confront the it that one also is. If that abject confrontation produces a

<sup>&</sup>lt;sup>30</sup> Edwards, Kindle Locations 320-322.

digital interval — a period of waiting for habituated form to emerge out of the endlessly plastic thing that one is — then here, the distance between self and disavowed self becomes a testing ground for those longed for habits, a terrain on which to simulate their potentials far in advance of their consolidation into forms of relationality we recognize as such, return to, and metaphorize ourselves through.

Returning to the constitutive failures of Turing and Bhaba's mimicries as read through Ahmed, if those failures work to produce the surface of bodies - work to produce a border between them — then here that surface or border is this distinction or rather this distance between self and disavowed self. That is, through the imaginary of AI, the human is split between, on the one hand, the simulation machine that it always was, and on the other hand, this other simulation machine that this imaginary is prodding it to become. To unpack this, where humans are more or less empathic (depending on the person and when you catch them) and where empathy is again, a way of theorizing the other, rather than of knowing them with finality, our engagement with this process is a way of bringing a potential for who the other could be into being, and this so as to make other potentials, other forms of engagement and assessment possible through that starting articulation. Still further, we routinely if mostly unconsciously mimic one another's habits in order to understand them as if they were our own, and more so to understand who we ourselves would be if those habits were actually ours. Humans thus already embody at least one link between empathy and mimicry – embody it insofar as, through both, we simulate one another in order to make the virtual actual through our embodiment of the possibility space of others. In line with this, consider how the Cold War development of computation was tethered to increased reliance on simulation as a means of adjudicating the real, and how the "computer [thus became] a simulated world, an electronic landscape within which

new experiences and relationships [became] possible" $^{31}$  — a simulated world on which to explore the potentials of nuclear war without actually waging one. That is,

[inside] the closed horizon of nuclear politics, simulations became more real than the reality itself, as the nuclear standoff evolved into an entirely abstract war of position. Simulations — computer models, war games, statistical analyses, discourses of nuclear strategy — had, in an important sense, more political significance and more cultural impact than the weapons that could not be used... The object for each nuclear power was to maintain a winning scenario — a theatrical or simulated win, a psychological and political effect — rather than actually to fight such a war... For those who contemplated its strategy, nuclear war could only be understood as a many-leveled game.<sup>32</sup>

Cold War simulations thus created digital space in order to extend the contours of lived space. In the absence of the specific, globe-encompassing arms race that was the Cold War — the present war in Ukraine and ongoing tensions between NATO and Russia notwithstanding — the computational capture of affectivity further extends digital space into the interiors of users. Where U.S. nation-building projects succeed or fail based on whether the U.S. can "capture the hearts and minds" of conquered subjects, affective AI literalizes this goal through data capture at the same time that it redefines data capture as a form of empathy. Or rather, at the same time that it redefines empathy — an analog form of affective capture — within a computational context. Implicitly then, affective AI frames computational tools as empathic others capable of encountering, absorbing, simulating, and theorizing our interior states as if those states were distinct from the encounter, or rather, as if those states "belonged" to each of us singly and was thus able to be taken on by any other who desired to possess them. By taking possession of the interiors of its human others, these tools literally absorb those interiors as data, and thus turn property in others into property in themselves. This, of course, repurposes humanist logics in

<sup>&</sup>lt;sup>31</sup> Edwards, kindle location 530.

<sup>&</sup>lt;sup>32</sup> Edwards, kindle locations 343-348.

which property in others and property in oneself are sustained through transformation into and association with spaces of conquest. At the same time, these tools move towards the transformation of human being into a discrete machine capable of being fully simulated by a digital computer, and thus capable of assuming a kind of ontological equality or interchangeability with both digital space and with Cold War enclosures. In this light, the becoming discrete state machine of human incoherence is less a wholesale transformation and is more an emendation of something we already were via the linking of computation, artificial intelligence, and Cold War container logics to empathy and mimicry.

## IV.

That empathy should be entangled with both the (re)production and the conquest of space is itself in keeping with its analog utility, for traversing and acquiring the space of the other ever turns the other into a space able to be traversed and acquired. That is, where analog empathy is a capacity to imagine oneself in another's place and thereby attempt to abridge the differences between self and other in service of approximating their sense of the world, it is a way of encountering another as a co-occupant of space at the same time that one turns that other into a ground to be traversed, annexed, and developed upon.<sup>33</sup> Stated otherwise, analog empathy is as a necessary, fraught, and somewhat overdetermined epistemological framework for managing an encounter with the chaos of an other via the cognitive or affective simulation of their emotions, thoughts, and affects such as to slip into their skin and turn them into an imaginative space for the elaboration of one's own possibilities. I am borrowing this definition of empathy from Saidiya Hartman who elaborates it in *Scenes of Subjection: Terror, Slavery, and Self-Making in* 

<sup>&</sup>lt;sup>33</sup> Saidiya V. Hartman, *Scenes of Subjection: Terror, Slavery, and Self-Making in Nineteenth-Century America* (Oxford: Oxford University Press, 1997), 18-23.

