May 2019

Machinic Eyes: New and Post-Digital Aesthetics, Surveillance, and Resistance

Brian Gaines
Clemson University, blgaine@g.clemson.edu

Follow this and additional works at: https://tigerprints.clemson.edu/all_dissertations

MACHINIC EYES: NEW AND POST-DIGITAL AESTHETICS,
SURVEILLANCE, AND RESISTANCE

_____

A Dissertation
Presented to
the Graduate School of
Clemson University

_____

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy
Rhetorics, Communication, and Information Design

_____

by
Brian Gaines
May 2019

_____

Accepted by:
Dr. Victor Vitanza, Committee Chair
Dr. David Blakesley
Dr. Beth Lauritis
Dr. Kelly Caine

ABSTRACT

This work concerns the rise of the New Aesthetic, an art project developed by James Bridle in 2012. The New Aesthetic, as envisioned by Bridle, was chiefly concerned with the overlapping of physical and digital realities through both the artifacts produced by this overlapping and the systems involved therein. I introduce the advent of the New Aesthetic and present the major criticisms: the lack of a robust theoretical and scholarly framework, the lack of a historical framework, the privileging of artifacts over systems as new Aesthetic, and the fragmented scholarly outlook on the New Aesthetic.

Upon further examination, I discovered that the New Aesthetic is less of an art project but a metaphor for a global surveillance apparatus that is the result of clandestine partnerships between multinational technology corporations and intelligence agencies associated the *Five Eyes* consortium.

In this dissertation, I critique the New Aesthetic from a scholarly viewpoint, offer a historical precedent of how the New Aesthetic came to be from cultural and technological perspectives, examine the rise of the global surveillance apparatus within the New Aesthetic, and offer ideas of how to resist surveillance as a result of our reliance upon computational technologies.

This dissertation is dedicated to the memory of my paternal grandparents, Francis Gaines (April 13, 1925 – July 17, 2015) and Sallie Gaines (August 24, 1929 – August 18, 2018) for indulging my curious nature as a child and for instilling in me the tenacity to see that curious nature through.

ACKNOWLEDGEMENTS

TABLE OF CONTENTS

LIST OF FIGURES

Chapter 1. The New Aesthetic Isn't So New

The thing that hath been, it is that which shall be; and that which is done is that which shall be done: and there is no new thing under the sun.
-Ecclesiastes, Chapter 1, verse 9

The birth of the search engine, it's nothing new: it's essentially embedded in our literature; it's how ideas relate, how the mind makes connections. I mean, connections are made online through links, and within an algorithm, they're made through degrees of relevancy between different terms.
-Joshua Cohen, philosopher

The New Aesthetic, a term coined by James Bridle to define the "series of artefacts of the heterogeneous network, which recognizes differences, the gaps in our distant but overlapping realities" (About) has been used to describe the increase of the visuals of digital technologies and the internet in the physical world. Bridle, employing a rhetorical device intent on defying classification, also describes the New Aesthetic as "an investigation / project / tumblr looking at technologically-enabled novelty in the world" (#sxaesthetic | Booktwo.Org). The New Aesthetic – whose definition has confounded scholars and technologists alike since being revealed to the world in 2012 – concerns itself not only with the images and objects that are produced by these technologies and networks, but is also concerned with the systems themselves (The New Aesthetic and Its Politics |

Booktwo.org).Bridle further posits that these systems, among them the "technological, spatial, legal and political," not only "permit, shape and produce" these objects, but is, in fact, inseparable in their wider implications (The New Aesthetic and Its Politics | Booktwo.org) Bruce Sterling, a science fiction author and a recognized pioneer in the Cyberpunk genre, has famously stated that the New Aesthetic, "concerns itself with "an eruption of the digital into the physical" and that, "The New Aesthetic is a native product of modern network culture. It's from London, but it was born digital, on the Internet (Sterling). The New Aesthetic is a "theory object" and a "shareable concept" (Sterling). While the New Aesthetic is seemingly a recent development born out of digital and internet culture, I posit that this emerging transdisciplinary phenomenon may have historical foundations in not only the visual, but also the philosophical. As we shall soon discover, these foundations may at this juncture prove to be shaky, at best.

What's in a Name?

