

Co-opting the Master's Tools: A Black Techno-Intervention in Mediated Performance

by

Christie Neptune

Bachelor of Art in Visual Arts
Fordham University, 2009

Master of Science in Art, Culture, and Technology
School of Architecture and Planning
Massachusetts Institute of Technology, 2023

DPhil, in Fine Art Practice
Ruskin School of Art
St. Hugh's College, Oxford, Expected 2029

© 2025 Christie Neptune. All rights reserved.

Doctoral Supervisors

Oreet Ashery, PhD

Professor of Contemporary Art, the Director of the MFA programme
Ruskin School of Art
Exeter College, Oxford

Onyeka Igwe, PhD

Associate Professor and Tutorial Fellow
Ruskin School of Art
Lady Margaret Hall, Oxford

Table of Contents

1. List of Figures	pg 4
2. Transfer Abstract	pg 5
3. Transfer Introduction	pg 7
4. Transfer Essay: Co-opting the Master's Tools: A Black Techno-Intervention in Mediated Performance	pg 10
5. Bibliography	pg 35
6. Acknowledgments	pg 38

List of Figures

Figure 1.	Patent #3,482,037–First Closed-Circuit Television (CCTV)	pg 09
Figure 2.	Marcel Duchamp, <i>In Advance of the Broken Arm</i> (1964)	pg 13
Figure 3.	A law regulating Negroes & slaves at night (1731)	pg 16
Figure 4.	Christie Neptune, Untitled video still, <i>Light Years Apart</i> (2021-2025)	pg 17
Figure 5.	Bill Spinhoven, <i>I/Eye</i> (1993-2011)	pg 20
Figure 6.	Bill Spinhoven, Installation floor plan diagram	pg 20
Figure 7.	Lynn Hershman Leeson, “CybeRoberta” (1996)	pg 21
Figure 8.	Lynn Hershman Leeson, Video still, <i>Dollie Clone Series</i> (1995-1996)	pg 21
Figure 9.	Lynn Hershman Leeson, Instruction diagram (1995-1996)	pg 22
Figure 10.	Lynn Hershman Leeson, <i>Difference Engine #3</i> (1995-1998)	pg 22
Figure 11.	Keith and Mendi Obadike, <i>The Interaction of Coloreds</i> (2002)	pg 25
Figure 12.	Christie Neptune, Calibration window, <i>Light Years Apart</i> (2021-2025)	pg 27
Figure 13.	Christie Neptune, Analytic panel and facial bounding box update, <i>Light Years Apart</i> (2021-2025)	pg 27
Figure 14.	Christie Neptune, March 14, 2025 Engagement survey comprehension chart, <i>Light Years Apart</i> (2021-2025)	pg 32
Figure 15.	Christie Neptune, March 14, 2025 Engagement survey narrative trajectory pie chart, <i>Light Years Apart</i> (2021-2025)	pg 32
Figure 16.	Christie Neptune, October 06, 2024 Engagement survey comprehension chart, <i>Light Years Apart</i> (2021-2025)	pg 33
Figure 17.	Christie Neptune, October 06, 2024 Engagement survey narrative trajectory pie chart, <i>Light Years Apart</i> (2021-2025)	pg 33
Figure 18.	Christie Neptune, Video still, exterior trajectory, <i>Light Years Apart</i> (2021-2025)	pg 34
Figure 19.	Christie Neptune, Video still, interior trajectory, <i>Light Years Apart</i> (2021-2025)	pg 34

Co-opting the Master's Tools: A Black Techno-Intervention in Mediated Performance

by

Christie Neptune

Abstract

Can the instruments of domination yield reparative justice within the matrices of cultural representation and visual culture? To address this query, this paper will revisit the scholarly debate advanced by American writer and Black feminist, Audre Lorde, in *The Master's Tools Will Never Dismantle the Master's House* to consider the possibilities and, conversely, the limitations of co-option, an algorithmic tactic of resistance within artistic interventions into digital surveillance. Drawing from a lineage of cybernetic art, literature, and artistic theory, it will frame tools as politically mediated structures situated between diametrically opposed viewpoints: power and resistance. To support this assertion, it will examine my film *Light Years Apart* (2021-2025), an interactive mediated performance utilizing the body and AI-powered biometric technology to order information in time. Special attention will be given to its respective genealogy—I/Eye (1993) by Bill Spinhoven, *The Dollie Clone Series* (1995-1996) by Lynn Hershman Leeson, and *The Interaction of Coloreds* (2002) by artist duo Keith and Mendi Obadike—and the varying methods of negation employed by each artist to co-opt, resist, and subvert the intended design and function of digital surveillance. Finally, it will investigate the interplay of the body and technology within the cybernetics of interactive mediated performance, drawing a correlation between art made politically, conscious labor, and conceptual comprehension within the phenomenology of the creative exchange.

Keywords: Co-option, systems thinking, hot spot, cybernetics, cyborg, algorithmic resistance, fourth wall, the black gaze, play, aesthetic understanding, conceptual comprehension, and the creative exchange.

Advisors:

Oreet Ashery, PhD

Professor of Contemporary Art, the Director of the MFA programme
Ruskin School of Art, Exeter College, Oxford

Onyeka Igwe, PhD

Associate Professor and Tutorial Fellow
Ruskin School of Art, Lady Margaret Hall, Oxford

Introduction

Will the precarity of white myths buckle under the aegis of counter-politics? More precisely, can instruments of domination yield reparative justice within the matrices of cultural representation and visual culture? My focus here examines the tactics, cultural politics, and legacy of digital surveillance (a progeny of domination)—artificial intelligence (AI)-powered biometric technology, closed-circuit television (CCTV), and the enduring strategies of algorithmic governance that regulate and control behavior in the public sphere. These devices are tied seamlessly to the prosaic of our day-to-day and are integral to our movement in and around space. My research examines the substructure grounding the mechanics of this system, particularly the choreography of politics threaded between identity, movement, and access. This dynamic, though ubiquitous, is predicated upon the collection, correctness, and, conversely, the incorrectness of data. The latter, an unintended outcome of programming, draws focus to the culture of politics situated at the root of surveillance. So much is implied here, and it is this malfunction, or rather dysfunction, that I question. What exactly is the incorrectness of data? And how does it inform the varying processes of identification and classification in contemporary models of surveillance? Are we to cast it aside as a mere error, the technological malfunction of bits and parts, or is this symptomatic of a more sinister plot? To the latter, Black feminist theorist and author Audre Lorde would argue “yes.” If she were alive today to witness—the digitalization of identity relations, the emergent practice of data colonialism, and the algorithmic absorption of racism—she’d remind us that tools will perform as designed. However, is this proposition addressed to the tool itself or the politics that govern the design (ideology and aesthetic values) and function (performance) of tools?

Historically, biometric technologies have been formidable devices in the production and preservation of systemic oppression. It colors and restricts the representation and visibility of blackness within the white racial frame,¹ a coded scheme of racial branding that others. African and African diasporic studies professor and author Simone Browne highlights this conundrum. In *Dark Matters: On the Surveillance of Blackness*, she examines the inherent relations between black fungibility and methods of surveillance, drawing deep connections between its biometric past and biometric present. In Browne’s analysis, racial framing structures the context of what is surveilled. The two are profoundly connected. They reflect a culture of politics deeply rooted within chattel slavery and supremacist frameworks of domination. And under the auspices of white racial framing, contemporary models of biometric surveillance perpetuate the same ethos. This is especially true in matters of public safety and law enforcement, where minorities

¹ The term, first introduced by American sociologist Joe Figian, works “to rationalize slavery and its attendant violence by framing, or I would say by branding, blackness as “bestial,” “alien,” and “rebellious,” among other markers of difference, in the white mind” (Simone 95). See Simone Browne, *Dark Matters: On the Surveillance of Blackness*.

experience higher rates of error than their white counterparts.

In a 2019 facial recognition study conducted by the *National Institute of Standards and Technology* (NIST), it was reported that African American and Asian populations experienced elevated rates of false positives with facial recognition technology utilized in domestic law enforcement.² International legal scholar E. Tendayi Achiume defines this as *techno-racism*,³ an unintended outcome in biometric technology that further exacerbates systemic racial bias. In an interview with the *United Nations Human Rights Council*, Achiume argues that “technology is not neutral or objective. It is fundamentally shaped by the racial, ethnic, gender, and other inequalities prevalent in society, and typically makes these inequalities worse” (Karimi 2021). However, this assertion draws attention to the centrality of politics within the design and function of tools, rather than the tool itself. Like Lorde and Simone, Achiume asserts that tools will perform as designed. Technology, a vital instrument of domination, when marked by white racial politics, compounds racial disparities in programming culture, data, industry, and the public sector. The racial paradigms of invisibility and, conversely, hyper-visibility in biometric technology (a matter that dictates who is watched, how they are framed, and what they are labeled as) are linked to the history and legacy of white supremacy.

But, can the politics that govern the design and function of surveillance be altered to protect, resist, or critique? The burgeoning beginnings of CCTV, after all, were developed by African American inventors, Marie Van Brittan Brown and her husband, Albert L. Brown⁴, to protect against potential intruders. Though the function remains relatively the same, the ideology and aesthetic values embedded in its design have changed significantly. The differences in politics between CCTV today and its burgeoning beginnings in 1966 are unparalleled. This begs the question: can systems of surveillance be divorced from dominance, particularly the logic of white supremacist patriarchy, and absorbed into a counter system? If it is indeed possible, what is the potential of co-option, the integration of surveillance technology into artistic decolonial praxis, and how might an ethos of resistance reconfigure the axes of power and language in frameworks of digital surveillance?

My doctoral research navigates the inherent paradox of this query to consider both the possibilities and limitations of co-option. Co-option is viewed as an algorithmic tactic of resistance within black artistic interventions into digital surveillance. It subverts and challenges

2 See Patrick Grother, Mei Ngan and Kayee Hanaoka in “Face Recognition Vendor Test, Part 3: Demographic Effects,” (December 2019), pg 2. See also Chad Boutin, “NIST Study Evaluates Effects of Race, Age, Sex on Face Recognition Software” in *NIST*, December 2019.

3 See Faith Karimi, “People of color have a new enemy: techno-racism,” in *CNN*, May 9, 2021. See also “Emerging digital technologies entrench racial inequality, UN expert warns,” in *United Nations, Special Procedures, Press Release*, July 15, 2020.

4 See Chris Gilliard. “A Black Woman Invented Home Security. Why Did It Go So Wrong” in *Wired*, November 14, 2021. See also Marie van Brittan Brown: Home Security System in *MIT Lemelson Center*.

the logic of white racial framing to foreground the humanness of its subjects. Algorithmic resistance, a concept introduced by culture and media sociologists Tiziano Bonini and Emiliano Treré, are locally organized tactics of resistance in opposition to state platform dominance. It pivots power from an elite technocracy towards a framework of technological democratization, an epistemic piloted by a plurality of cultural perspectives and knowledge formations. The latter, a social output of resistance, is what philosopher and technology critic, Yuk Hui, defines as technodiversity—a formidable subversion of the vertical and unilateral distributions of power commensurate with frameworks of technological domination. In artistic practice as the nexus of art and technology, this framework is most palpable. My research collides the optics of intersectionality (the interrelated dynamics of race, class, and gender) with tactics of algorithmic resistance in interactive mediated performance to reconfigure the paradigms of visibility in digital surveillance. Interactive mediated performances are participatory performances in artistic practice experienced through technology.⁵ The spectator's direct engagement within this framework is framed as a performance integral to meaning and the real time organization of information across the screen. I am interested in the implications of this performance, particularly its role within the radicalization and neutralization of surveillance frameworks.

This paper will frame tools as politically mediated structures situated between diametrically opposed viewpoints: power and resistance. To that end, it will interrogate the tools, techniques, and approaches employed within my film *Light Years Apart* (2021-2025),⁶ an interactive short that utilizes biometric data and facial recognition technology to critique the paradigms of white racial framing. Drawing reference from a lineage of artistic works in cybernetics and systems thinking: *I/Eye* (1993) by Bill Spinhoven, the *Dollies Clone Series* (1995-1996) by Lynn Hershman Leeson, and *The Interaction of Coloreds* (2002) by artist duo Keith and Mendi Obadike, I will consider the possibilities and, conversely, the limitations of option within artistic interventions into digital surveillance.

5 See Philip Auslander. "2. Live performance in a mediatised culture" in *Liveness: performance in a mediatised culture*. The term "mediated performance" was initially introduced in theatre criticism in the 90's to describe the mediation of live and recorded performance through technology. See also Claire Bishop. "Activated Spectatorship" in *Installation Art: A critical History*. (Interactive) mediated performance is comparable to activated spectatorship, a "politicised aesthetic practice"—introduced by British art historian and cultural critic Claire Bishop—that foregrounds the viewer's inclusion in art made politically. In Bishop's framework, the viewer's role is political. It works to modify the "operations of power, authority, and exclusion" pertinent to organizations of the state. Like activated spectatorship, interactive mediated performance addresses the political implications of the viewer's participation with respect to artistic discourse. However, this happening is mediated in real time through varying technological devices: the screen, the computer, the camera, the speaker, AI, etc., and can be experienced interchangeably in isolation or as part of a collective.