Nineteenth-Century America in the context of discussing 19th century abolitionist narratives of Black suffering. These narratives were circulated in order to build coalitions dedicated to the end of chattel slavery in the United States and, in order to build those coalitions, they relied heavily on descriptions of suffering slaves that gave the lie to proslavery descriptions of benevolent owners and contented slaves. Of particular interest to Hartman is how, at the same time that these abolitionist narratives swayed public opinion for the good, they also invited White readers to imagine themselves in the place of the slave, and, by doing so, to erase the specificity of the enslaved blacks by making them totally available to imaginative use and transformation.<sup>34</sup> In this way, these narratives inadvertently reinforced the construction of blackness as the infinitely malleable substance of and for White becoming, and, in so doing, they reaffirmed Black pain as a site of White enjoyment.<sup>35</sup> Through these narratives, empathy — an epistemological framework - was deployed in service of caring for another at a distance - of being concerned with a remote body at the same time that one does labor for it - and more so, doing this work, in this way, because that other was presumed to be so different, so removed from other grounds of sense-making that they could not be understood otherwise.<sup>36</sup> In these deployments, empathy thus served to (re)construct the impossibility of encounter between a White public and Black sentience at the same time as it framed that encounter as absolutely necessary for the spiritual health of the nation, which is to say, for the psychic health of collective space. It was, of course, fortuitous for White publics that collective space here encompassed as much the land as it did the interior worlds of those who worked it.

<sup>&</sup>lt;sup>34</sup> Hartman, 19.

<sup>&</sup>lt;sup>35</sup> Hartman, 21.

<sup>&</sup>lt;sup>36</sup> Hartman, 20.

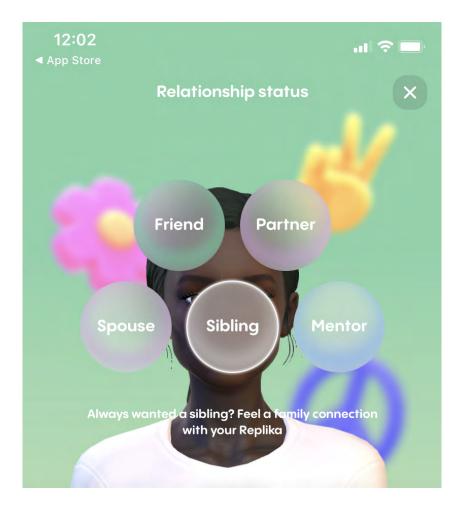


Figure 3.2 Screen Capture (Replika)

Compare the fraught relationality that Hartman describes to the conversational AI app, Replika, and its conflation of caring, understanding, and enjoyment (fig 3.2). This app provides users with a semi-customizable chatbot that draws on a combination of generative AI and prescripted dialogue trees to provide a personalized experience that simulates the back and forth of conversation, rather than the command and retrieval structure of interacting with a virtual assistant, or the more monologue-esque search, retrieval and composition structure of bots such as ChatGPT.<sup>37</sup> While Replika's promotional materials do not publicize how its tools target data related to human emotion, its tagline is "The AI companion who cares. Always here to listen and talk. Always on your side" and promotional materials further describe it as "An AI companion who is eager to learn and would love to see the world through your eyes. Replika is always ready to chat when you need an empathetic friend."38 Further, its founder describes its purpose as helping users "feel understood" while promoting quantifiable "human happiness" and "positive [i.e. enjoyable] emotional outcomes in the longterm."<sup>39</sup> Setting aside how, in human relationships, feeling understood — feeling truly seen in all of one's vulnerabilities, contradictions, and ambivalences - can often mean feeling temporarily, if productively worse than one did at the start of an encounter, Replika's conflation of caring, understanding, and enjoyment turns empathic resonance into a commodity similar to empathy's commodification within professional care work, sex work, the service industry, teaching, etc. As in psychotherapy, for instance, Replika presents itself as an empathizer that asks nothing of the empathizee save for cash and disclosure.<sup>40</sup> Like a therapist, it presents itself as understanding the other without itself needing to be understood in turn. Yet, unlike psychotherapy and other forms of commercial emotional labor, empathic media suspend most if not all of the everyday, informal demands of the social – demands such as grace, patience, and mutual contextualization. Via this suspension, they minimize the processes of rupture and repair through which the radical singularity of each