At first blush therein lies a question in the name itself. "The New Aesthetic" carries heavy implications of the philosophical study of the creation of beauty and art. However, by James Bridle's own admission, the New Aesthetic deals primarily in the surface qualities of the artifacts and not the underlying motives and concerns of its own critiques and politics (The New Aesthetic and Its Politics | Booktwo.Org). I argue that to ascribe a qualifier such as aesthetic implies that the imagery Bridle has become enamored with would point toward

the objects of inquiry's creation as being those of machines imbued with experiences and consciousness. At present, even with the advent of artificial intelligence and machine learning, these artifacts are not necessarily the renderings of machines that understand and create aesthetic choices, but rather are a precipitate produced by apparatuses and systems, created both intentionally and unintentionally, that are bestowed an aesthetic by humans post hoc. Bridle, as previously mentioned, was haphazard in the naming of the New Aesthetic. He readily admits in booktwo.org, one of several blogs he keeps, that initially the use of the word aesthetics was "what something looks like" (James Bridle | Booktwo.Org) Bridle, in this same blogpost, is quick to point out that he was unaware of how key the term aesthetics was to art historical and critical discourse, yet later in the same paragraph attacks these same discourses as focusing only on the surface qualities evident in his own rhetorical practices. It is here we find a fundamental flaw in Bridle's reasoning: that critical academic discourses concerning themselves with aesthetics are focusing on the surface qualities when it is in fact that Bridle is the pot calling the kettle black. While alluding to his formal training in Computer Science and Artificial Intelligence, his practical background in literary editing and software programming, along with his self-professed "lifetime of interacting with the internet and other systems," he states it is impossible for him to look at these images and not to only think about their visual qualities, but how these artifacts came to be and what they become (James Bridle | Booktwo.Org). He cites the processes of capture, storage, and

distribution; the actions of filters, codecs, algorithms, processes, databases, and transfer protocols; the weight of datacenters, servers, satellites, cables, routers, switches, modems, infrastructures physical and virtual; and the biases and articulations of disposition and intent encoded in these things, and our comprehension of them as his true intentions regarding his choice of the word aesthetic (James Bridle | Booktwo.Org).

Bridle, in the vague articulation of his pedigree and his overview of his deep understanding of digital technological processes, attempts to undermine Kant's view that beauty is neither cognitive nor conceptual. Bridle contradicts Kant by making his perception of taste a determinate concept, and as such, is attempting to dictate the parameters by which those who make a life of the mind may think about his hobbyhorse. Moreover, by endeavoring to decree the constraints of aesthetic judgement, he is essentially supplanting the subjective nature of aesthetics in favor of his objective view. To put it another way, Bridle is attempting to universalize Barthes' concept of punctum he has experienced through digital traces left behind by the machines and systems by which he is captivated. It is in this sense Bridle is acting counter to Steven Shaviro's claim that a "judgement of taste does not involve a mind's active impressing of its own Categories upon a passive external world" (Shaviro 1). Shaviro further posits that a judgement of taste involves an uncoerced response on the part of the subject to the object that is being judged (1). Through his insistence that critics of The New Aesthetic are preoccupied with its surface qualities, Bridle not only has attempted

to create an ontological shift of the very nature of aesthetics, but also by introducing his knowledge of computational processes into the conversation he has created a red herring to divert attention away from his heavy-handed operationalization of aesthetics.

Continuing along the aesthetic trajectory, Bridle seems to suggest that The New Aesthetic and its subsequent machinic and technological systems are responsible for the subjectivity placed upon the artifacts they produce. While some scholars, such as Curt Cloninger, agree that machines are capable of producing aesthetic objects and some of these machines, to a degree, do indeed have agency, there is no such concept as a machine aesthetic (Manifesto for a Theory of the 'New Aesthetic' | Mute). Because machines and systems, including Artificial Intelligence, do not exhibits tendencies of pan-psychism, are devoid of consciousness, and currently are at their core anthropocentric, both the digital traces of systems that produce New Aesthetic artifacts and their aesthetic sussing are the result of human intervention. In this sense Bridle is unknowingly referencing the Hegelian notion of a second nature, or what Stefan Helmreich refers to as a Silicon Second Nature: one that is bound up in rules, laws, and human customs and practices, which is everting from the digital world into the physical (Helmreich 11–12).

Due to the inevitable technical cross-pollination that will occur because of this overlapping, significant scholarly disagreement concerning what is and what isn't the New Aesthetic will surely be a source of contention in scholarship.

Moreover, because the phenomenon that is the New Aesthetic may be ascribed to not only the objects and images produced through digital technologies, but may also describe the systems themselves, further muddling of this "revelation" and the subsequent ivory tower squabbling concerning the merits between this predetermined schism could prevent meaningful discourse regarding furthering the knowledge base. Echoing this sentiment, it should be noted that because of the transdisciplinary nature of the New Aesthetic, a cohesive body of literature presents a major challenge in establishing the seminal texts that inform the New Aesthetic as well as the major figures whose scholarly affinities may be situated within the movement. Tellingly, it is Bridle himself who alludes best to the haphazard nature of the current scholarship by asserting:

Much of the critical confusion around the New Aesthetic has clustered around the use of the term "aesthetic", by which I meant simply, "what it looks like" – I wasn't even really aware of how key the term aesthetics was to art historical and critical discourse. As a result of my use of this term, much of the critical reaction to it has only looked at the surface and has – sometimes willfully it feels – failed to engage with the underlying concerns of the New Aesthetic, its own critique and politics (The New Aesthetic and Its Politics | Booktwo.org).