6 *Light Years Apart* by Christie Neptune (2021-2025), is a single-channel linear and interactive web-based HD video. *Light Years Apart*, written and directed by filmmaker and Backslash Artist, Christie Neptune, starring Ronis Aba, Nia Simone, and Zipporah Wilson, was made possible with contributions from Creative Technologist and Backslash fellow, Heidi Minghao He; Choreographer, Kyle Marshall; and Director of Photography, Daniele Sarti, through production support from Backslash at Cornell Tech. The Backslash at Cornell Tech fund supports bleeding-edge technological interventions into artistic practice. See Christie Neptune.

In my doctoral research, the frames of visibility are temporal devices, shaped by the political, a generative apparatus wielded by the body in interactive mediated performance. The body's politicking, in this context, structures meaning. As an extension of cinematic and theatrical discourse—an architecture of control that orders the context and organization of what is seen and experienced—it shifts the dynamics of power and language in cultural representation and ruptures illusion. This undress is provocative, though esoteric, as the denouement in each work is left to the viewer. I am interested in the nuance and instability of this space, specifically the body's role in the subversion of myth, design, and function. As the '(cybernetic) hot spot,' a penetrative entity that advances comprehension and muddies boundaries in interactive mediated performance, how does the body's conscious labored work reorient and shift the dynamics of power in co-opted frameworks of surveillance?

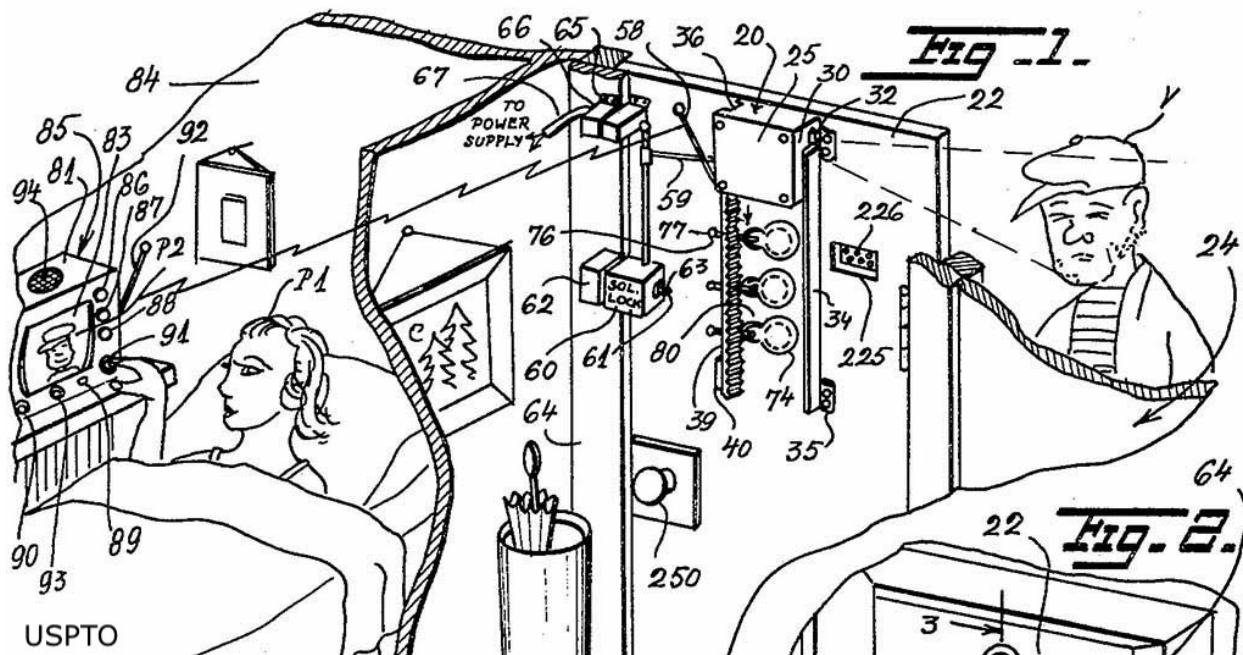


Figure 1. Patent (#3,482,037) design of the first closed-circuit television (CCTV) developed by African American inventor, Marie Van Brittan Brown in 1966. Brittan Brown's invention received a patent in 1969. The patent included "four peepholes, a sliding camera, television monitors, and two-way microphones. These items created a closed-circuit television system for surveillance also known as CCTV," (Lemelson-MIT). Image courtesy of Lemelson MIT Program. Sourced from: <https://lemelson.mit.edu/resources/marie-van-brittan-brown>

Co-opting the Master's Tools: A Black Techno-Intervention in Mediated Performance

by

Christie Neptune

In negotiating power and resistance, can tools of domination be co-opted to postulate a new cultural politics of difference? Tools of domination can speak to a host of things, from the grammatical syntax of language to the school-to-prison pipelines of mass imprisonment. Under the umbrella of this particular phrase, the possibilities are endless and dynamic, no less. However, this paper closely considers the tools of digital surveillance (a progeny of domination): artificial intelligence (AI)-powered biometric technology, closed-circuit television (CCTV), and the enduring strategies of algorithmic governance wielded by the state to regulate and control behavior. Can these devices be divorced from power and absorbed into new frameworks of understanding that resist, protect, and empower, and how might that look in representational practice? Audre Lorde's provocation on the antecedents of 'power' and 'difference' is a great starting point for this discussion, which I shall lay out below. Lorde's lecture at the 1979 *Second Sex Conference* critiqued the negligence of the event's discourse, specifically the omission of 'othered' voices within the cartography of feminist theory. It lambasted the centrality of white supremacist patriarchy within dialogics framed to critique its dominance: "The master's tools will never dismantle the master's house."¹ In retrospect, Lorde's proposition was prophetic, a call to action that bled the optics of intersectionality (the intertwined relations of race, class, and gender) into the infrastructure of second-wave feminism. At the onset of my artistic interrogations, this proposition was law, unyielding in praxis. Who dared to counter the pedagogy of Lorde? She is the ethos, reference, and foundational basis for a great majority of feminist scholarly writing and developments in contemporary art.

Cultural critic Nomusa Makhubu's critique of *Somnyama Ngonyama: Hail The Dark Lioness* (2015-present)² by South African photographer Zanele Muholi is a case in point. To challenge the varying implications of Muholi's material, Makhubu culles Lorde: "What does it mean when the tools of racist patriarchy are used to examine the fruits of the same patriarchy?" (Lorde 98). With this as the basis for critique, Makhubu launches into a polemic

1 See Audre Lorde. "The Master's Tools Will Never Dismantle the Master's House," in *Sister Outsider: Essays and Speeches* (Berkeley, CA: Crossing Press, 1979), pg 99

2 See Autograph London. *Somnyama Ngonyama: Hail the Dark Lioness* (2015-Present) by Zanele Muholi, is a traveling exhibition curated by Renée Mussai. The exhibit includes 80 self portraits exploring the complicated relations of race and representation in American historical cultural memory. In *Somnyama Ngonyama*, Muholi digitally darkens the black of her skin and animates herself along the same plane as disparate objects. This intervention, a direct address to blackface minstrelsy, is described as an act of reclamation by the artist, one that reclaims the beauty and aesthetics of blackness.

comparing Muholi's provocative self-portraits, foregrounding her digitally darkened skin, to a modern-day minstrel show. Similarly, Martha J. Cutter, professor of English and Africana studies, draws Lorde into context to discuss the paradox of using language, specifically the written text—an instrument of domination—to challenge systemic oppression within her analysis of Harriet Jacobs' *Incidents in the Life of a Slave Girl*.³ These are just a few examples of the discourse facilitated, over the years, around Lorde. The consensus across all analyses is unanimous: tools will perform as designed. But this places greater emphasis on the conceptual drivers of Lorde's assertion. Is there space to re-examine Lorde's thesis, particularly intellectual space that considers an alternative entry into this aged old debate? My objective here is not to oppose Lorde for the sake of provocation, but to critically think through this idea with respect to its practical application within the matrices of digital resistance.

When context is everything, so much is left for interpretation. For starters, what exactly are the master's tools and what are their key principles of operation? Lorde herself does not explicitly define tools. It is interpreted to mean several things, from the tactics and strategies of patriarchal thought to pervasive models of nurturing. She casts a rather wide net that places any device used to uphold and maintain white supremacist patriarchy under the heading of 'tool.' It is for this reason that the interpretations of tools in various scholarly articles and artistic works are debated. How do we explicitly define "patriarchal models of nurturance"⁴ or "patriarchal thought,"⁵ the former being arguably oxymoronic? Can it be referred to as language, a formidable device of control and representation? Is it material, the armature of form? Or is it a system, the syndicate organization of relations that guide our modes of perception? If it is either of the three, what tools are left at the disposal of the oppressed? What tools do we use to counter, re-imagine, resist, and empower? Can tools be neutral, and how might they be divorced from the politics of the Master, within cultural representation and visual culture? Is there room for reinterpretation, particularly within the context of systems?

The most obvious answer is "no." The mere question, by most standards, in academia and contemporary art alike, is diabolical. However, "no" is quick, a seemingly pinched response devoid of nuance; much is overlooked. Let us, for a moment, break apart the sign. Beyond the interpretative registries of Lorde's metaphor, the "master's tool" indeed is nothing more than a 'tool'⁶ of function, a creature of myth entangled within the folds of signification. It is the body's

3 *Incidents in the Life of a Slave Girl* is an autobiography by African American abolitionist and writer Harriet Jacobs. It details her escape from enslavement and life hidden in the garrets of her master's plantation.

4 See Audre Lorde. "The Master's Tools Will Never Dismantle the Master's House," in *Sister Outsider: Essays and Speeches* (Berkeley, CA: Crossing Press, 1979), pg98.

5 See Audre Lorde. "The Master's Tools Will Never Dismantle the Master's House," in *Sister Outsider: Essays and Speeches* (Berkeley, CA: Crossing Press, 1979), pg100.

6 See Roland Barthes. The tree analogy from "Myth Today" in *Mythologies* (New York, NY: The Noonday Press-Farrar, Straus & Giroux, 1991), pg 107. See also Riggan Thompson's note in Alejandro G. Iñárritu's film, *Birdman*. "A thing is a thing, not what is said of the thing," (2014).

politicking—a constellation of ideas, beliefs, perspectives, and values—that lends credence to meaning. In the absence of myth, we are left with an object, a mere system, with neither function nor relation to the historical world. Function, in this sense, is political, an intended result informed by the body. To that end, can the internalization of Master’s politics stymie a liberation movement, or, rather, uphold the linchpins of white supremacist patriarchal order in cultural representation and visual culture? Absolutely. This query aligns, to a great degree, with Lorde. However, as politics informs a tool’s design and function, there is certainly room for re-interpretation.

Retooling the Paradigms of Visibility in Digital Surveillance

Like power, models of resistance possess agency. They, too, can define, shape, and reconfigure a tool’s design and function as they are alternative perspectives of the same episteme. French historian and philosopher Michel Foucault advances this notion in *The History of Sexuality*. He points to the inextricably linked nature of power and resistance within praxis.⁷ This assertion isolates tools from either viewpoint and situates them within intermediate states negotiated by the body. Writer and visual artist Carmen Winant wrestles with this idea in “Our Bodies, Online,” a short essay for *Aperture Magazine*. Like Makhubu and Cutter, Winant acknowledges the inherent paradox of utilizing “the techniques and tools of the male gaze” (Winant 142) to challenge patriarchal systems of censorship. However, she diverges in addressing its potential within feminist frameworks of resistance. Winant draws our attention to the political implications of tools:

When untangling the complex questions posed by the work of these artists, it’s important to recognize that these women deliberately take control of the master’s tools (porn, Instagram, high-end fashion advertising, lifestyle magazines, other corporate and commercial entities) to dismantle the master’s house (patriarchal expectations of gender). [...] Movements evolve and revolt against themselves; axioms shift over time and in relationship to culture.⁸

Here, Winant calls for a more expansive definition of feminism, one that considers the potential of co-option in disarming the male gaze. Co-option, in this context, draws focus to the centrality of the body within myth-making practices. Porn as expressed in the works of feminist artists is transmuted to signify uncensored expressions of female sexuality, rather than the extension of male pleasure. Politics, that is, the body’s generative beliefs, ideologies, perspectives, and values, frame the context of myth.

Take, for example, *In Advance of the Broken Arm* (1964), a repurposed ready-made of wood and galvanized iron, hung vertically from the ceiling by French visual artist and writer

7 See Michel Foucault. “Part 4: Chapter 2-Methods,” in *The History of Sexuality*, Vol. 1 (London: Penguin Books, 1978), pg 95.

8 See Winant, Carmen. “Our Bodies, Online” in *Aperture*, no. 225 (2016): pg 143.

Marcel Duchamp. Functionality is subverted within the object's transmutation from 'shovel' (the most basic of tools) to 'art.' Here, co-option alters relations and fosters new sensibilities of understanding. As spectators of the newly defined piece, we are drawn into a discursive where the intentions, particularly the politics, of Duchamp are brought to the fore in addition to the structure's existing epistemic. In both Winant's and Duchamp's frameworks, the body's politicking subverts function to establish new threads of information.