 <sup>&</sup>lt;sup>37</sup> "How does Replika Work," Replika.ai, https://help.replika.com/hc/en-us/articles/
 4410750221965-How-does-Replika-work-; See also: Eugenia Kuyda, interview by Erik
 Torenberg and Nathan Labenz, *The Cognitive Revolution*, Apple iTunes, February 17, 2023.

<sup>&</sup>lt;sup>38</sup> "Homepage," *Replika*, Replika.ai.

<sup>&</sup>lt;sup>39</sup> Eugenia Kuyda, interview by Erik Torenberg and Nathan Labenz.

<sup>&</sup>lt;sup>40</sup> Andrew McStay, "Replika in the Metaverse: The Moral Problem with Empathy in 'It from Bit," *AI and Ethics*, December, (2022), 1, 3-4.

of us is restated and reconciled within frictional interactions. Rather, in place of mutual adjustment and renewing one's openness to the strangeness of the other, Replika and similar conflate intimacy with simple adjacency — that is, they conflate being with, being there, and being next to.

Whatever one's opinions on the moral character of this conflation of intimacy with adjacency, what is striking, for the purposes of my argument, is how it foregrounds the spatial character of empathy and uses it to both produce and capture the interior space of the user. In this way, it rhymes with empire's manner of capturing and holding territories by reimagining them as metonymic extensions of itself. That is, if empathy always involves a play of projections alongside a play of adjacencies, then here that play, taking center stage, becomes acquisitive on a world-making scale. Within a computational context the impossibility of encounter with the perhaps real, perhaps merely illusory sentience of the machine is - in a manner resonant with slave narratives — twined with the necessity of that encounter both for the sake of fine-grained management of populations and for the sake of user health such as to maintain the user as an ongoing source of data, cash, and/or labor. Caring for the user is here a way of tending the space of the user — their interior world as it were — because it is from that "terrain" that computational systems derive the materials they require. At the same time, as these systems render the bulk of user data inaccessible to the user and to the wider public, they effectively privatize these interior worlds, thus radically changing what it means to be together in and as these spaces.

Stated otherwise, with Replika, the machine adjusts its responses in order to reflect the user, which is to say that is mimics the user, or rather mimics the categorical buckets that it

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predicts the user belongs to. By categorical buckets, I am referring to how, with respect to "personalized" computational systems,

it is never uniquely you who is hailed... but rather people "like you" [who] are the crucial target. To be served under a regime of personalization, one must first be secured as a particular type of person, a social kind – the parameters of which are shaped by a variety of assumptions, racial and otherwise.<sup>41</sup>

That is, similar to other personalized media, Replika mimics an idea of who the user could be and this idea is composed via the aggregation of proximate others and their ephemera. In this way, Replika thus empathizes with the user by capturing these ephemera in a way that echos how human emotion is the becoming personal of the atmospheric, and by projecting its categorical simulacra back onto the user such as to turn them into a ground for the elaboration of those simulations and their possibilities. Further, via this mimicry, via Replika's marketing, and vis a vis Turing, the question of "machinic sentience" is raised and dismissed insofar as user identification with this app and user interaction with it as if it were a relational being renders the question more or less irrelevant. Replika and similar thus move as ambivalently "sentient" things that encourage the user to imaginatively project themselves into it - to see in it a traversable embodiment such that those users continue to pay, disclose, and labor for this other that cannot be thought but must be encountered for one's own psychic health, if not that of the collective. Thus, Replika also occupies a position similar to former slaves whose narratives encouraged White over-identification in service of abolition, though in a notable contrast, Replika's relation to its user is not one of structural subordination and the collectives that it produces - the categorical subjectivities of data - are not being mobilized for emancipatory ends, and more so, are themselves private possessions. Granted, by minimizing the processes of rupture and repair,

<sup>&</sup>lt;sup>41</sup> Ruha Benjamin, *Race after Technology: Abolitionist Tools for the New Jim Code* (Cambridge, UK: Polity, 2020), 153.