Moreover, Bridle is explicit in admitting that the New Aesthetic-as a method of critical thought-

> This criticism still concerns itself only with images, despite the wealth of texts also included in the project, and the numerous recorded lectures I've given on the subject. The Tumblr is just one aspect of, the sketchbook or playlist for, a wider project. In short, this form of criticism has been looking at the pixelated finger, not the moon (The New Aesthetic and Its Politics | Booktwo.org).

Despite this lack of cohesiveness and Bridle's own convolutedness regarding the New Aesthetic, it has nonetheless gained traction across several communities. Perhaps most famously, Bruce Sterling, in a 2012 article for the technology periodical Wired sang its praises, writing:

> I witnessed the New Aesthetic panel at South by Southwest 2012. It was a significant event and a good thing to see. If you know nothing of the "New Aesthetic," or if you have no idea what "SXSW" is, you should repair your ignorance right away. Go peruse this: http://booktwo.org/notebook/sxaesthetic/ (Sterling).

Sterling goes on to compare the New Aesthetics' revelation as a disruptive force in art, likening it to "like early photography for French Impressionists, or like silent film for Russian Constructivists, or like abstract-dynamics for Italian Futurists" (Sterling). He further describes it as an entity that is "collectively intelligent" and "crowd-sourcey," and "truth telling" (Sterling). He also drinks the machinic visual Kool-Aid, pointing out that art movements are no longer formed around "Left Bank café tables where disaffected creatives quarreled about headlines in newspapers" (Sterling). In considering how artistic movements are formed, perhaps the writer, editor, and art critic Joanne McNeill offers a compelling take on the New Aesthetic.

On Monday, March 12, 2012, McNeil was a panel member, along with Bridle, Ben Terret, and Russell Davies at that year's South by Southwest (SXSW), a conglomerate of concurrent multiple music, interactive, and film festivals and conferences that takes place in Austin, Texas (Paul and Levy, 37-41; Paul, 1; "SXSW Schedule). It was during this panel that The New Aesthetic was introduced publicly and McNeil, in a move to ground this mutual illumination of the corporeal and the incorporeal through the lens of major art movements situated in postmodernity, in her own words said, "Here I try my best to find some art historical context" (McNeil, "New Aesthetic at SXSW").

In this overview, McNeil briefly touched upon the major movements that she feels has contributed to The New Aesthetic (McNeil, "New Aesthetic at SXSW"). Among the most notable movements, Italian Futurism, appears to be a

legitimate predecessor to this "movement." The Futurists, founded by the poet Filippo Tommaso Marinetti, formulated the idea for an artistic movement founded on a love of speed, technology, youth, and violence following a car accident in 1909 (Marinetti, 2). McNeil cites the noises of new technologies, "the clacks and cracks. A new way of hearing…." as being principally exciting for some Futurists, such as the painter and experimental instrument builder and composer, Luigi Russolo. Russolo embraces this technological zeitgeist by stating:

> After being conquered by Futurist eyes our multiplied sensibilities will at last hear with Futurist ears. In this way the motors and machines of our industrial cities will one day be consciously attuned, so that every factory will be transformed into an intoxicating orchestra of noises (Russolo, as quoted in McNeil, "The New Aesthetic").

While the Futurists, according to McNeil, provide a suitable theoretical grounding in postmodernism, she also cites Russian film (especially Vertov), Cubism (Picasso), Abstract Expressionism (de Kooning), and sets the tone for The New Aesthetic most notably in the postmodern through "Rauschenberg's collage-like pieces" and into digital art. It is here that McNeil briefly distinguishes between "net.art" and "new media," and their situatedness in both devices and networks (McNeil, "The New Aesthetic"). Of particular note is Rosa Menkman's exhortation to realize that technological improvement is "nothing more than a

proprietary protocol, a deluded consumer myth of progression towards a holy grail of perfection, and that "Every (future) technology possesses its own fingerprints of imperfection… "(Menkman 339). Moreover, McNeil ends the discussion with Jon Rafman's "9 Eyes of Google Street View" project and the specific critiques of the amoral lens this surveillance lends itself to (Rafman; McNeil, "The New Aesthetic). While the new Aesthetic with its possible groundings in philosophy, technology, and art has its proponents, it is also the subject of much criticism by its many detractors.