Figure 2. Marcel Duchamp, *In Advance of the Broken Arm* (1964). Signed and dated 'Marcel Duchamp 1964' (on the lower handle). Conceived in New York in November 1915, this version was executed in 1964. Image courtesy of Christie's. <https://www.christies.com/en/lot/lot-6509395>

Agency exercised by way of the body across both frameworks does two things. On the one hand, it intentionally co-opts tools integrated within its framework. Tools are divorced from power and absorbed into a counter system. Secondly, it marks. Tools are marked by a cultural politics, visible and distinct in their impression, that shifts understanding. Marking within this context moves beyond fixed symbols across the surface. It is pathological: a political and rhizomatic pestilence that soils the anatomy and social outputs of systems. The paradox of Lorde's proposition, in this context, though arguable, is inconsequential. Although the tools employed in both Duchamp's ready-made (material) and the feminist works discussed by Winant (language) are notably different, the resolve is the same. Tools are malleable. Politics informs function. Bodies frame politics.

This viewpoint challenges the perspective framed by both Makhubu and Cutter. This gray area, albeit precarious and paradoxical at times, is what I find most intriguing, particularly within the collision of immaterial and material devices of domination. How does this theory translate within the cybernetics of interactive mediative performance (participatory performance in artistic practice mediated by technology)? To investigate this question, I shall examine my interactive short film *Light Years Apart* (2021-2025)⁹ and its respective genealogy: *I/Eye* (1993) by Bill Spinhoven, *The Dollie Clone Series* (1995-1996) by Lynn Hershman Leeson, and *The Interaction of Coloreds* (2002) by artist duo Keith and Mendi Obadike. Each work demonstrates how technology performs when marked by counter-politics. This analysis will focus on the technical methods of negation employed by myself and each respective artist to co-opt, resist, and subvert the intended design and function of digital surveillance within artistic practice. Special attention will be given to the body's articulation of agency and its role in subversion. How might direct user engagement (the performativity of the audience) reorient and shift dynamics of power? What space is defined in the aftermath of this encounter?

In *Light Years Apart*, an interactive film commissioned by *Backslash at Cornell Tech* in the United States (U.S.), the body's politicking becomes an extension of cinematic discourse, an architecture of control that orders the context and organization of what is seen. This detail, regarding the mechanics of the film, is an obvious observation—one witnessed at the surface of this discursive—as with all interactive works. Though this framework is customary, it is the hardware, software, and modes of engagement employed within *Light Years Apart* that provide material for a compelling comparative analysis. The film utilizes the body and AI-powered biometric technology to critique the gaze and, correspondingly, systems of anti-blackness.

⁹ *Light Years Apart* by Christie Neptune (2021-2025) is a single-channel linear and interactive web-based HD video with a total run time of 20:41 minutes. *Light Years Apart*, written and directed by filmmaker and Backslash Artist, Christie Neptune, starring Ronis Aba, Nia Simone, and Zipporah Wilson, was made possible with contributions from Creative Technologist and Backslash fellow, Heidi Minghao He; Choreographer, Kyle Marshall; and Director of Photography, Daniele Sarti, through production support from *Backslash at Cornell Tech*. The *Backslash at Cornell Tech* fund supports bleeding-edge technological interventions into artistic practice.

Upon first observation, the integration of this device with a framework of resistance appears paradoxical. Surveillance is predominantly used to regulate the autonomy and agency of the populace. It is an oppressive tactic of state governance deeply rooted in cattle slavery—the progeny of colonization and empire.

One of the earliest forms of this device was the 18th-century U.S. law “For regulating Negroes and slaves in the night time.”¹⁰ This legislation required “all Negroes, Mulattoes, or Indian slaves above age fourteen”¹¹ to carry a lantern at night so that their defining facial attributes and identity may be recognized and classified. This practice, for bodies at the margins of the dominant culture, extended well beyond the 18th century, taking form in new legislation, racial profiling practices, and the digitalization of surveillance. African and African diasporic studies professor and author Simone Browne documents this history in *Dark Matters: On the Surveillance of Blackness*, and academic and writer, Saidiya Hartman, describes the embodied experience of this legislation in *Wayward Lives, Beautiful Experiments*:

Gatherings that were too loud or too unruly or too queer—or venues like hotels and cabarets that welcomed black and white patrons; black-and-tan dives frequented by Chinese men and white girls or black women with Italian paramours or women who preferred dancing with each other—were deemed disorderly, promiscuous, and morally depraved. [...] The governing elite, targeting this promiscuous sociality, manufactured a moral panic to justify the extravagant use of police power.¹²

Utilizing the archives, Hartman pens a speculative fiction chronicling the off-the-beaten-path of black women at the fringes of society. She draws our attention to their movement in and around space, a regulated tight frame negotiated by the socio-politics of race, class, and gender. This ethos in surveillance, particularly the interpretative frame of racial *othering*, prevails as the leading mechanism for the framing of Black and Brown bodies. In *Light Years Apart*, co-option retools the cultural politics of surveillance to address this history. The film’s interface utilizes edited film sequences, *Google’s Mediapipe* application programming interface (API),¹³ JavaScript (JS), the World Wide Web and the body to reshape the paradigms of visibility.

The narrative begins at night. A luminous geodisidic dome foregrounds the scene my subject enters. She is camouflaged in the background and does not become visible until the

10 See Rare Book Division. The New York Public Library. “A law for regulating Negroes and slaves in the night time” *New York Public Library Digital Collections*. Accessed September 24, 2025.

11 See Rare Book Division. The New York Public Library. “A law for regulating Negroes and slaves in the night time” *New York Public Library Digital Collections*. Accessed September 24, 2025.

12 See Saidiya Hartman. *Wayward Lives, Beautiful Experiments* (London: Serpent’s Tail, Profile Books Ltd, 2019), pg 248.

13 See *Google Mediapipe* terms of agreement. Google’s *Mediapipe* is an open source facial recognition application programming interface (API). It enables machine learning processes to occur on-device (computer, tablet, or smart phone) and is performed entirely in the browser. See also, *Google Mediapipe* “Blazeface” and “Facemesh” model cards. There is no server involvement in the machine-learning process for facial recognition and facial landmark analysis.

scene's culmination. The duration between my subject's entrance and her illumination is critical to the film's chronology. Here, the emphasis is not on recognizing and classifying the identity of my subject—which can only be seen under the radiance of the illuminated dome positioned at the center—but to become sensitised to her subjectivity. The interplay of sound and video is critical to this development. Though my subject is unnoticeable upon entrance, through left stereo sound, we are alerted to her presence on screen; the sound of her footsteps, her gasps, and her sighs provide critical information that directs our attention. This happening, masked under the thick of fog and the darkness of night, directs our gaze to the screen's periphery. It is one's sensitization to this event that dislocates the meta-narrative and reorients the trajectory ahead.

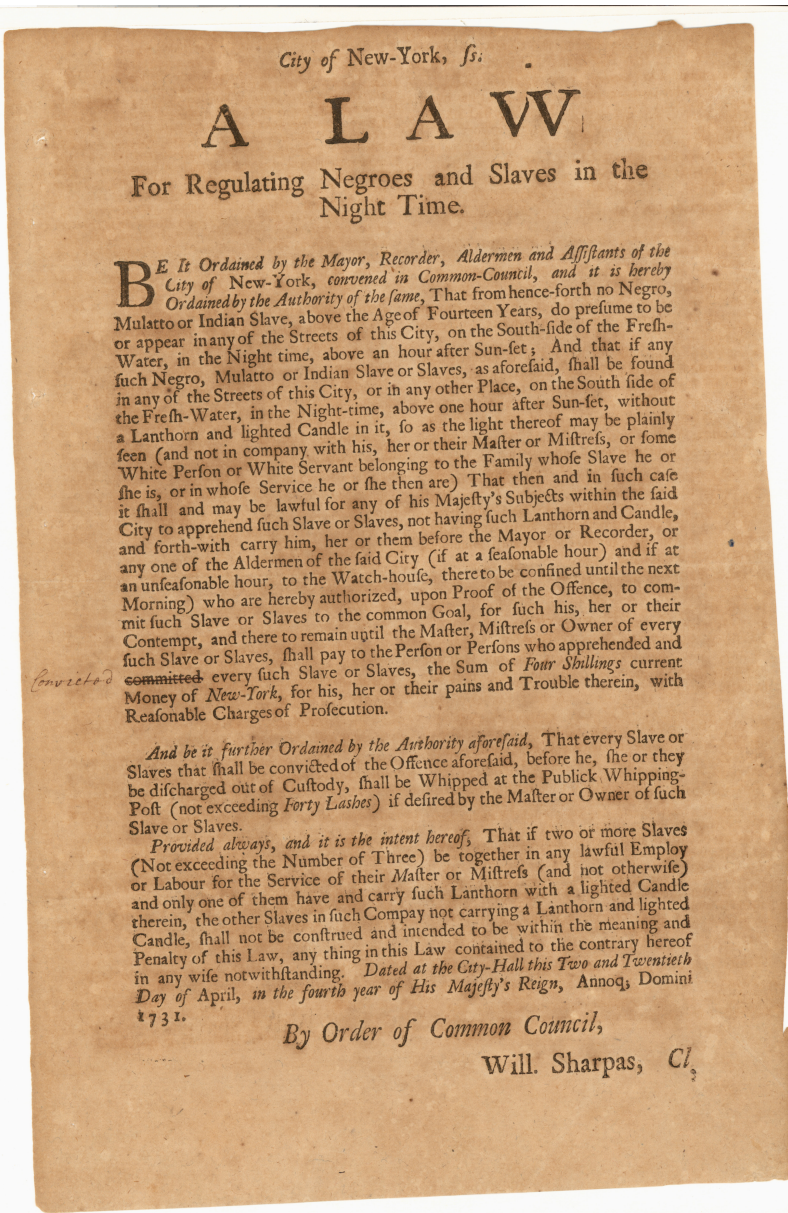


Figure 3. Rare Book Division, The New York Public Library, "A law for regulating Negroes and slaves in the night time," *New York Public Library Digital Collections*. Accessed September 24, 2025. Early 18th century recognition surveillance policy regulating the activity and movements of enslaved Africans. This document required "all Negroes, Mulattoes, or Indian slave above age fourteen" to carry a lantern at night so that their facial landmarks and form may be identified by policing officials.



Figure 4. Untitled video still, *Light Years Apart* (2021-2025), single-channel HD video linear and interactive web-based application, TRT 20:41 mins. The film begins with a direct address to the history and culture of surveillance with respect to black subjugation. Featured above is the opening scene of *Light Years Apart*. Fula, the film's protagonist, positioned on the left, walks into a scene illuminated by a quasi-lantern, a geodesic dome positioned at the center of the screen. Image courtesy of Christie Neptune.

A Systems Approach: Interrogating the Mechanics of Digital Surveillance

Artistic interventions into technology have long transposed historic roles and functions to explore the potential of failure, man-machine symbiosis, and systems thinking in contemporary art. Within this domain, discovery, that is, the spectator's direct engagement and trajectory towards understanding, is critical to the management of outputs and meaning. It places greater emphasis on knowledge formations generated from error, feedback, and relations. American art theorist and writer, Jack Burhnam, describes this as 'systems aesthetics,' a shift in artistic practice that foregrounds the organization, processes, inherent patterns, and interaction of devices within their respective environment. "A systems viewpoint is focused on the creation of stable, ongoing relationships between organic and non-organic systems, be these neighborhoods, industrial complexes, farms, transportation systems, information centers, recreation centers, or any of the other matrices of human activity" (Burhnam 113). Whereas governance regulates and controls the behavior of systems, the artist investigates and transposes the design and function of systems. The systems of values in both cases are ontologically distinct. The former places considerable emphasis on recognition and classification, and the latter on experimentation and discovery.

From a systems viewpoint, artistic interventions into technology activate a critical lens. It compels the spectator to think critically about the interrelations between material and immaterial systems in space. Take, for example, *I/Eye* (1993-2011) by Dutch artist Bill Spinhoven. The installation utilizes CCTV, assembly language,¹⁴ and a cathode-ray tube (CRT) monitor to blur fixed lines between the observer and the observed. Upon first encounter, the viewer is greeted with an extreme close-up of Spinhoven's eye. His eye, a surrogate stand-in for governance, returns a penetrative gaze that tracks movement in real time. Comprehension, in this context, is somatic. The spectator's body activates the gaze on screen, and it is through the body that the spectator engages the artist in discourse interrogating the tradeoff experienced between surveillance and privacy in public space. This encounter, as described by art historian and cultural critic Jorinde Seijdel, fosters an embodied awareness. From the spectator's standpoint, it is a provocation that "challenges their own secure position as observers" (Netherlands Media Art Institute 4). Lynn Hershman Leeson's *Dollie Clone Series* (1995-1996) runs tantamount to this approach. CCTV cameras installed in the eyes of two telerobotic dolls, Tillie and CybeRoberta, capture and stream live footage online. Viewers are given agency in the dynamics of framing and essentially become the watchful eye lodged in the sockets of Hershman Leeson's Dollies. Utilizing the project's web-based application and direct user interaction, the viewer remotely controls the direction and function of the gaze.