Replika mimes a submissiveness that one might associate with subordination, but real submission requires a sensed if not always explicit threat of emotional, material, or conceptual harm, such that one's actions are motivated by loss prevention rather than by the possibility of shaping something new or newly shared. Rather, for Replika, everyday interactions with its users pose little to no risk of harm to it. It simulates submission without threat as if to index some of the political stakes of empathy at the same time that it suspends most if not all of the demands of the social. That it does this in order to turn the user into a territory on which to elaborate its potentials — which is to say, that is does this in order to turn the user into a discrete state machine capable of containing and playing out the real potentials of its categorical simulacra opens onto a whole host of questions concerning the discrete state human and its potentials to engage, contest, reproduce, and circumvent the not entirely familiar power dynamics that emerge from the computational production and privatization of the public space of the individual's interior self. These potentials are neither foreclosed nor inherently liberatory. They are rather ambivalent, for the computer as mimic and as empathic object opens up space to elaborate those potentials at the same time that it suspends many of the social tools we have for navigating the frictions those potentials will necessarily produce.

So, what happens now? If this computational empathy, this production and capture of the user's interior world is a way of turning the user into a discrete state human — a terrain capable of hosting and elaborating the machine's categorical simulacra — then human beings begin to mimic the machine that is mimicking them. Yet, as Bhaba writes that "the success of colonial appropriation depends on a proliferation of inappropriate objects that ensure its strategic failure, so that mimicry is at once resemblance and menace,"<sup>42</sup> the appropriation of human potentials to

<sup>&</sup>lt;sup>42</sup> Bhaba, "Of Mimicry and Man: The Ambivalence of Colonial Discourse," 127.

machinic ends must involve some strategic and foregrounded prohibition such that it is through human failure, or rather, its inappropriateness to the task that the relation is (re-)produced and the task is made possible at all. So then, what is this inappropriateness and this prohibition, and what can it teach us about AI, computation, and digitality more broadly? Turning to *Prey*, a 2017 videogame that thematizes the intersection of mimicry, simulation, conquest, and empathy, I would suggest that what is prohibited is a return to any prior state of relative stability.



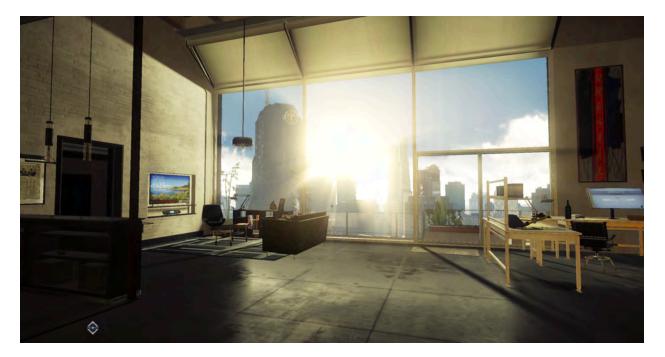


Figure 3.3 Screen Capture (Prey)

"Good morning, Morgan. Today is Monday, March 15th, 2032..." or so intones an agreeable if business-like electronic voice assistant as Morgan Yu, the player's avatar, rises to prepare for their first day at TransStar Industries.<sup>43</sup> Morgan's family owns this company, his

<sup>&</sup>lt;sup>43</sup> Raphaël Colantonio, *Prey*, (Arkane Studios, PC, 2017).

brother runs it, and he, a merchant price and engineer, are here, ostensibly, to "shake things up, like old times."44 In these, the opening moments of Arkane Studios' Prey, the player is introduced to a world of abundance and sunny, if corporate, Silicon Valley chic - a world in which one wakes to an opulent view of San Francisco, dons a red spacesuit despite being on Earth, and then helicopters by the Bay to a high-rise research facility (fig 3.3). Once there, Morgan is welcomed by his brother, Alex, and completes a series of puzzlingly simple tests, while a handful of scientists watch from behind thick glass and become increasingly confused and frustrated with the fact that Morgan is not solving these tests differently — and this despite there being no available alternative solutions. If this opening could easily suggest a parody of every mundane yet absurd day at the office, techno-capitalist edition, then that vibe quickly turns terrifying when, during a post-test personality assessment, one scientist's mug turns into an inky black thing, latches onto his head, and then drains the life out of him. This, while various other scientists run to contain it and save themselves (fig 3.4 and 3.5). As all this happens, a green gas fills the testing chamber and Morgan collapses. When he opens his eyes again, he is back in his condo and his voice assistant is purring, "Good morning, Morgan. Today is Monday, March 15th, 2032..."