Second, The New Aesthetic is besieged by a fragmented sense of scholarly identity, spanning a gamut including: art history, cyberpunk literature, computer science, glitch art and sound, cybernetics, analytical philosophy, Continental philosophy, and Object-Oriented Ontology (OOO), among others. Also, the New Aesthetic, in terms of "post-digital" media, exemplifies the overlap of physical and digital realities both in media creation and consumption. Because of the multifarious ways in which the digital is now employed, the overlapping of the physical and digital are becoming something more akin to convergence; David M. Berry describes what was once the purview of data processing is now the "de facto medium for transmitting information, communicating and for social life" (121). Owing to this multilayered miasma of intellectual and popular culture leanings, a codified and unified consensus on exactly what The New Aesthetic is has proven to be elusive, at best.

Third, it should be noted that both proponents as well as detractors of The New Aesthetic have almost solely privileged the artifacts produced and viewed the systems involved in the artifacts' production as secondary. Because the digital systems and machines subsumed into the New Aesthetic serve functions aside from that of artifact production, a profound consideration of the wider implications of these systems is warranted. One such implication I am choosing to focus on is the proliferation of mass surveillance that has come about because of the widespread use of such systems, especially those centered in and around how we engage with computational networks such as the World Wide Web. I propose that as computational systems have become ingrained into the human experience an inverse has occurred that presupposes an increase in the transparency of people's lives as the systems themselves promote the illusion that they are transparent; a form of obfuscation that the activist design collective Metahaven denotes as black transparency.

Fourth, as a collection of systems, ranging from physical infrastructure, to widely used social computational structures like the Internet, to abstract systems including computational languages and languaging, art, object-oriented ontologies, as well as emerging systems and technologies both human and posthuman, suggests a convergence of physical and digital realities that has rendered a singular understanding and definition of what is being referred to as The New Aesthetic moot. I contend that these myriad systems, when viewed under the auspices of The New Aesthetic, presents a set of phenomena that is

collectively beyond the normal scope of human understanding. However, artist, designer, and writer, Curt Cloninger, offers the most promise in terms of codifying the New Aesthetic. His essay, Manifesto for a Theory of "The New Aesthetic," presents the most clarity. In his manifesto, Cloninger argues that the New Aesthetic is not a singular aesthetic, but an amalgamation of "myriad aesthetics (including, but certainly not limited to: drones, Google Maps, glitches, Processing code, etc.)" of what he describes as "entangled cultures/nature histories" that produce their own aesthetics (Cloninger 19). Furthermore, Cloninger is quick to point out the comparisons of the New Aesthetic to New Media and the lack of "ontological constraints," but notes that aesthetics in the Kantian sense are far more fluid than "technical, formal, and material constraints" associated with New Media (Cloninger 19). However, what might be most appealing about Cloninger's assessment of the New Aesthetic's problematic lack of codification is his ability, through his understanding of its inherent complexity through disparate aesthetics, to situate this movement across a variety of thinkers. Here Cloninger traces a line from Kant to Heidegger, Freud, Graham Harman, Alfred North Whitehead, and Bruno Latour. Cloninger reads New Aesthetic images in a Freudian sense as uncanny, i.e., residing in an unhomelike place between familiar and alien; he refers to it as the Uncanny Valley (Cloninger 25). I further maintain that these aggregate phenomena fit the criteria of an entity that exhibits vast temporal and spatial dimensions; an entity that philosopher Timothy Morton refers to as a hyperobject. As a hyperobject,

The New Aesthetic far exceeds Bridle's myopic vision and alludes to something far more expansive.

What Does a New Aesthetic Look Like?

While Bridle's New Aesthetic Tumblr has been denigrated as "a heap of eye-catching curiosities" by Bruce Sterling, the digital heap offers some insight to what comprises a new aesthetic. The Tumblr, which has been active since May 2011, has a wunderkammer-like quality that has been acting as a curation of the recent history of digital and network-generated imagery. The earliest blog entries focus upon the ubiquity of the pixel-the smallest addressable digital element-as it is represented in the physical world. In postings from May 6, we find the pixel across a variety of physical media: paint schemes on an exterior of a data center, as land used for agriculture from satellite imagery, in Minecraft creations, and as the camouflage scheme on a German Luftwaffe Tornado fighter jet (The New Aesthetic) (See Figures 1 and 2.)

Figure 1 and *Figure 2* (From left): Agricultural Images From Space; New Fighter Camouflage Schemes. Both images posted on http://new-aesthetic.tumblr.com/ on May 6, 2011.