It is also important to consider the context of history and its varying implications upon Hershman Leeson's material. Hershman Leeson, like Spinhoven, created this work in the wake of significant technological advancement. Production is happening at the same time the general public is being introduced to the World Wide Web, cell phones, personal computers, data storage devices, and genome experimentation. The *Dollie Clone Series* developed in response to *Dolly the Sheep*, the first genetically cloned mammal and progeny of nuclear transfer technologies.¹⁵ CybeRoberta and Tillie are quasi-genetic clones, albeit with minor differences. But, what is most important is what Hershman Leeson manages to accomplish. Through varying schemes of co-option, she is able to make a social commentary on the era of digitization and call into question the ethics and potential afterlife of a developing technocracy. Caroline A. Jones, art critic and professor of art history in the department of architecture at MIT, addresses this in her essay, *The Artistic Use of Cyberbeings*: "Hershman Leeson produced 'dolls' as clones, offering a critical framing of the way contemporary individuation had become part of an ideological, replicative, plastic realm" (Jones 224). In many ways, Hershman Leeson's approach echoed the concerns of Simone and Achiume. Though it lacks an intersectional lens, Hershman Leeson's *Dollie Clone*

14 Assembly language are low-level programming language designed for specific computer architecture. See Wikipedia entry for Assembly language.

15 See Robin Feldman and Ven Norviel. "Dolly The Sheep: A Cautionary Tale" in *Yale Journal of Law & Technology*, Jan 8, 2016.

Series cautions against the digitalization of gender-based biases and the culture of replication in emergent technologies.

Artistic intervention into digital surveillance draws focus to the increasing influence of surveillance on our daily lives. It produces new threads of information from which to see and learn. *I/Eye*, *Tillie*, and *CybeRoberta* are cybernetic beings, hybrid entities birthed from the collision of human consciousness and surveillance technology. They are inherently distinct from the repressive models of digital surveillance we are most used to. They are what feminist theorist and author Donna Haraway describes as Cyborgs.¹⁶ Cyborgs are subversive. They respond. They critique. They mark. They disavow dichotomous ways of thinking. In the context of social thought, they provide space to reimagine and counter. Here, failure serves as critical feedback for intelligence. It foregrounds process and encourages varying modes of play, which is, debatably, antithetical to the market-driven practices of contemporary art and, correspondingly, systems of governance, which places greater value on the production of the commodity object. But let us, for a moment, take a step back and first analyze the mechanics of failure with respect to play in both works.

The *Dollie Clone Series* emerged from a chain of setbacks in Hershman Leeson's *Difference Engine #3* (1995-1998),¹⁷ a virtual exploration tool commissioned by Zentrum für Kunst und Medien (ZKM) in Karlsruhe, Germany. The work malfunctioned, or rather, did not function at all, during the first two years of its initial showings. To resolve system errors, Hershman Leeson considered an alternative approach, ultimately repurposing the project's hardware in *Tillie*. *Tillie*, apart from being a model to think with, provided feedback critical to the optimization and refinement of *Difference Engine #3*. Spinhoven follows a similar course. There exist several variations of *I/Eye* due to the obsolescence of tech and future preservation efforts.¹⁸ The project is, arguably, an ongoing production in perpetual transformation. Nevertheless, it is important to remember: though the hardware of both works is vital to our understanding, it is neither the impulse guiding dialogue nor the pillars upholding content. Within a systems approach, the material semiotics of content are eclipsed in value by process, relationships, and, most importantly, discovery. Though the devices of surveillance are integral to our understanding, it is the discourse generated around the manipulation of these devices that is the art. Play, performed through failure, enhances this registry. It produces the ongoing project, a responsive production sensitized to the world around it.

16 See Donna Haraway. "A Cyborg Manifesto: Science, Technology, and Socialist Feminism in The Late 20th Century. Simians" in *Cyborgs and Women: The Reinvention of Nature* (Routledge, 1991), pgs 149-181.

17 Lynn Hershman Leeson's *Difference engine #3* (1995-1998) is an computer based interactive art work commissioned by Zentrum für Kunst und Medien (ZKM) in Karlsruhe, Germany. The piece was inspired by mathematician, Charles Babbage's proto-computer, *Difference Engine*. See Karen Archey. "Cyborgs, Sheep, and NannyCams" in *Rhizome*, 2017.

18 See Neatherlands Media Art Institute. Bill Spinhoven, *I/Eye* (1993/ 2011), *Case Study Report, Obsolete Equipment Research Project*, 2011.



Figure 5. Bill Spinhoven, *I/Eye* (1993-2011). Site-specific interactive installation of variable dimensions. Montevideo Gallery exhibition. Image courtesy of the Netherlands Media Art; Wikipedia.

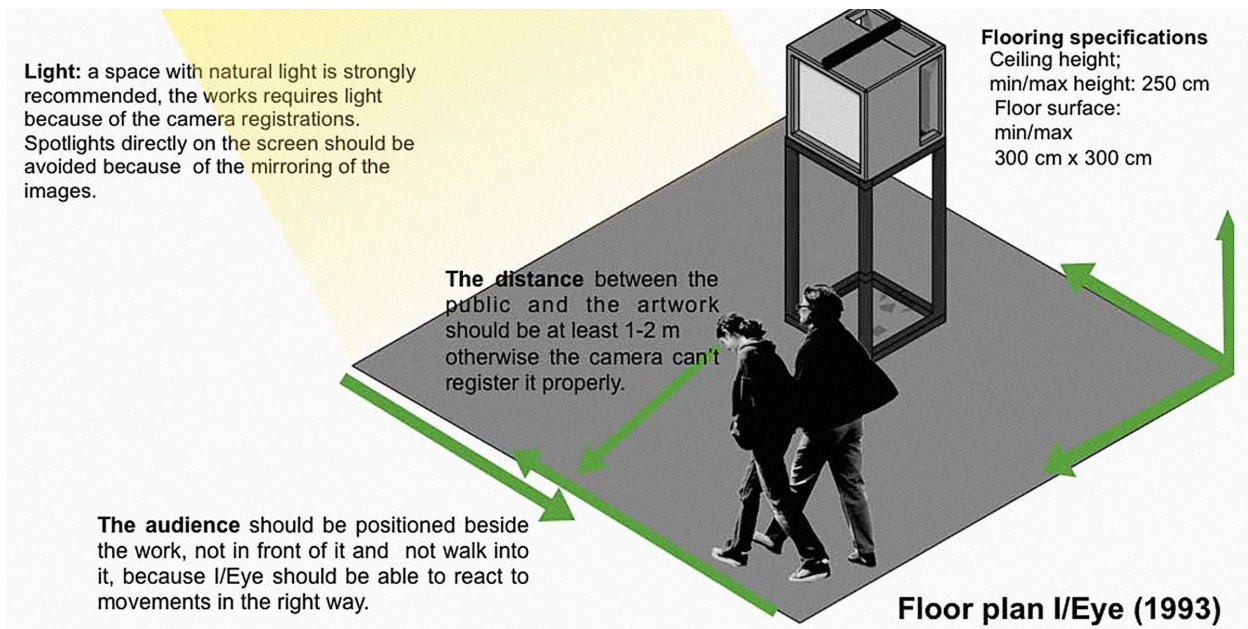


Figure 6. Floor plan diagram of Bill Spinhoven's *I/Eye* (1993/2011). Sourced from Case Study Report on the Scope of the Obsolete Equipment Research Project, 2011 by the *Netherlands Media Art Institute*



Figure 7. Lynn Hershman Leeson, “CyberRoberta” (1996), the plastic clone of Tillie from the *Dollie Clone Series* (1995-1996). 17 ³/₄ x 17 ³/₄ x 7 ⁷/₈ inches. Image courtesy of Hyperallergic; the artist; Bridget Donahue Gallery, New York; and Altman Siegel, San Francisco. <https://hyperallergic.com/664541/lynn-hershman-leeson-in-all-her-cyborg-glory/>



Figure 8. A video still of surveillance footage captured from CyberRoberta's eyes, from the ZKM exhibit of the *Dollie Clone Series* (1995-1996). Image courtesy of Rhizome. <https://rhizome.org/editorial/2017/feb/09/cyborgs-sheep-and-nanny-cams/>

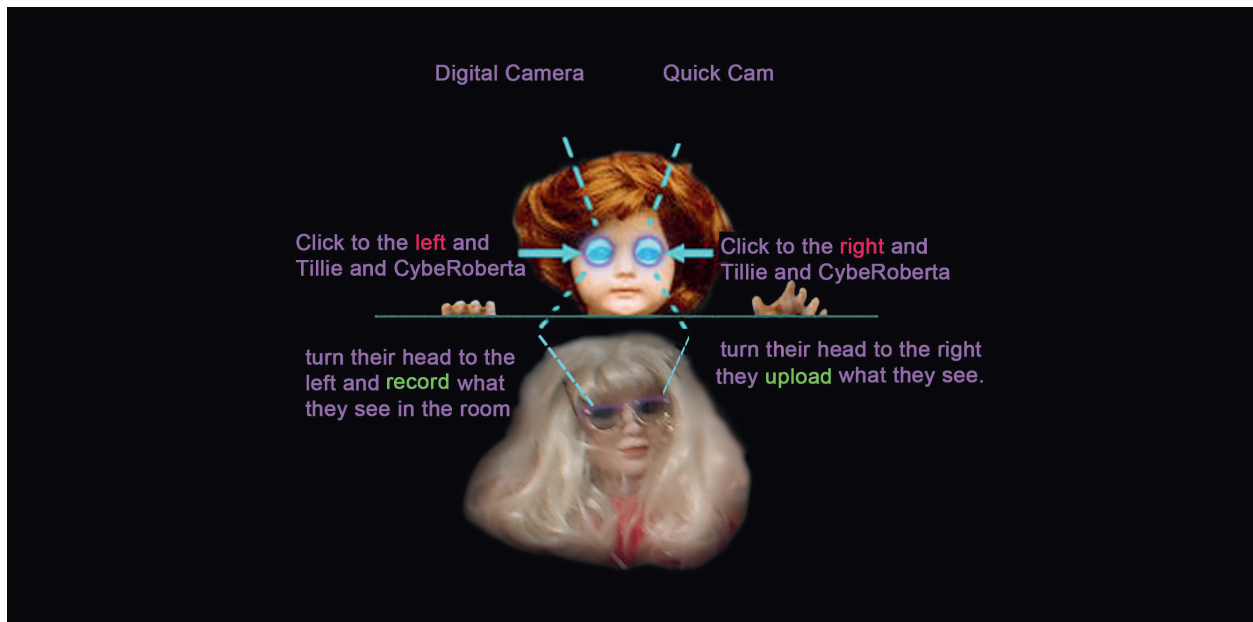


Figure 9. Lynn Hershman Leeson, Instruction diagram for telerobotic dolls, Tillie and CybeRoberta, from the *Dollie Clone Series* (1995-1996). Image courtesy of Rhizome, <https://rhizome.org/editorial/2017/feb/09/cyborgs-sheep-and-nanny-cams/>

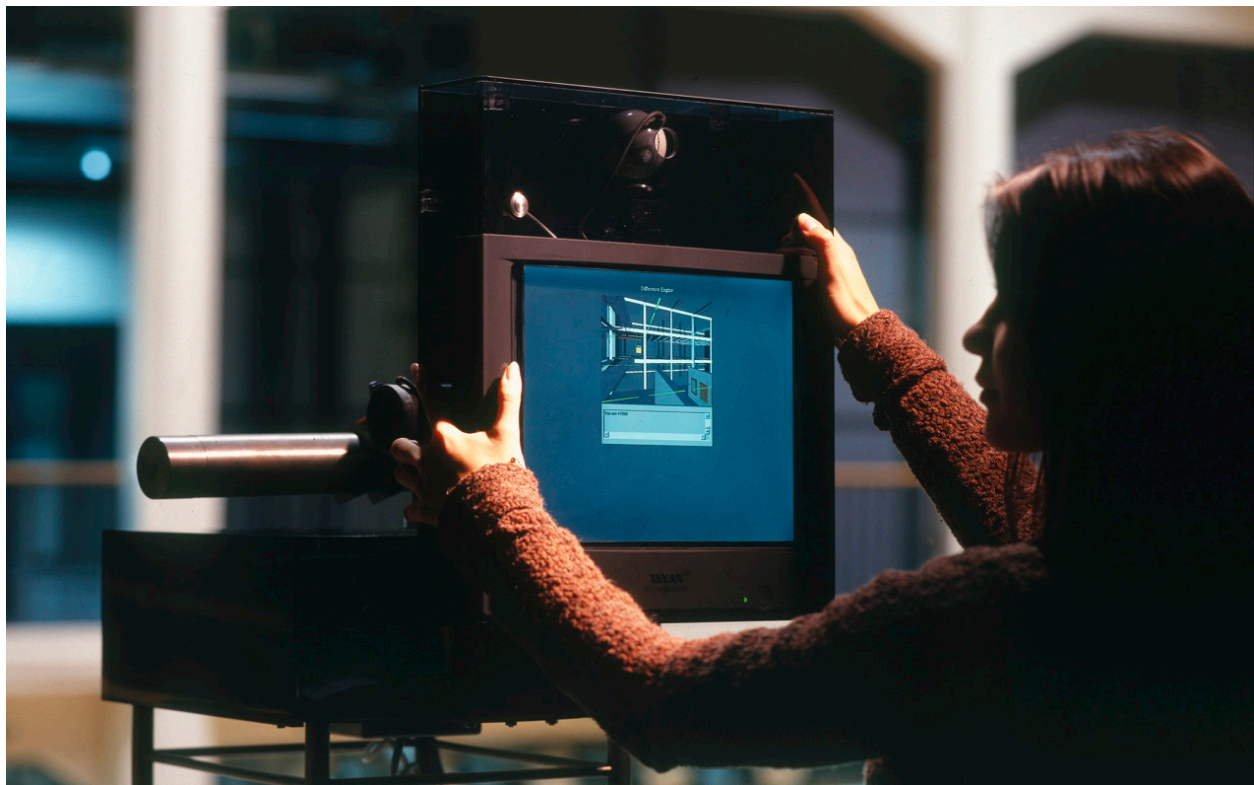


Figure 10. Lynn Hershman Leeson, *Difference Engine #3* (1995-1998). Interactive installation exhibited at the ZKM Center for Art and Media. Image courtesy of ZKM Center for Art and Media. <https://zkm.de/en/artwork/difference-engine-3>

Within a systems approach, artistic intervention into technology is anti-material. It foregrounds “play as narrative,”¹⁹ a term introduced by MIT Open Labs founder and principal investigator, William Uricchio. From this vantage point, the viewer’s experience, or rather their trajectory towards understanding, is the storyline. *Play as narrative* in the works of Spinhoven and Hershman Leeson, not only “enhances moments of affective immersion and discovery within the filmic encounter” (Neptune 52), but it works to foreground process—a vehicle in artistic discourse critical to meaning. However, this idea is neither exclusive to the cybernetics of interactive media nor unprecedented in the context of contemporary art. There are a number of theorists, artists, and critics who have played with this idea to some degree.