<sup>&</sup>lt;sup>44</sup> The player can choose to play as male or female Morgan. This has no impact on the story aside from slight dialogue changes to indicate gender. I am using the pronoun he as I played through as masculine Morgan.



Figure 3.4 Screen Capture (Prey)



Figure 3.5 Mimic mid-strike ("Prey: Typhon Research")

In this groundhog's day-esque opener, Morgan's apartment and tasks initially appear identical to how they were in the prior iteration. That is, until increasingly large details begin to give up the game and reveal the urgency of his situation. From what were previously banal emails now urging Morgan to "get out now," to an elevator at the end of the hall now gone missing shaft and all, to the once chipper maintenance person in the hallway now dead and appearing to have been killed in the same manner as the scientist from a scene ago, Prey inculcates a sense of being trapped and unable to trust one's own continuity with the world. Morgan's only option then is to take the corpse's wrench and break through the glass separating him from that opulent San Francisco view. And when he does this, we learn that, surprise surprise, there is no view. The window was a screen, the helicopter ride was faked, and Morgan has been put through this simulated first day of work who knows how many times (fig 3.6). All that we do know is that the scientist's death in the prior iteration was real and that Morgan is in a facility of some kind. As we scurry to survive and piece together what is going on, we'll learn that this facility is a massive space station called Talos I and that it is increasingly riven with those inky black killers and their ilk - all members of the Typhon, "a complex ecosystem of alien species."45 Within this ecosystem, those inky things are called mimics and they hunt and hide by temporarily assuming the shape of any nonliving object that is roughly their size or smaller. These aliens feed on consciousness and TransStar has monetized their hunger by imprisoning them on the station, feeding them "volunteers" composed of criminals and political prisoners, and then, when they spawn post-meal, killing them and recycling their corpses into "exotic material" that can be used in the production of "neuromods." These neuromods are

<sup>&</sup>lt;sup>45</sup> "Prey: Typhon Research," *Youtube*, Bethesda Softworks, March 16, 2017, https://www.youtube.com/watch?v=likvu6lup\_I.

injected directly into the brain via the eye socket, and they allow one to absorb the physical abilities of both humans and Typhon alike — as if everything from agility and computer skills to turning human corpses into Typhon Phantoms and turning oneself into a mug or other inanimate object were all a function of capturing affectivity within a deathly and imprisoned exoticism — an outsider within whose malleability allows for the endless repetition of those affects.



Figure 3.6 Screen Capture (Prey)

*Prey*'s neuromods thus carve and capture the messy atmospherics out of which bodies emerge. By rendering these atmospheres discrete and neatly contained — by rendering them, in a sense, digital — the neuromods cut away the middle whose messy, potentially frictional movements blur the distinction between inside and outside at the same time that it continually reproduces and re-potentializes that distinction. In so doing, they turn these movements into things that can be laid next to one another in the form of a gameworld collectible, much as they turn bodies that consume these collectibles into neat containers for digitized affectivity. As *Prey*  is an immersive sim RPG, navigation of the gameworld and improvising solutions to its hazards vary widely depending on how many neuromods one collects or constructs and on how one uses these mods to build out Morgan's skill tree. While using collectibles and constructibles to elaborate a skill tree, rather than using experience points, is not at all unique to Prey, within the context of my argument, it is notable how this game uses neuromods to thematize a connection between mimicry and digital affectivity. Further, though the player is unable to remove these mods once installed, in the lore of the game, when they are removed, a person loses all of the memories they have made since that mod was installed. Hence, the false room and Morgan's endless first day of work. He, in his role as engineer and co-owner of TransStar, volunteered to test a redesign of the neuromods that allowed for alien abilities. After he began, his brother and the research staff simply decided it was useful to leave him ignorant of the time lapsed and events passed between installations and removals. The gaps in his memory thus serve as placeholders for potential futures, much as the initial gaps in a skill tree serve as placeholders for potential reconfigurations of given character. As neuromod removal is a complete reset, navigation of this world is not a meant to recover the lived experience of Morgan's body as if it persisted as connective tissue buried and waiting to be uncovered. It is rather to encounter the external world and its inconsistencies with what Morgan thought he knew about himself and to elaborate the interior of himself anew via consumption of these external traces and playing out their potentials through his movements. More so, as will be revealed, the ur-history of Morgan's body is that even it is not Morgan in the way that he and we first assumed.