Through the omnipresence of the rendered pixel in the physical world and its devoted documentation, the approbation of technology can certainly draw comparisons to Marinetti and the Italian Futurists. Whereas Marinetti, et al were drawn to the notions of speed, technology, and violence, and emphasized objects such as the car, the airplane, and the industrialized city, Bridle, et al uphold these same notions, albeit from a more abstract approach focusing on the distilled essence offered by discrete elements such as the pixel. In celebrating the smallest addressable unit of the rasterized image, Bridle embodies an abstracted notion of computational power and speed in its most minimalist form.

Aside from the pixel, uncanniness is also a hallmark of the New Aesthetic. Freud, from an aesthetic point of view, describes the uncanny as a particular subset of aesthetics that is marginal and has been neglected in the "specialist literature" (Freud 123). It is the uncanny, Freud writes, that resides in the frightening, and thus evokes fear and dread (123). The since-deleted YouTube link, https://www.youtube.com/watch?v=0GE09AbAZVw, a news clip of Irish rock group The Cranberries singer Dolores O'Riordan's death was set to the tune of "Old Macdonald Had a Farm." It is in the discovery of recognition of the song, that an uneasiness crept over me, that I was witnessing something endeavored by human ingenuity, but had in this instance gone horribly awry. In the same vein as Freud, quoting Ernst Jentsch, I was left wondering whether or not this

memorialization had been produced by something that is alive, or was it generated by something closer to automata (Freud 135).

Curt Cloninger describes these images, and in the case of the O'Riordan Death Video, assemblages, as residing within the Uncanny Valley; an interzone where "something non-human is almost human enough to seem human, but not quite" (Manifesto for a Theory of the 'New Aesthetic' | Mute 25). In this bizarre example, we see the machinic mourning of a beloved pop music singer, which is quite human. However, the addition of a cherished children's song classic imparts an affective quality to the assemblage that leaves us disturbed, mortified, and disgusted. We are left with a Kantian notion of the sublime; that there is a "subterranean, ongoing operation of assemblages which have not yet been resolved," in which we are implicated and entangled (Manifesto for a Theory of the 'New Aesthetic' | Mute 25).

Everything All the Time: An Overview of New Aesthetic Fragmentation

Building off the dispute concerning aesthetics, the fragmented ontologies of The New Aesthetic also play a major role in the contentiousness between Bridle and scholars and critics of his hyperobject passion project. Bridle, in his cocksure dismissal of any erudite critique of The New Aesthetic as anti-technology, anti-intellectual, and the purview of "low-level Luddites" is not only missing the point of his creation but is estranging himself from a scholarly community that supports the "movement." He further goes on the defensive, stating that The New Aesthetic project is undertaken within its own medium. He

articulates his and others' writing critically about The New Aesthetic should be in the vernacular of the network itself: Tumblr, blog posts, YouTube, tweets, likes and comments, etc., are preferable to Bridle than what he considers more formal modes of scholarship such as the essay, manifesto, or book. He further states that because the critical undertaking of The New Aesthetic does not necessarily appear in these familiar formats for critics and academics, it is therefore illegible to them.

While ostensibly this may seem to be a valid criticism, Bridle has made quite a few assumptions about what the academy, and I am paraphrasing here, doesn't get about The New Aesthetic. Bridle is far from the only one who has ever uploaded a lecture to YouTube, as academics have been using the platform for years to disseminate intellectual thought. It is also rash to consider that the academy is neither willing nor able to produce scholarly work outside of the traditional codex or manuscript, as much scholarly work has appeared recently in a variety of genres, including the graphic novel[1], a dissertation that treats digital methodologies as scholarship rather than addenda[2], and a digitally produced hip-hop album[3]. Aside from the emergence of dissertations taking on formal

---

[1] See Unflattening, by Nick Sousanis, Harvard University Press, 2015.It should be noted that this is contested as the first graphic novel dissertation. Victor Vitanza, and others, make the claim that Jason Helms' 2010 dissertation, Rhizcomics: Rhetoric, Technology, and New Media Composition is the rightful heir to the title. In 2017, Rhizcomics was published by the University of Michigan Press.

[2] See Infinite Ulysses, the doctoral dissertation of Amanda Visconti, Maryland Institute for Technology in the Humanities, 2015.

[3] See Owning My Masters: The Rhetorics of Rhymes and Revolutions, the doctoral dissertation of A.D. Carson, Clemson University, 2017.

embodiments that have progressed beyond the nineteenth century, evidence suggests that the ivory tower has been alluding to The New Aesthetic for over a century.