In 1967, art critic and curator Lucy Lippard introduced the concept of *dematerialization*,²⁰ an approach in artistic practice predicated on content, namely, the conceptualization of an idea. Process, that is, the varying activities undertaken to articulate the idea, takes precedence over material. In the September 1968 issue of *Artforum*, Burhnam implicitly expands upon this standpoint within his variant theory and essay of the same name, *systems aesthetics*. Again, the interrelations between ideas, process, and the matrices of human activity (immaterial and material) outweigh the material production of the commodity object. Three years later, assemblageist and installation artist Allan Kaprow introduced the theory of *unarting*.²¹ In his penned essay, “The Education of the Un-Artist, Part 1” (1971), Kaprow calls for the de-sophistication of artistic practice, a formidable shift towards humor and process that throws the cosmetic and formalist statutes of the *art-art*²² to the wayside. Each approach to making, that is, Lippard’s *dematerialization*, Burhnam’s *system aesthetics*, Kaprow’s *unarting*, and Uricchio’s *play as narrative*, underscores the significance of relations, process, and action within artistic discourse. The emphasis here is not so much on producing an object to be looked at in the traditional sense, but the cultivation of experiences, an ephemeral and intangible matter. If one were to take a decolonial turn, a gesture that pins the optics of intersectionality to a systems approach, one would arrive at the interactive short film, *Light Years Apart*. Within this framework, the viewer’s experience along the inside and outside of white racial framing eclipses the material.

19 See William Uricchio. The notion of *play as narrative* in “Re-thinking Social Documentary.”

20 See Lucy Lippard. The concept of *dematerialization* in *Six Years: The Dematerialization of the Art Object from 1966 to 1972*.

21 See Allan Kaprow. The notion of *unarting* in “The Education of the Un-Artist, Part I.”

22 In Allan Kaprow’s “The Education of the Un-Artist, Part I,” *art art* is art made from the formalist traditions of art school.

A Decolonial Turn: Colliding the Optics of Intersectionality with Algorithmic Resistance in Digital Surveillance

Like Spinhoven's *I/Eye* and Hershman Leeson's *Dollie Clone Series*, *Light Years Apart* draws our attention to the ubiquitous presence and capabilities of surveillance technology. However, it pushes further to interrogate and reimagine the violence of framing. The film's decolonial turn heightens the criticality of the unseen, the hyper-visible black subject historically silenced and excluded from the dominant discourse. It is here that we see a distinction drawn between surveillance models of governance and artistic interventions into surveillance models. The latter draws focus to the mechanics of function: the skeletal structure of politics driving its performance and execution.

Through artistic intervention, we are able to analyze and reconfigure what is negotiated within the frame. Biases are brought to the fore and dissected, and the paradigms of visibility are shifted to dislocate the centrality of the meta-narrative. This is what I refer to as a *marked axiological shift* (MAS),²³ an approach in artistic practice that co-opts, marks, and shifts the dynamics of power, axiology, and understanding within representational practice. In *Light Years Apart*, the optics of intersectionality draw focus to deep-rooted prejudice at the core of surveillance, drawing connections between its biometric past and biometric present. However, this approach is not unique to *Light Years Apart*. There are a great number of works that can be fitted within the purview of MAS frameworks. *The Interaction of Coloreds* (2002), developed by artist duo Keith and Mendi Obadike, is one example that speaks to this. The work uses biometric data and the World Wide Web to interrogate coded systems of racial classification. The audience completes a survey online and sends biometric data to the artists to obtain a six-character alphanumeric code and certificate specifying their skin complexion. The work, in abstract, addresses the digitalization of racial relations within contemporary technological procedures, specifically within the codification of blackness. For the Obadikes:

It was one way of thinking through and pushing back on the claims that race didn't matter online because we didn't see people. We understood that we're never just seeing people in real time. We're also activating a series of calculations that are stabilized in our imaginations as color terms, but they are more dependent on interpretive frames and relations than on color.²⁴

The Obadikes articulated, rather vividly, the social weight and depth of politics within the design,

23 Marked axiological shifts (MAS) is a lexicon and artistic approach introduced by Christie Neptune. It pushes beyond the border of geographical knowledge in visual articulations of representational space to (1) disavow framed binaries; (2) dislocate meta-narratives; (3) co-opt and mark the sites and devices of western culture with the values, semiotics, and grammar of black culture; (4) realign the dynamics of authorship and control in interactive mediated performances. See Christie Neptune. "Ah New Riddim: A Marked (Black) Axiological Shift Across Space and Time," master thesis in *MIT Architecture* (Cambridge, MA: Massachusetts Institute of Technology, June 2023).

24 See Aria Dean, Mendi and Keith Obadike. "#000 is a Color: An interview with Mendi + Keith Obadike" in *Rhizome*, 2017.

activation, and function of tools. Here, co-option provides space to reimagine new futures, one where the World Wide Web is activated as a site of resistance. This process, a rather telling exposition of counter-politics, radicalizes the hex code. New formations of knowledge emerge that shift the dynamics of understanding around racial myths, its digitalization, and inherent implications.

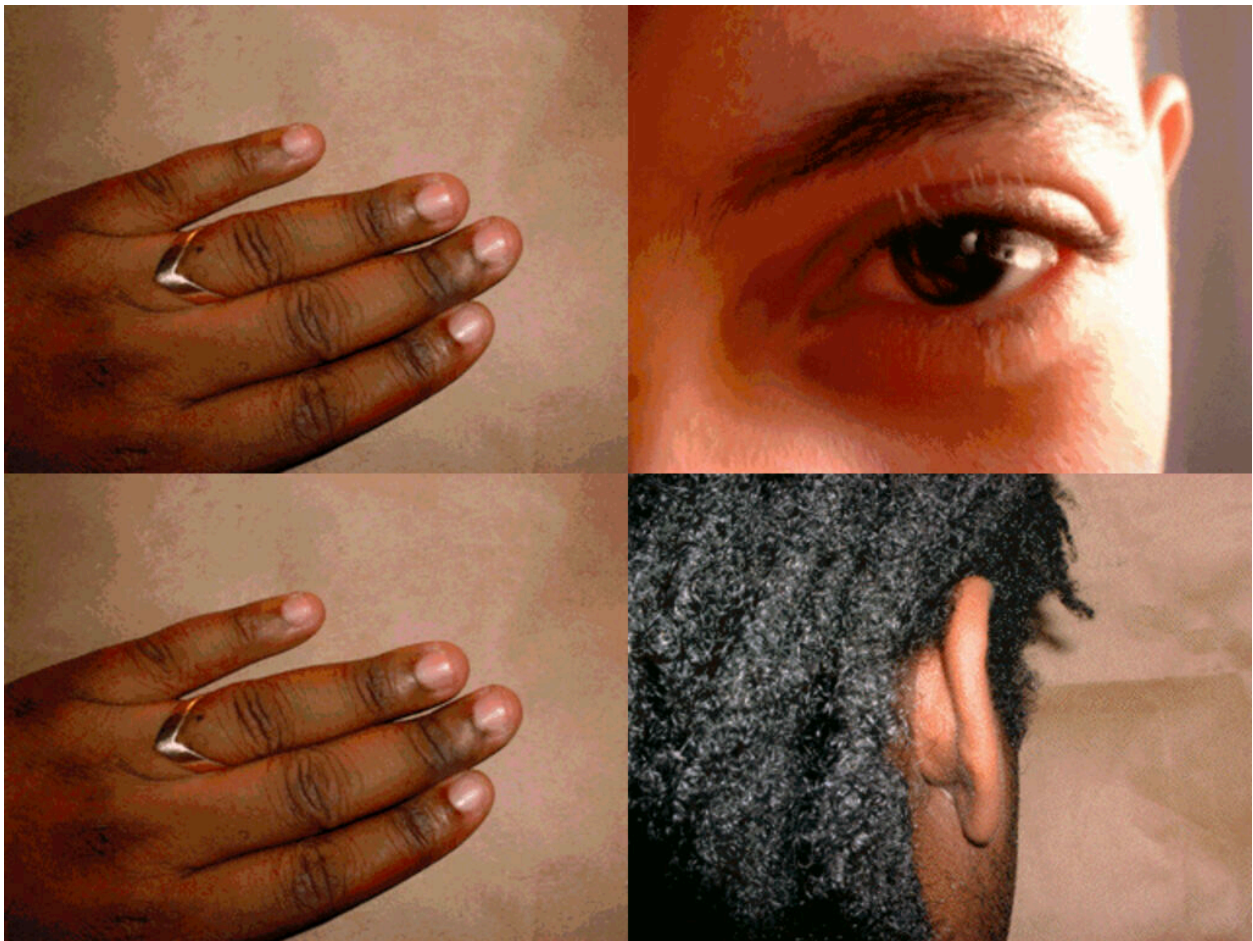


Figure 11. Keith and Mendi Obadike, *The Interaction of Coloreds* (2002), an HTML site of variable dimensions. Screen capture of running montage. Image courtesy of the *Whitney Museum of American Art*. <https://whitney.org/exhibitions/mendi-keith-obadike>

Play Performed Through Failure vs. Play Performed Through the Narrative

It is also necessary to point out the role(s) of play with respect to approach and content. In *Light Years Apart*, ‘play’ performs two functions. From one perspective, play performed through failure stimulates continuous evolution within the film’s artistic approach. It necessitates ongoing adaptation, evolving methodologies, and variations of form to counter emerging problems, questions, and changes wrought through the interplay of the film’s idea, devices, and environment. The film’s evolution from a multi-user gallery experience to a one-to-one web-based application speaks to this. The film underwent a series of amendments in consequence to system failures, user feedback, and policy changes. In the project’s initial scheme, the thresholds for engagement were informed by an arithmetic mean of varying values culled from a collective of spectators. More specifically, the organization of information in time was predicated on the gaze of varying entities in space. This approach led to many irregularities that further complicated programming and assessment. Though simplified, the switch to one-to-one spectatorship deepened immersion and provided more feedback critical to the film’s overall intelligence. It provided insight into the mechanics of the gaze, particularly on what informed, sustained, and changed it.

Additionally, the interface of *Light Years Apart* generated many annoyances in preliminary tests with focus groups. Among many things, respondents complained about the application’s control scheme and engagement metrics. To optimize the film’s performance, a calibration window for neuro-inclusivity and an analytics panel including hints, narrative trajectory, and control options were integrated into the film’s interface. Over time, the work became intuitive. However, that was quickly overshadowed by changes to state policy.²⁵ To maintain the film’s artistic intent, an approach of algorithmic resistance was adapted, one that made the process of co-option ongoing.²⁶ This tactic serves as an enduring strategy of neutralization—an ongoing effort exercised through regular updates and amendments to counter the influence of state power in the film’s application of digital surveillance. More importantly, it preserves critical features integral to the film’s artistic design.

²⁵ On February 4, 2025, Google launched new updates rescinding past agreements to restrict the use of AI in weapons and surveillance. And five months later, the U.S. federal government issued an executive order declaring woke AI a threat. In the eyes of governance, the integration of diversity, equity, and inclusion (DEI) initiatives and corresponding “concepts like critical race theory, transgenderism, unconscious bias, intersectionality, and systemic racism...” (White House 2025), became a detriment to the future of AI. See Nitasha Tiku and Gerrit De Vynck, “Google drops pledge not to use AI for weapons or surveillance,” in *The Washington Post*, February 4, 2025. See also US executive order. “Preventing Woke AI in the Federal Government,” in *White House Presidential Actions*, July 23, 2025.