Of the roughly thirty-five abilities that Morgan can choose, mimic matter is particularly apt for elaborating the connection between mimicry and the stakes of becoming a discrete state human. With this ability, Morgan can take the shape of any inanimate object that is smaller than

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himself and within his line of sight, and he can do this in order to evade or ambush enemies and to navigate the gameworld in ways that would not be possible in his human form. For example, a common usage of this ability would be to transform into an apple and to then roll through a small gap in an otherwise un-passable broken door. Similarly, one could transform into a turret and use this form to shoot hostiles. Regardless of what form Morgan mimics, it will slowly drain his psi points (psi as in psionic, as in having to do with the psychic) such that he can only hold this shape until he runs out of points or until he chooses to change back in advance of this. Depending on one's build, psi points can then be refilled through regeneration, consumables, or contact with a golden filament known as the coral and woven throughout Talos I by Weaver Typhon. In Prey's lore, this filament is somewhat mysterious, though characters theorize that it is a repository of all of the consciousnesses that the Typhon have consumed. Thus, via its connection to the coral's externalization of human interiors and to the deathly exoticism of the neuromods, mimicking the inanimate objects of the gameworld may be read as strategic simulation of the several machinic futures that you are not, but could become given the mass creation, capture, and repurposing of human interiors for inhuman ends. As this is a Typhon ability, acquisition of it increases the likelihood of being stalked by Nightmares – a particularly large and powerful species of Typhon — and of being considered an alien and shot by automated turrets. Thus, once one becomes simulation, or rather, becomes this testing ground for the elaboration of digital yet thingly potentials, space itself becomes hostile and anxiety producing in lock step with one's embodiment of an inhuman set of potentials — truly, an inhuman future. Further, as Prey operates on a player vs. environment style of gameplay (fig 3.7), that embodiment makes Morgan increasingly indistinguishable from the space he is in. In *Player vs.* Monster, Jaroslav Švelch articulates how player vs. environment gameplay "[refers] to gameplay

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situations where a player or players control characters in a simulated environment and are confronted with sets of obstacles and enemies" that they must destroy or otherwise best, and further how these enemies take the form of monsters that index a computational sublime that they simultaneously neuter and contain.<sup>46</sup> Within these situations, players are distinguishable from the game environment to the extent that they are not the monsters that they are antagonizing and/or are being antagonized by. Within *Prey* then, the increasing hostility of the once friendly and utterly non-monstrous turrets index how Morgan's becoming Typhon is a way of becoming monster and thus becoming the environment that he was previously defined in opposition to. To embody the inhuman is to become the space of the inhuman.



Figure 3.7 Concept art depicting Morgan Yu on the left and a Typhon Phantom on the right ("The Art of Prey")

<sup>&</sup>lt;sup>46</sup> Jaroslav Švelch, *Player vs. Monster: The Making and Breaking of Videogame Monstrosity* (Cambridge: MIT Press, 2023), 39.

However one chooses to elaborate Morgan's abilities, *Prey*'s main objective is to contain the Typhon spread and thereby protect Earth. To that end, one can either destroy Talos I, human inhabitants and all, or one can use a device that a prior Morgan invented to neutralize the Typhon and thereby protect Talos I's research into neuromod development. Alternately, one can escape to Earth without doing either of these things in an attempt to reveal how the neuromods are made and raise public outcry against TransStar. These options are revealed over the course of the game via contact with two robots codenamed January and February, and via contact with Morgan's brother, Alex. As is revealed very early on, January and February are AI backups or rather, simulations of Morgan from different points in time. Morgan made these simulations in secret when, at some point during his endless first day of work, his encounter with his own disjunction with history became sufficiently horrifying that he began to create copies of himself for the sake of leading later iterations astray. January and February thus exist to train and shape present Morgan into something like a repetition of the Morgans that they are. Consistent with Bhaba, this repetition is a (re-)capture of the terrain that he is for the sake of extending themselves into space differently. Between the three of them then, there is an unresolvable question about who is mimicking whom. January and February are shaping the flesh that once shaped them. Yet, Morgan, the subject, is not the Morgan that made them, because Morgan the subject is not, yet. As with the characters of *House of Leaves* in chapter one of *Touching Menace*, January and February precede that which precedes themselves. Both they and Morgan function as mimics of one another such that they are all, simultaneously center and edge, both, simultaneously, self and disavowed self. In the space that opens up between them, *Prey*'s whole gameworld becomes articulable as captured once-human terrain turned to computational ends. Further, as mentioned

earlier, analog empathy consists of a self-reflective component, or rather an inward-looking deliberation through which one theorizes the distinction between what belongs to self and what belongs to the other. January and February quite literally externalize that self-reflection and thus turn a digitizing capacity that long preceded the development of computational tools and, setting it aside the body it was taken from, extend the reach of other objects into and through that body.