Ian Bogost, a professor of digital media and interactive computing cum columnist, employs what can be considered facets of the so-called New Aesthetic as part of his stock-in-trade, including designing video games that explore critiques of societal ills and contemplating what it's like to be a thing in his writings on OOO. He, for one, certainly gets it. In a 2012 article for The Atlantic, Bogost evokes the manifesto as a suitable introduction to criticize The New Aesthetic, asserting that manifestoes offer grievances and demands plainly, all at once, and on a single page rather than as a series of evolving blog entries (The New Aesthetic Needs to Get Weirder - The Atlantic).

Bogost's suggestion that The New Aesthetic is piecemeal speaks directly to the perfunctory qualities of Bridle's Tumblr, which offers seemingly little in the way of actual critical thought from Bridle; it appears as if the viewer (or academic or critic) is to supply the theoretical underpinnings. Later in the same blog post, Bridle confirms this notion by stating that, "The onus is on the reader to explore further, just as and because the onus is on the individual in a truly networked politics" (The New Aesthetic and Its Politics | Booktwo.Org). If Bridle truly believes that the burden of proof is on the reader to further explore, it stands to reason that both academics and critics are a constitutive element within this vague and generalized audience known as reader. Furthermore, if we are to

accept Bridle's tirade against academe as serious, that exploration is reserved for the reader, then we can see the contradiction writ large.

It is within The New Aesthetic's "own vernacular" we witness the jumble Bogost alludes to: images of machine learning juxtaposed with photographs of advertisements for "hashtag" Halloween costumes, Artificial Intelligence-generated pornography alongside camera footage from video games, and most peculiarly, a "data center" fashion show depicting models in server farms, among other random entries. Here the viewer can understand Bogost lamenting the degradation of modern and postmodern art from "caprice to bric-a-brac" and his glib dismissal of The New Aesthetic and its Tumblr as a form of scrapbooking. If this is The New Aesthetic written in its own patois, then the language used can be interpreted to be the balderdash of digital ataxia.

Bogost, going one step further, also cites Marinetti as an exemplary author within the manifesto genre, whose car accident was "the line in the sand" (The New Aesthetic Needs to Get Weirder - The Atlantic) that he notes is apparently missing from Bridle's digital wunderkammer. Whereas Marinetti exclaimed that "we are on the extreme promontory of the centuries" (Marinetti 14), Bridle gushes over mass-produced "pixelated" cushions. Marinetti declared that "Time and Space" are dead and that we are living in the absolute through the creation of "omnipresent speed" (14). Bridle, as a milquetoast converse, states, "here is a cool thing I found." While a lack of zealous writing does not necessarily minimize the legitimacy of an artistic movement, the discourse set forth by someone's

contemporaries might. Bogost, in a display of shrewd sophistry alludes to Bruce Sterling with the quote from his Wired essay: "a heap of eye-catching curiosities doesn't constitute a compelling worldview" (Sterling).

Returning to Bogost, he has more to offer than an unwholesome measure of scathing critique. He praises Borenstein's claim that The New Aesthetic strives toward a new conception of relations between things in the world and commends David M. Berry's assessment that it revels in seeing the grain of computation (The New Aesthetic Needs to Get Weirder - The Atlantic). Furthermore, in an act of scholarly goodwill, Bogost offers up OOO as a possible theoretical scaffolding in which The New Aesthetic may be able to frame itself. In his appeal to OOO as a preferred grounding, he urges Bridle to move beyond humans and computers to the objects themselves as, at least from a philosophical perspective, cognizant and part of what Pierre Bourdieu has named a habitus (The New Aesthetic Needs to Get Weirder - The Atlantic).

Coming down the ladder of abstraction a few rungs, we see that Berry and Michael Dieter recognize that the computational is increasingly penetrating life in user-oriented logics that draw from interdisciplinary modes of aesthetics, human-computer interaction, psychology, sociology, phenomenology, and design research (Berry and Dieter 2). They, along with David Golumbia, see the relevance of new disciplinary engagements with the computational in digital humanities, software studies, computational social sciences, and new media, among other disciplines (2). The eversion of the digital into the physical is

evident according to Berry, et al, despite Bridle's insistence that The New Aesthetic and its technological eminence is indecipherable to the academy. Additionally, Berry and Dieter refer to a blurring of the historical distinction between the digital and non-digital that becomes superfluous in everyday experiences. Moreover, they see that computation is becoming experiential, spatial, and materialized in its implementation, and has become embedded within the environment and embodied. It is in this realization that Berry and Dieter concur that neologisms including post-internet, post-digital, and new aesthetic may refer to a coming of terms with the disorienting and immersive qualities of computational infrastructure as they scale up and intensify (5). They cite Felix Guattari's concept of post-media as an orienting alternative to hedge against the contemporary lines of digitalization. As the scaling up of the computational proliferates, a more nuanced examination of at least one certain "post" is warranted.