²⁶ Planned contingencies implemented within the film’s interface (1) modified the source code of facial landmark and detection APIs; (2) rerouted the initial page load from Google to the film’s hosting platform; and (3) introduced subtle adversarial perturbations (including a slight blur and tint to the bounding box of the detected face) to reconcile the trade-off between privacy and accuracy during screening. Adversarial perturbations exacerbate machine learning vulnerabilities by obstructing identity recognition. This feature will be regularly updated to account for rapid developments in AI.

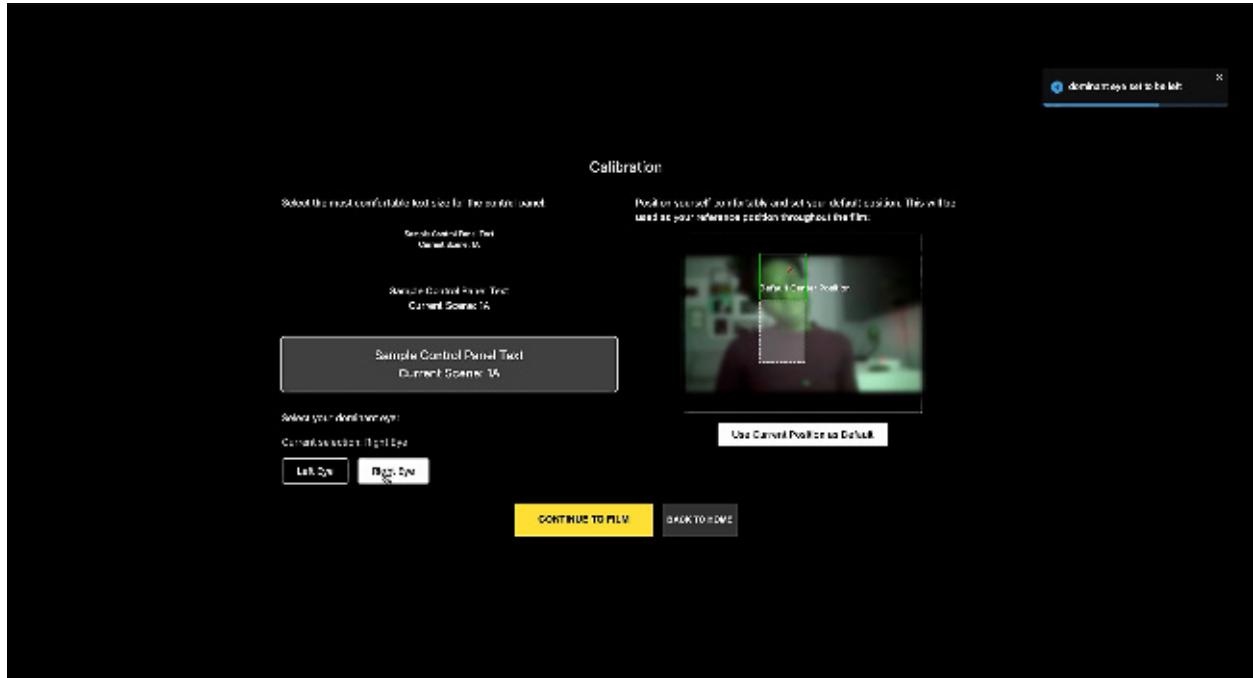


Figure 12. Christie Neptune, *Light Years Apart* (2021-2025), single channel linear and web-based interactive HD video, TRT 21:40 mins. A screen-shot of the neuro-inclusive calibration window. Through calibration, viewers can choose notification font size and characters; their default position for facial recognition; and dominant eye for the interface's eye-tracking capabilities. Image courtesy of Christie Neptune.

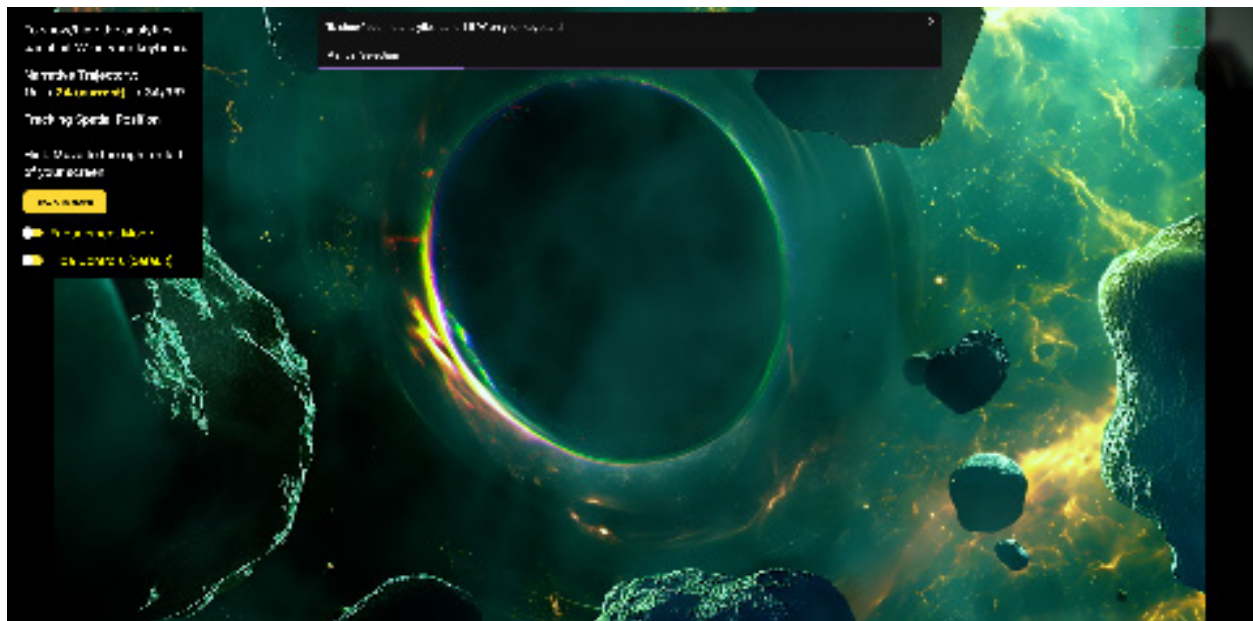


Figure 13. Christie Neptune, *Light Years Apart* (2021-2025), single channel linear and web-based interactive HD video, TRT 21:40 mins. A screen-shot depicting the analytic panel, to the right of the screen; prompt window, at the top center of the screen; and facial bounded box, to the right of the screen (including adversarial perturbations). Image courtesy of Christie Neptune.

Play performed through failure deepens the cyborg discursive in interactive mediated performance. It nurtures the ongoing project: a living, breathing quasi-organism with artificial tentacles and cells that adapt and evolve to meet the challenges of its environment. However, from an alternative perspective, the role of play, as performed through the narrative, synthesizes discordant elements of content and conceptual understanding. Through play, the spectator bridges an aesthetic understanding with conceptual comprehension, ultimately reconciling the registries of meaning with the artist's intentions. This coupling establishes a culture of shared labor within the creative exchange. And it is through the body, that is, the conscious labored work of both the artist and spectator, that the paradigms of visibility in *Light Years Apart* are shifted. In interactive mediated performance, the body as *hot spot* is critical to this reorganization—it shifts the axes of power and language in cultural representation and advances comprehension in photographic seeing.

The *hot spot*²⁷ in computation is an area on the computer screen marked by heightened activity. It is a point of transport, the hyperlink, a repository of information that pushes the viewer elsewhere along a programmed trajectory of events. In photography, this functions as an over-exposed spot, across the print's surface, noted for its loss of information and detail. And, in its general application, it is often referred to as a site of violence, the epicenter of dangerous activity in a given space or time. Within its varying contexts, the *hot spot* performs as an enduring axiom of pronounced action. Many parallels can be drawn between the term's semantic framing and the role of the body in interactive mediated performance with respect to play. The body as *hot spot* activates a trajectory of plot points along a branching narrative structure. As the focal point of action in interactive mediated performance, it moves the frameworks of understanding from passive acts of perception towards active perceptual discovery. The latter balances the offset of labor in the creative exchange. The role of play, as performed through the narrative, hinges on this performance. It brings the work into context with the external world, sutures meaning, and foregrounds the artist's intentions.

Seeing the Unseen: Reconciling the Registries of Understanding in Art Made Politically

Framing the unseen, specifically in the realm of art made politically, is an arduous process of conscious reorientation and plastic organization. The 'artist,' whom I shall interchangeably call the 'unseen,' must first remap the cartographies of representation, a perceptual and conscious reworking that dislocates the centrality of the dominant narrative from the gaze. This labor produces a new politics of vision, both palpable and substantive, that pushes beyond the camera's capabilities. And finally, through the plastic power of organization,²⁸ the unseen,

27 See Oxford dictionary entry for *hot spot*.

28 See Hungarian painter and photographer, György Kepes (Kepes György?) *Language of Vision*, with intro-

a political entity at the fringe of social visibility, foregrounds their likeness. This inscription, etched across material, is then packaged and delivered for discussion, the tacit *vomit*²⁹ that Brazilian artist Lygia Clark ejects and molds into propositions. Though critical to discourse, this production is futile unless witnessed. It is a *vomit* that must be exchanged, discussed, and experienced through the senses. Duchamp defines this exchange as the *Creative Act*, a mutually interdependent production where both parties, on either end of the spectrum, are integral to meaning. In Duchamp's critique, however, a distinction is made between the labor of the artist and that of the spectator. Although the artist frames the context of the dialogue, it is the spectator who "brings the work in contact with the external world by deciphering and interpreting its inner qualifications" (Duchamp 25). Here, the spectator's labored contribution and understanding are limited to aesthetics, an epistemic centered around the inner qualities of affect and pathos. There is a potential imbalance of labor here that warrants addressing, particularly when considering the politically driven intentions of the unseen.

Does an aesthetic understanding lend itself to conceptual comprehension? More importantly, is the evocation of pathos enough to shift the gaze, a matter of politics? My question posed here addresses criticism by philosopher and social critic, Roger Scruton. In *Photography and Representation*, Scruton poses a question regarding the separation of interests in spectatorship. He asks, "Can we have such an interest in a photograph without having the same interest in the subject?" (Scruton 592). This question implies, though not explicitly, a division in perceptual labor—between an aesthetic understanding and conceptual comprehension. The former intensifies the division wrought between the artist's intent and the spectator's understanding. And this question is reasonable, as it is neither rare nor unheard of to encounter an image that is deeply felt but not comprehended.³⁰ Or, an image that is despised, yet widely discussed in popular culture due to the intensity of emotion it evokes.³¹ We see this quite often,

ductory essays by S. Giedion and S. I. Hayakawa (Chicago: P. Theobald, 1944): 6–14, 44–51, 218–228.

29 Brazilian artist Lygia Clark introduces the *vomit* analogy to describe the creative exchange. See Daniel Birnbaum. "Lygia Clark" in *Artforum*, October 2014, Vol. 52, No. 2. See also Roland Barthes. He discusses the phenomenology of the photographic encounter in "A Casual Phenomenology."

30 *Centropy*, the 2021 Hugo prize solo exhibition by American photographer Deana Lawson explores "black diasporic identity that powerfully evokes self possession and divinity in her subjects," (Guggenheim 2025). However, this idea, critical to the works understanding, is, arguably, missed within the encounter. Some critics argue that *Lawson's* staged production panders a romanticised view of blackness, one that perpetuates stereotypical tropes. In an article for *Hyperallergic*, art historian, curator and professor of American art, Gwendolyn DuBois Shaw expressed that "Many of Lawson's pictures continue a tradition of degradation and exploitation that may not be easily recognized as problematic by those who are distanced from it by virtue of their class position or racial identity." This perspective brought forth by a number of critics, diverges significantly from the artist's intentions. See Gwendolyn DuBois Shaw in "The Many Problems with Deana Lawson's Photographs." See also, Guggenheim Museum entry for *Centropy*.

31 Andres Serrano generated outrage in mainstream media for *Piss Christ* (1987), a cibachrome print, depicting the piss covered crucifixion of Christ. In *Art in America*, art theorist and writer Lucy Lippard addresses the schism wrought between mainstream criticism of Serrano's work and his intentions as the artist. See Lucy Lippard in "From The Archives: Andres Serrano, The Spirit and The Letter." See also Ilan Stavan and Jorge J.E. Garcia in

particularly in the media, where public criticism and controversy generated around an artist's work do not align with the artist's intentions. However, as an aesthetic understanding, neither connotes comprehension nor suggests transformation in the encounter, what labored work is required to "see" the "unseen?" How does the spectator reconcile their inner experience with the act of co-option? Moreover, what is conceptual comprehension, and how does the role of play, as performed through the narrative, work to enhance its registry in *Light Years Apart*?