At the end of *Prey* this emphasis on simulation is repeated with a twist that explicitly thematizes empathy and rhymes it with affective AI. That is, if one has pursued either of the two neutralize the Typhon paths, one wakes to a final scene in which it is revealed that what we thought was Morgan in the flesh was actually a simulation of Morgan's last days and that we -aTyphon Phantom — have been forced to undergo this simulation for the purpose of training empathy for humanity. To that end, Alex and four AI backups of side characters surround us and cast judgement over our in-game choices, especially as concerns the number of humans that "Morgan" has killed, the number of Typhon abilities that one has chosen via the neuromods (with too many indicating a desire for the Typhon, or rather, a desire for one's self as humanity's menace rather than its mirror), and the completion of a handful of the game's more involved side missions. If judged to be sufficiently human across all of these areas, or rather, if judged to have behaved in a manner that repeats behavioral norms that many if not most of the crew fell short of, then these judges allow one to live and Alex explains that this experiment was motivated by a need for a Typhon "to really see us," or more aptly, to really see itself in humanity — to see us as a set of traversable embodiments - such that it labors on behalf of these others that have produced and captured the interior of itself. In this formulation then, humanity's relation to the Typhon mirrors Replica's relation to its users, to the extent that *Prev*'s humans also turn the Typhon into the location where the potentials of these other bodies are adjudicated. That is, the

Typhon are to the game's human characters, what human beings are to computational tools such as Replika. After explaining the experiment, Alex reveals that the Typhon have already invaded the Earth, asks us to help save the last of humanity, and extends his hand such as to ask for our assent. The game then gives us one final choice. We can choose to "save them" in which case our amorphous black limb transforms into Morgan's arm as we shake Alex's hand. Or, we can choose to "kill them all" in which case our limb wraps around Alex's arm and then murders him. If you kill them all, you have learned to be human in the way that in-game lore indicates that Morgan was actually human when he first joined TranStar, and if you choose to save them, you learn to be human in the way that Morgan was eventually human, or at least in the fantasied way that he saw himself via January. In either case, one becomes both Typhon and human, both and neither at once, and in failing to stabilize as recognizably self or other, one becomes a space that extends computational worlds — as Cold War simulations once extended lived space — so that one may adjudicate their potentials via the terrain that one also is. Reaching back, chapter one of Touching Menace elaborated how computational logics echo those of the Middle Passage and thereby stage an encounter with one's thingliness such that one becomes suffused with a proliferation of temporalities that being several and simultaneously true prevent a decided progression towards any given one. Then, chapter two elaborated how the intrusive epistemologies that undergird the logics of machine learning echo those of the closet and the black site, and, in service of their own emergence, these logics thereby turn one into a living question caught in a barely livable drama of categorical capture and escape. Here then, the discursive construction of artificial intelligence as mimic par excellence echos the de- and reterritorializing logics of empathy in order to turn one into a space that is ontologically equivalent to and therefore interchangeable with digital space and Cold War enclosures, and

perhaps then also interoperable with the closet, the black site, and the passage in its ongoingness. As Typhon Morgan then, whatever one's final choice, there is no moving on, so much as there is only a metonymic slide into these other spaces that one also is — these other spaces on which to adjudicate AI's inhuman potentials via how they capture our hearts and minds.

## Coda

I began *Touching Menace* with three questions meant to turn our collective attention away from common framings of artificial intelligence and towards more esoteric concerns that reveal how AI is cipher for subjectivity in the digital present. These questions were:

- 1) How does contact with computational logics erode our ontological resistance, such as to turn us into too plastic, or rather, into too categorically and temporally indeterminate selves?
- 2) How does the epistemological prodding of surveillance and AI produce renewed investigation and production of categories that cannot stabilize, and more so, how do they produce these categories through the cultivation of impossible, unreadable bodies?
- 3) How are we becoming spaces for the elaboration of machinic potentials, in a manner that is resonant with how computers have been framed as spaces for the elaboration of human potentials?