The filmmaker and theorist Florian Cramer, in an unpacking of the post-digital, presents the dichotomous essence of the description as a "term that sucks but is useful" in describing the crux of the overlapping of the physical and digital associated with The New Aesthetic. Cramer refers to the post-digital as both a contemporary disenchantment with digital information systems and media gadgets, as well as alluding to a period in which the fascination with these systems and objects has become historical. This is evident in the resurgence of analogue media objects like vinyl records, cassette tapes, and handmade "zines."

And just as postpunk and postmodernity exist after the exodus of their respective

epochs while maintaining semblances of their roots, the post-digital (or

postdigital, or even postDigital, and other permutations) can move beyond the

digital while maintaining some of its characteristics (Cramer 14-15). Cramer

further refines this position by claiming that certain variations of post/digital are

hybrids of "old" and "new" media, or more pointedly, in so-called Do-it-Yourself

(DIY, or what I'm calling Do-It-Themselves or participatory) media versus

corporate media (14). I further posit that because the old and participatory

notions of media often result in tangible artifacts (think vinyl record or zine

versus mp3 or PDF) that become special in their tactility among other physical

attributes that possibly run counter to Michael Betancourt's claims of false

scarcity that can be associated with the digital, even if these artifacts are

produced in part by computational technologies (Betancourt 62, 66). Cramer

reinforces these claims in his faux equation, Post-digital =" old" media used like

"new media," in which he makes the case that "new ethical and cultural

conventions which became mainstream in internet and Open Source culture have

been retroactively applied to the creation of non-digital and post-digital media"

(Berry and Dieter 21) One example of this phenomenon is musicians using online

music distribution sites such as SoundCloud to upload, distribute, and promote

original musical compositions much in the same way that having access to two

and four track tape recorders in previous eras led to the "demo tape." Moreover,

the convergence of the physical and the digital, along with the specter of "old"

media artifacts produced in part by newer technologies suggest the Derridean notion of hauntology that was championed by Mark Fisher, especially in his writings on media and the post-punk band Joy Division. He notes that Joy Division, even when heard today, is indicative of 1979 England, "Pre-VCR, pre-PC, pre-C4. Telephones far from ubiquitous (we didn't have one till around 1980, I think). The postwar consensus disintegrating on black and white TV" (Fisher, chap. No Longer the Pleasure: Joy Division). The post-production hiss and crackle mimicry of the analogue is the invisible hand reaching out to the planchette of the digital talking board; we know it isn't real but nonetheless it speaks to us in an all-too-familiar language we are equally frightened of and comforted by.

If the New Aesthetic and Bridle are to be taken seriously by those whose life mission is to extend the knowledge base, then he and his passion project must open itself up to scrutiny. A crucial element in that enquiry must involve a great deal of dialectic, not only from technologists, but also across a spectrum of intellectual disciplines, including the humanities.

Moving to the Uncanny Valley

While the artifacts associated with The New Aesthetic are the subject of much debate, I argue that the systems that are responsible for the production of these artifacts are also worthy of examination. The systems, which share responsibility with humans in the production of The New Aesthetic artifacts, provide an interesting insight to the convergence of the physical and digital.

Baudrillard, in writing about metafunctional and dysfunctional systems, cites the gizmo (or in French, "machin") as being indeterminate in its functional paradigm as opposed to a machine, which is explicit in its purpose (Baudrillard, Le Système Des Objets 123). Baudrillard also states that "there is something immoral about an object whose exact purpose one does not know" (123). While there is something teleological at work in Baudrillard's writing here, machines and systems operating outside of their unambiguous functions presents an uneasiness that can be described in the Freudian sense of the term "uncanny." The gizmo as a viable component of the New Aesthetic, in Baudrillardian terms, can be found in the revelations of Julian Assange. On March 7, 2017, "WikiLeaks released internal documentation of the CIA's massive arsenal of hacking tools and techniques. These 8,761 documents—called "Vault 7"—show how their operatives can remotely monitor and control devices, such as phones, TVs, and cars" ("The CIA Just Lost Control of its Hacking Arsenal. Here's What You Need to Know.") In addition to the vault of documents concerning the CIA's motives and techniques for spying on American citizens, WikiLeaks has released other caches that provide instruction on how to infect and disable Apple firmware and the source code for the anti-forensic Marble Framework (WikiLeaks - Vault 7: Projects).