In *Light Years Apart*, these questions are routinely examined and checked through the body: the *hot spot* of activity and architecture of control within interactive mediated performance. Through the body, the spectator becomes complicit in the narrative's plot points. They are able to draw immediate connections between their own position in space and its impact upon the imagined world displayed across the screen. It is an embodied performance that incentivizes conscious reorientation, a pivotal development in the creative exchange that enhances discovery and builds conceptual comprehension. Conceptual comprehension in artistic practice collides the affective and intellectual registries of understanding with the artist's intentions. It converges interests in processes of looking. Play, as performed through the narrative, is integral to this development. The spectator's conscious reorientation and organization of material within the encounter converges varying fields of understanding. They perform what author and professor of humanities, Tina Campt, describes as shifting "the optics of 'looking at' to a politics of looking with, through and alongside another" (Campt 8). This gray area is both palpable and forthcoming. It muddies dichotomies, converges interests, and encapsulates shared labor. The spectator and artist are collectively doing the work to disavow the matrices of white racial framing found at the core of surveillance. User feedback from the film's web interface confirms this. Participants expressed great discomfort when positioned on the exterior of my protagonist's inner world. However, when greeted with a cartographic representation of their trajectory, they became motivated to adjust their lens. Discovery, in this case, moved the formations of knowledge beyond an aesthetic understanding towards conceptual comprehension. This process brought into question the precarity of surveillance, the ethics that govern it, and its susceptibility to bias.

Artistic interventions into digital surveillance enhances a lens of criticality and encourages agency. In this space, resistance is most palpable. But perhaps Lorde is right, and it is indeed impossible to dismantle Master's house using Master's tools. Co-option as an algorithmic tactic of resistance does not dismantle the framework of digital surveillance; it simply subverts its design and function to provide new formations of knowledge. The house is still a house, and Master's tools are still tooling. However, politics, a device critical to meaning, is adjusted for cultural differences. This is pivotal in the context of framing, as it works to modify the optics of

"On Desecration: Andres Serrano, Piss Christ."

representation. The spectator's conscious labor is formidable to this framework. It advances the processes of co-option, a precarious development in the context of surveillance that necessitates much labor: firstly, the work must consistently adapt and evolve to meet the challenges of its respective environment. Play, as performed through failure, nurtures the cyborg discursive. The artist's response to the obsolescence of hardware, policy changes, and user feedback is perpetual. Here, co-option, an algorithmic tactic of resistance in digital surveillance, is ongoing. Fluid. Secondly, the spectator must share the burden of conscious reorientation and plastic organization. This process, a system of relations and actions, fosters conceptual comprehension. Both the artist and spectator are transformed within the phenomenology of the creative exchange and aligned with the same agenda: retooling the paradigms of visibility in digital surveillance. ■

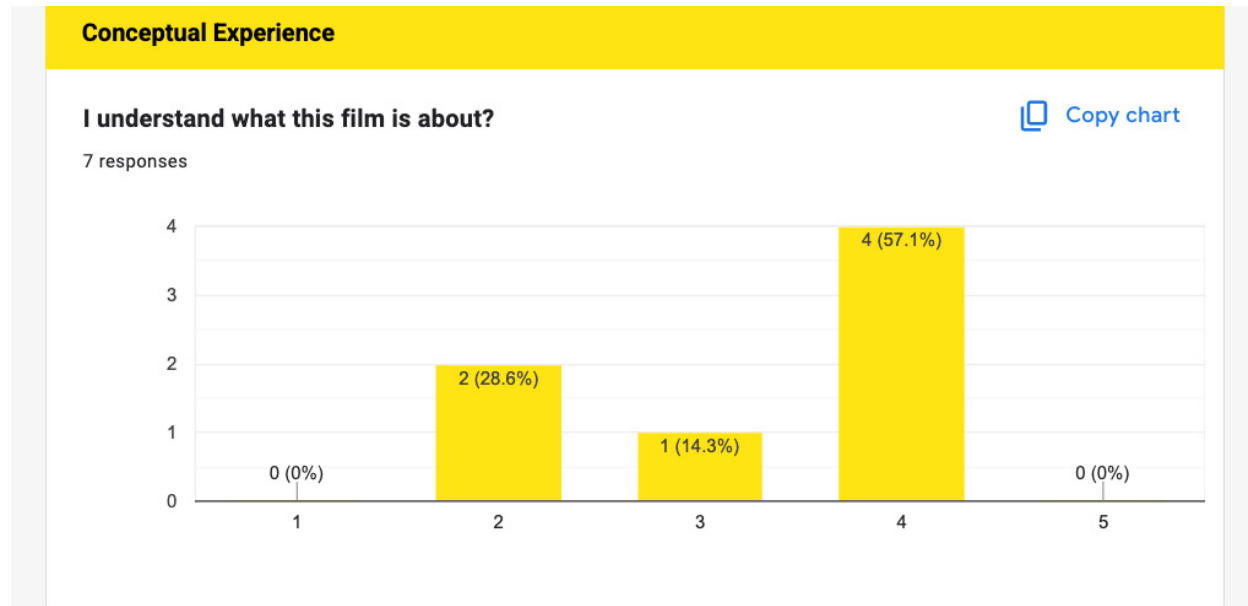


Figure 14. Comprehension chart from *Light Years Apart* (2021-2025) user experience survey on March 14, 2025 at the Ruskin School of Art, Oxford. Participants rated their comprehension on a scale of 1 to 5 with (1) as “strongly disagree” and (5) as “strongly agree.” Image courtesy of Christie Neptune.

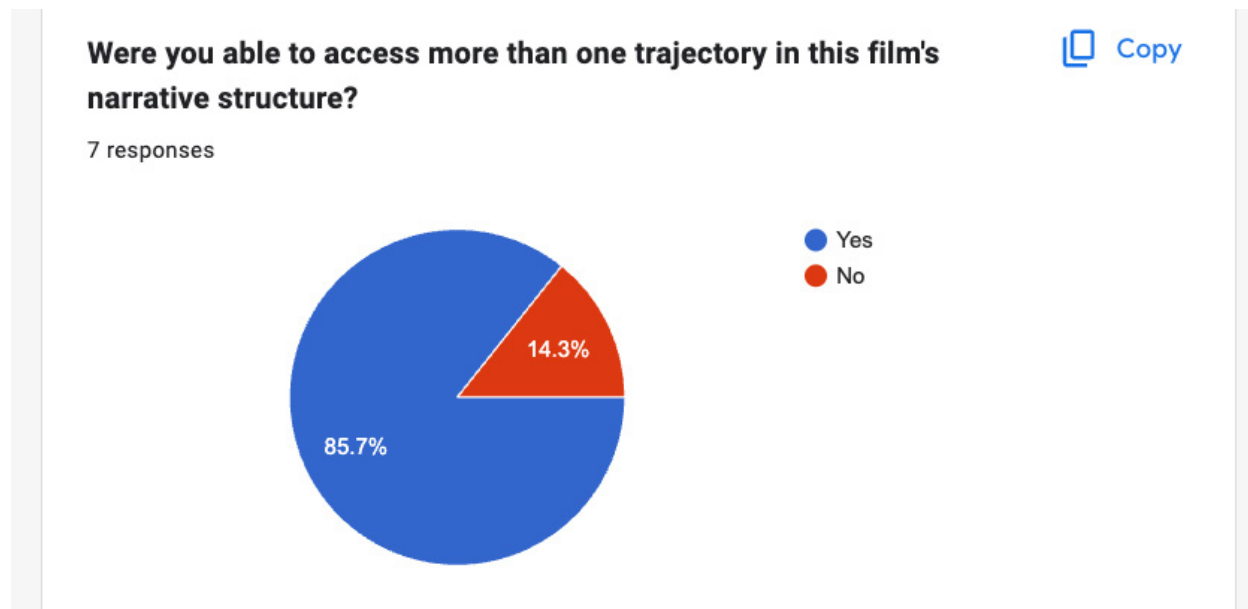


Figure 15. Narrative trajectory pie chart from *Light Years Apart* (2021-2025) user experience survey on March 14, 2025 at the Ruskin School of Art, Oxford. To test the film’s intuitive control scheme users were asked to confirm whether or not they were able to access more than one narrative trajectory. Image courtesy of Christie Neptune.

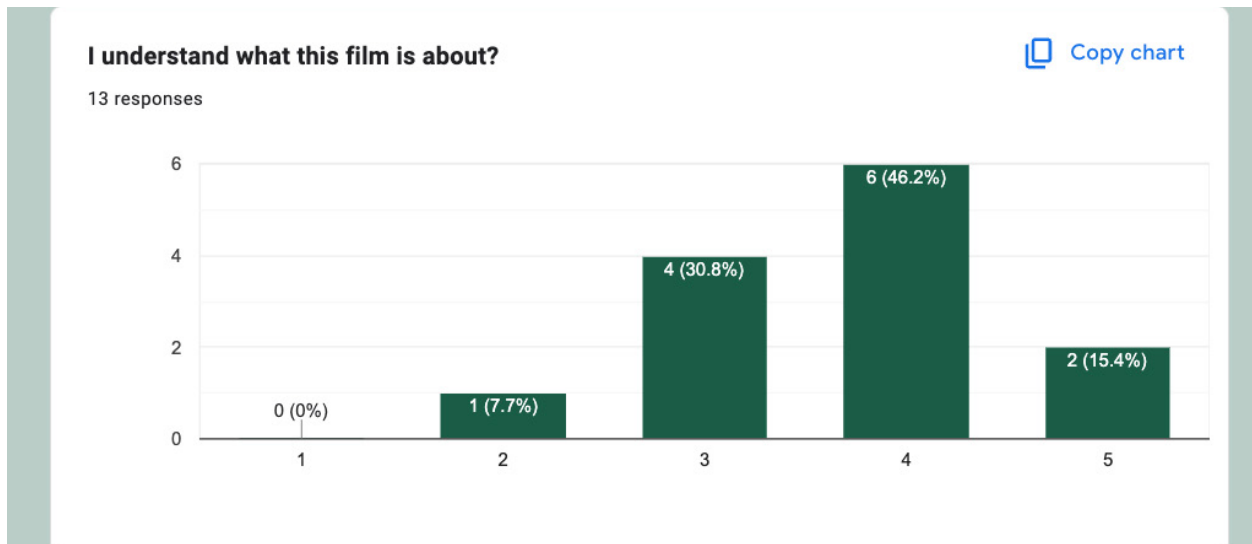


Figure 16. Comprehension chart from *Light Years Apart* (2021-2025) online beta-user experience survey in September 2024 and October 2024. Participants rated their comprehension on a scale of 1 to 5 with (1) as “strongly disagree” and (5) as “strongly agree.” Feedback from this survey was integrated in updates tested on March 14, 2025 at the Ruskin School of Art, Oxford. Image courtesy of Christie Neptune.

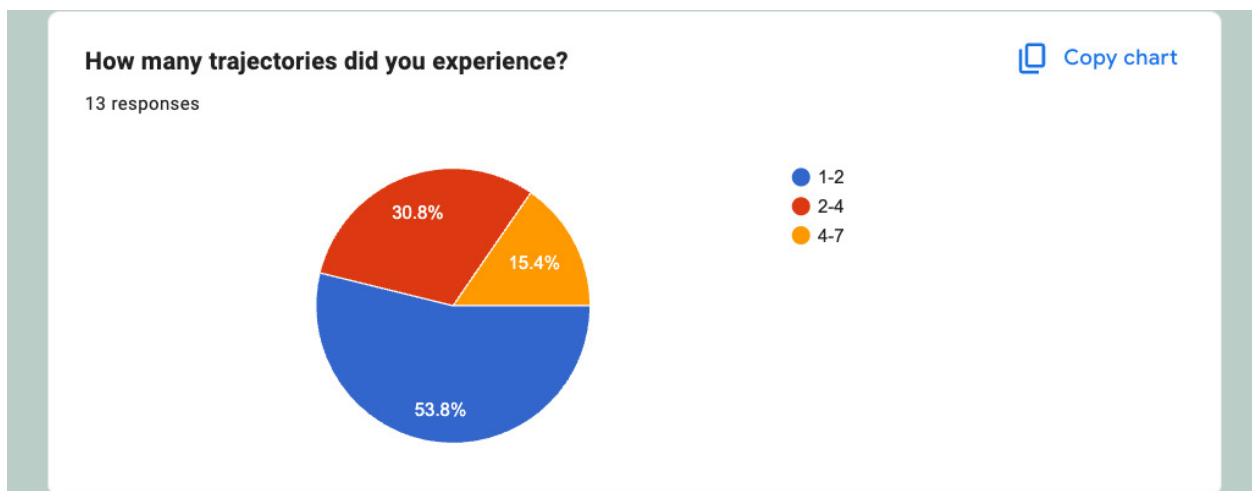


Figure 17. Narrative trajectory pie chart from *Light Years Apart* (2021-2025) online beta-user experience survey in September 2024 and October 2024. To test the film’s control scheme, users were asked to confirm whether or not they were able to access more than one narrative trajectory. Feedback from this survey was integrated in updates tested on March 14, 2025 at the Ruskin School of Art, Oxford. Image courtesy of Christie Neptune.



Figure 18. Untitled video still, Christie Neptune, *Light Years Apart* (2021-2025), single channel linear and interactive web-based video HD video, TRT 20:41. The above image features the inside of white racial framing. In this scene, Fula is intruded upon and surveilled.



Figure 19. Untitled video still, Christie Neptune, *Light Years Apart* (2021-2025), single channel linear and interactive web-based HD video, TRT 20:41. Fula's inner world, also known as the outside of white racial framing. The above image features the direct address of Fula, the film's protagonist. For more than 30 seconds, Fula delivers a penetrative gaze that ruptures the imagined barrier between herself and the spectator. However, to return this gaze, the spectator must perform the labored work of conscious reorientation.