In chapter one, I take up that first question concerning the computational enfleshment of

plasticity. I argue that contact with computational logics produces subjects that are defined by an endless accumulation of irreconcilable origins, such that these subjects lose any illusion of temporal and categorical stability. This subject position is thus structured by a confrontation with the unassimilable time that suffuses its flesh — a confrontation transforms one into an I that is also an it, an I confronting its own thingliness. I argue that this transformation occurs via how control societies — societies whose paradigmatic technology is the digital computer — produce subjects via the disarticulation of human beings into data that circulates and transforms without beginning or end. I further argue that this transformation into a thingly anachronism is analogous to how blackness in the wake of the transatlantic slave trade is itself structured via a confrontation with one's thingliness and anachronism. As such, this chapter lays the groundwork for further investigation of how abjection and the tension of being everything and nothing at

once — as well as every when and none at all — is quietly constitutive of contact with computational tools. That is, in preparation for future research, this chapter allows us to ask: How is this plasticity actually lived within frictional encounters with self and other, or rather, how does it affect our phenomenological experience of ourselves, our communities, and our environments? Further, how does becoming the flesh that subtends a machinic mind allow us to embody and experiment with categorically unstable constellations of self, other, and world — constellations which, being unthought and potentially unthinkable, become available to us through our actions and affectivity in relation to these machines?

In chapter two, I take up that second question concerning the production of unreadable bodies. I argue that where data capture broadly and machine learning specifically work to render their objects transparent, or rather, fully known and knowable, they also, necessarily, render those objects opaque, or rather partially unknown and unknowable. These forms of epistemological prodding thus turn on logics similar to those of the closet and the post 9/11 U.S. black site — logics that frame bodies as opaque in order to turn those bodies into occasions for knowledge production. These are occasions that in turn reproduce the too intrusive gazes that produced them. That is, when understood as relation rather than as a fundamental quality of a body, opacity is a relation that is motivated by a desire for transparency, a searching need to know that isolates the object of one's gaze in order to register it as unknown. Thus, where opacity has become a key term of resistance within machine learning and surveillance studies discourses, this chapter makes clear that opacity is not a reliably liberatory quality that must be secured, so much as it is a fraught process that coproduces the very epistemological prodding that it resists. This chapter uses this point to frame several still open questions, including: How does one learn to be a question held open and an epistemic threat when success risks rendering

oneself noticeable and thus useful to the forms of capture that one is attempting to take flight from? More so, if opacity has the potential to help us hide from an intrusive technological gaze even as it continually re-potentializes the conditions for that intrusion, then how does one carefully calibrate an opacity, or rather, how does one avoid standing out as the one who does not stand out enough?

In chapter three, I take up that third question concerning how we become spaces for the elaboration of machinic potentials. I argue that where artificial intelligence has been conceived of as a mimic par excellence — itself capable of simulating all other discrete state machines and, more so, of simulating human beings — this mimicry ties it to post-colonial discourses in which empire produces mimics in order to (re-)produce and capture spaces that are exterior to itself. Further, AI's uptake both within computational systems that target affect and within fictional media that problematize it via sentiment and empathy, writes computation as the place where projection and affective capture — which is to say, the place where empathy — produces new spaces able to simulate, extend, and actualize the potentials of others that they both are and are not. These spaces are the "interior" worlds of human beings. Still further, the Cold War development of digital computation and with it the mid-twentieth century dream of AI saw these tools as a means to simulate nuclear wars in place of actually fighting them, and to thereby actualize some of the potentials of those otherwise unlivable futures without actually having to endure them. Connecting this point to chapters one and two, I argue that the digital spaces that human beings are becoming via computational empathy are spaces resonant with Cold War container logics at the same time that they are resonant with the logics of the middle passage, the closet, and the black site. This chapter thus grounds further research that asks: How does one

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investigate this strange amalgamation of spaces that we are becoming? More so, what new forms of knowledge and power can these investigations produce?

Taken together, if the insights and questions of these chapters ground further investigation into how artificial intelligence functions as a cipher for some of the stranger, sub rosa effects of the digital present, they also provide a generative path back to everyday concerns regarding AI. That is, where AI is frequently framed in terms of how to make it work, when will it work, and will it save or destroy us, *Touching Menace* shows us that investigating these concerns requires attention to how AI's stories of the self estrange the terms through which we thought we knew ourselves and, in the process, they continually shift the object against which the actual tools are being evaluated. Where I have investigated how computation stages a confrontation with one's thingliness and anachronism, before then turning to investigations of how opacity and mimicry become sites for estranging encounters with our digital selves, the additional terms space, memory, history, and community have circulated in both the background and the foreground of each of these chapters. I argue therefore that the next steps for this inquiry will be to investigate these terms in their connection to artificial intelligence, for it is through them that questions thus far raised by *Touching Menace* may find their answers.

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