Bibliography

- Auslander, Philip “2. Live performance in a mediatised culture” in *Liveness: performance in a mediatised culture* (London ; New York, New York : Routledge, Taylor & Francis Group 2023), pgs 10-68.
- Barthes, Roland. “A Causal Phenomenology” in *Camera Lucinda* (Hill and Wang Press; Farrar, Straus, and Giroux, 1981) pg 21.
- Barthes, Roland. “Myth Today” in *Mythologies* (New York, NY: The Noonday Press-Farrar, Straus & Giroux, 1991), pgs 109-121.
- Bazarevsky, Valentine. BlazeFace: Sub-millisecond Neural Face Detection on Mobile GPUs. *CVPR Workshop on Computer Vision for Augmented and Virtual Reality, Long Beach, CA, USA, 2019*. <https://sites.google.com/view/perception-cv4arvr/blazeface>.
- Birnbaum, Daniel. “Lygia Clark” in *Artforum*, October 2014, Vol. 52, No. 2, <https://www.artforum.com/events/lygia-clark-4-207128/>.
- Birnbaum, Daniel; Hui Yuk. “Tools of the Trade,” in *Artforum*, September 2025, <https://www.artforum.com/features/yuk-hui-daniel-birnbaum-interview-1234733869/>.
- Bishop, Claire. “Activated Spectatorship” in *Installation Art: A Critical History* (London: Tate Publishing, 2005), pgs 102-128.
- Bonini, Tiziano; Treré, Emiliano. “Living With Algorithms: Power, Agency, Resistance,” in *Algorithms of Resistance: The Everyday Fight against Platform Power* (MIT Press, 2024), pgs 13-27.
- Boutin, Chad. “NIST Study Evaluates Effects of Race, Age, Sex on Face Recognition Software” in *Nist.gov*, December 19, 2019. <https://www.nist.gov/news-events/news/2019/12/nist-study-evaluates-effects-race-age-sex-face-recognition-software>.
- Brown, Tom. “Introduction: direct address in film history, theory and criticism” in *Breaking the Fourth Wall: Direct Address in the Cinema*. Edinburgh University Press, 2012. <http://www.jstor.org/stable/10.3366/j.ctt3fgqrq>.
- Browne, Simone. “Branding Blackness: Biometric Technology and the Surveillance of Blackness,” in *Dark Matters: On The Surveillance of Blackness* (Duke University Press, 2015), pgs 63-88.
- Burnham, Jack. “Systems Aesthetics (1968),” in *Systems* (MIT Press, 2011), pgs 112-115.
- Burnham, Jack. “Real Time Systems (1969),” in *Systems* (MIT Press, 2011), pgs 116-119.
- Campt, Tina M. “Prelude to A Black Gaze,” in *The Black Gaze* (MIT Press, 2023), pgs 1-24.
- Cutter, Martha J. “Dismantling ‘The Master’s House’: Critical Literacy in Harriet Jacobs’ ‘Incidents in the Life of a Slave Girl.’” *Callaloo* 19, no. 1 (1996): 209–25. <http://www.jstor.org/stable/3299351>.
- Dean, Aria. “#000 is a Color: An interview with Mendi + Keith Obadike,” in *Rhizome*, May 17, 2015, <https://rhizome.org/editorial/2017/may/17/mendi-keith-obadike-interview/>
- DuBois Shaw, Gewndolyn. “The Many Problems with Deana Lawson’s Photographs” in *Hyperallergic*, September 23, 2021. <https://hyperallergic.com/679220/the-many-problems-with-deana-lawsons-photographs/>
- Duchamp, Marcel. “The Creative Act.” *Art News* 56, no. 4 (Summer 1957): 28–29.
- Duchamp, Marcel, artist. *In Advance of The Broken Arm*, 1964. Readymade sculpture. Luhring Augustine Gallery, New York.
- Feldman, Robin; Norviel, Ven. “Dolly The Sheep: A Cautionary Tale” in *Yale Journal of Law & Technology*, Jan 8, 2016. <https://yjolt.org/blog/dolly-sheep-cautionary-tale>

- Foucault, Michel. "Part 4: Chapter 2-Methods," in *The History of Sexuality*, Vol. 1 (London: Penguin Books, 1978), pgs 92-102.
- Gilliard, Chris. "A Black Woman Invented Home Security. Why Did It Go So Wrong" in *Wired*, November 14, 2021.
- Grother, Patrick; Ngan, Mei; Hanaoka, Kayee. "Face Recognition Vendor Test, Part 3: Demographic Effects," in *National Institute of Standards and Technology* (December 2019). <https://doi.org/10.6028/NIST.IR.8280>
- Guggenheim. *Centropy*, assessed October 2025. <https://www.guggenheim.org/centropy>
- Haraway, Donna. "A Cyborg Manifesto: Science, Technology, and Socialist Feminism in The Late 20th Century. Simians" in *Cyborgs and Women: The Reinvention of Nature* (Routledge, 1991), pgs 149-181.
- Hartman, Saidiya. *Wayward Lives, Beautiful Experiments* (London: Serpent's Tail, Profile Books Ltd, 2019).
- Hershman Leeson, Lynn, artist. *Dollie Clone Series*, 1995-1996. Telerobotic dolls. Bridget Donahue Gallery, New York; and Altman Siegel, San Francisco.
- Hershman Leeson, Lynn, artist. *Difference Engine #3*, 1995. Computer-based Installation. ZKM | Center for Art and Media. <https://zkm.de/en/artwork/difference-engine-3>.
- Hui, Yuk. "Rethinking Technodiversity," in *The Unesco Courier*, March 31, 2023, <https://courier.unesco.org/en/articles/rethinking-technodiversity>.
- Jones, Caroline A. "The Artistic Use of Cybernetic Beings," in *Possible Minds: 25 Ways of Looking at AI* (Penguin Press, 2019), pgs 219-227.
- Kaprow, Allan. "The Education of the Un-Artist, Part I (1971)," in *Essays on The Blurring of Art and Life*, (University of California Press, 1993), pgs 97-110.
- Karimi, Faith. "People of color have a new enemy: techno-racism," in *CNN*, May 9, 2021. <https://www.cnn.com/2021/05/09/us/techno-racism-explainer-trnd>.
- Kartynnik, Yury; Ablavatski, Artsiom; Grishchenko, Ivan; and Grundmann, Matthias. "Real-time Facial Surface Geometry from Monocular Video on Mobile GPUs," For *Third Workshop on Computer Vision for AR/VR at CVPR 2019*, June 17, 2019, Long Beach, CA. <https://sites.google.com/view/perception-cv4arvr/facemesh>.
- Kepes, Gygyory. *Language of Vision*, with Introductory essays by S. Giedion and S.I. Hayakawa (Chicago P. Theobald, 1944), pgs 614, 44-51, 218-228.
- Lorde, Aurde. "The Master's Tools Will Never Dismantle the Master's House," in *Sister Outsider: Essays and Speeches*, (Berkeley, CA: Crossing Press, 1979), pg 110-114.
- Lorraine Daston and Katharine Park, *Wonders and the Order of Nature* (New York: Zone, 1998), read excerpt of Ch. 7, "Wonders of Art, Wonders of Nature," 255–276.
- Lippard, Lucy. "From the Archives: Andres Serrano, The Spirit and The Letter" in *Art in America*, January 5, 2023. <https://www.artnews.com/art-in-america/features/andres-serrano-provocative-work-lucy-lippard-1234652353/>.
- Lippard, Lucy. *Six Years: The Dematerialization of the Art Object from 1966 to 1972*, (University of California Press, 1973).
- Makhubu, Nomusa. "Performing Blackface: Reflections on Zanele Muholi's Somnyama Nkonyama" in *Decolonial Propositions, On Curating*, April 2021, pg 110-122. <https://www.on-curating.org/issue-49-reader/performing-blackface-reflections-on-zanele-muholis-somnyama-ngonyama.html>.
- MIT Lemelson Center. Marie van Brittan Brown: Home Security System. Assessed October

2025. <https://lemelson.mit.edu/resources/marie-van-brittan-brown>.
- Muholi, Zanele, artist. "Bester I, Mayotte," 2015, *Somnyama Ngonyama – Hail the Dark Lioness*. Stevenson, Cape Town/Johannesburg, and Yancey Richardson, New York.
- Neptune, Christie. "Ah New Riddim: A Marked (Black) Axiological Shift Across Space and Time," master thesis in *MIT Architecture* (Cambridge, MA: Massachusetts Institute of Technology, June 2023).
- Neptune, Christie, artist. *Light Years Apart*. Backslash at Cornell Tech, 2021-2025. 21 mins.
- Neptune, Christie, moderator. User Experience Survey Report, *Light Years Apart* (2021-2025), September 15, 24, and October 06, 2024 & March 2025.
- Netherlands Media Art Institute. *Bill Spinhoven, I/Eye (1993/ 2011), Case Study Report, Obsolete Equipment Research Project*, 2011. https://cb593ca2274aa1e79b84-e535f07f3766decb604a06a661a89f06.ssl.cf3.rackcdn.com/case_studies/ieye_bill_spinhoven_case_study_report.pdf.
- Obadike, Keith and Mendi, artist duo. *The Interaction of Coloreds*, 2002. Net art. Whitney Museum of Art, New York.
- Rare Book Division, The New York Public Library. "A law for regulating Negroes and slaves in the night time" *New York Public Library Digital Collections*. Accessed September 26, 2025. <https://digitalcollections.nypl.org/items/5833e660-0033-0130-603d-58d385a7bc34>
- Spinhoven, Bill, artist. *I/Eye*, 1993-2011. Video sculpture. Netherlands Media Art Institute.
- Stavan, Ilan; Garcia, Jorge J.E. "On Desecration: Andres Serrano, Piss Christ," in *Michigan Quarterly Review*, Volume 52, Issue 4, Fall 2013. <http://hdl.handle.net/2027/spo.act2080.0052.415>.
- Tiku, Nitasha; De Vynck, Gerrit. "Google Drops Pledge not to use AI for weapons or Surveillance," in *Washington Post*, February 04, 2025. <https://www.washingtonpost.com/technology/2025/02/04/google-ai-policies-weapons-harm/>.
- Toronto Metropolitan University. Headshot of South African artist, Zanele Muholi with bare face. Image sourced from "Behind the Lens: Global Impact of TU Alumni in Photography" in *Toronto Metropolitan University*. <https://www.torontomu.ca/alumni/news-and-stories/zanele-muholi/>.
- United Nations, "Emerging digital technologies entrench racial inequality, UN expert warns," *Special Procedures*, Press Release, July 15, 2020. <https://www.ohchr.org/en/press-releases/2020/07/emerging-digital-technologies-entrench-racial-inequality-un-expert-warns>.
- Uricchio, William. "Rethinking the Social Documentary," in *The Playful Citizen: Civic Engagement in a Mediatized Culture*, edited by Rene Glas, Sybille Lammes, Michiel de Lange, Joost Raeseens, and Imar de Vries, 1:73-91. Amsterdam University Press, 2019.
- US White House. Executive order, "Preventing Woke AI in the Federal Government," in *whitehouse.gov*, Presidential actions, July 23, 2025, <https://www.whitehouse.gov/presidential-actions/2025/07/preventing-woke-ai-in-the-federal-government/>.
- Van, Billy, The monologue comedian, 1900. Poster. United States Library of Congress's Prints and Photographs division under the digital ID var.1831. Sourced from the *National Museum of African American History and Culture*.
- Winant, Carmen. "Our Bodies, Online." *Aperture*, no. 225 (2016): 138–43. <http://www.jstor.org/stable/44404723>.

Acknowledgements

I would like to express my deepest gratitude to my first year doctoral advisors: Dr. Oreet Ashery and Dr. Onyeka Igwe at the *Ruskin School of Art, Oxford* for their feedback and guidance. Their feedback has been critical to the optimization of the film's interface including a neuro-inclusive calibration window, enhanced feedback questions and the programming of screening. I would also like to acknowledge Greg Pass, Heidi Minghao He, and Vincent Campagna, from *Backslash at Cornell Tech* for providing funding and technical support towards my artistic vision and project, *Light Years Apart* (2021 -2025). Additionally, I would like acknowledge Kyle Marshall and affiliates from *Kyle Marshall Choreography* for choreographed movements captured on screen; Daniel Sarti and affiliates from *Fatking Films* for my productions cinematography and equipment; and Ronis Aba, Nia Simone and Zipporah Wilson for their stunning performance. I am deeply honored to have you as advisors, project sponsors, collaborators, and supporters of my artistic vision.

Thank you, in no particular order!

Backslash at Cornell Tech

Greg Pass

Heidi Minghao He

Vincent Campagna

Kyle Marshall

Daniele Sarti

Ronis Aba

Nia Simone

Zipporah Wilson

Joshua Druckman

Rosamund Neptune

Dr. Oreet Ashery

Dr. Onyeka Igwe

Engagement Survey Participants

Art, Culture, and Technology, MIT

Ruskin School of Art, University of Oxford

St. Hugh's College, University of Oxford