While this uncanniness can be applied to New Aesthetic artifacts ¬¬– Vault 7 shows us it is in the systems, or to lift a name from a handheld gaming console to describe a world of systems that serve functions beyond the explicit,

the Gizmondo – where we see the more unheimlich paradoxes of the uncanny occurring. It is in our reliance and familiarity of these objects, such as the project codenamed Weeping Angel – a malware system that records audio through Samsung Smart television sets (WikiLeaks- Vault 7: Projects)—that true uncanny terror finds us.

Writing about what is arguably modernity's first paranoid schizophrenic, the Dresden Court of Appeals judge Daniel Paul Schreber, Modern Culture and Media scholar Wendy Hui Kyong Chun draws parallels between his paranoid hallucinations, his nervous system, and high-speed fiber optic cable-powered networks (Chun 35). She notes Schreber's system of delusions, which involved an intricate communications network (including the nervous system, with its complex rhizomatic system) that confused pictured men with real ones and consists of light rays and a nerve -language that vibrates in a way that corresponds to words, but the actual speech organs do not move, except perhaps by coincidence (Schreber 54–55). Taking this analogy further, I assert that not only does Schreber's delusions provide a metaphor for a global network but acts as an analogue precursor to the convergence of the physical and digital hinted at by The New Aesthetic. Schreber believed he must be transformed into a woman and impregnated by God in order to save the human race. This delusion reflects not only systems (in this instance, of communication and reproduction) at work, but also with Schreber's claim that God will impregnate him upon his transformation that these same systems can and do operate uncannily,

contrastive to their intended purposes. Schreber's idea of an Abrahamic God behaving in such a manner is furthermore uncanny in that it supersedes the traditionally held beliefs that a divine being is simply omniscient and omnipresent, but in Biblical literature is replete with sentiments of an uncanny all-seeing, such as Psalm 139. Here, in poetics, we find early written concepts of a surveillance apparatus as well as allusions to the eversion of disparate systems into one another. David, the second king of the United Monarch of Israel and Judah, writes:

O Lord, you have examined my heart and know everything about me.

2 You know when I sit down or stand up. You know my thoughts even when I'm far away.

3 You see me when I travel and when I rest at home. You know everything I do.

4 You know what I am going to say even before I say it, Lord.

5 You go before me and follow me. You place your hand of blessing on my head.

6 Such knowledge is too wonderful for me, too great for me to understand!

7 I can never escape from your Spirit! I can never get away from your presence!

8 If I go up to heaven, you are there; if I go down to the grave, [a] you are there (Psalm 139).

Schreber's notion that an interpersonal set of experiences with absolute power alludes to a totalizing surveillance that is currently being realized. While Schreber's delusions are not the result of machines acting outside of their intended purposes, he believes in the totalizing power of a deeply entrenched system, i.e., a theology, acting in a manner that is wildly beyond the scope of its intended purposes. It is in the uncanniness I am making the connection between The New Aesthetic and the massive surveillance apparatus that is emerging.

In terms of a global networked society, fiber optic cables act as a rhizomatic armature supporting a communicative reunification of Pangea. According to Nicole Starosielski, this vast system transports 99 percent of all transoceanic digital communication, about thirty million bits per second (Starosielski 1). In addition to the phone calls, emails, and television, this rhizomatic structure also drives international business and connects the world's economies. To say that the world is wireless is inaccurate; it is indisputably wired and is dependent upon this wired system acting reliably at all times.

It is in the reliability of the global fiber optic network that the uncanniness finds an incubator. According to MacArthur Genius Grant recipient Trevor Paglen, it is in certain areas of this undersea network nexuses of cables that information converges. It is in these convergences, called chokepoints, that The National Security Agency (NSA) collects cross sections of networked traffic for analysis and storage. The NSA, it has been revealed, has several surveillance

systems in place, working both independently and in tandem with several

multinational technology corporations, including Facebook, Google, and Apple

(Paglen). While NSA surveillance protocols such as PRISM and Upstream

certainly portend a sense of Big Brother-esque dread to systems we use and trust,

and as we have seen with Facebook most recently, mass surveillance is not only

the purview of shadowy government agencies trying to locate terrorist needles in

a digital haystack. The creators of these networks that government agents have

leveraged for their nefarious projects are also complicit. Wholesale data-mining

and profiting from the data collected, such as the high-profile Facebook situation

involving Cambridge Analytica, has projected an additional uncanny patina to an

already tarnished social network. While mainstream media outlets are referring

to this system abuse as a data breach, it should be noted that this may prove to be

uncanny to the product/user as the networks in question reveal their potentiality

to be manifold; however, this appears to be business as usual for the systems in

question. Speaking to the European Parliament Civil Liberties committee on USA

spying in September 2013, computer security researcher and The Onion Router

(TOR) project core member Jacob Appelbaum articulated a version of what can

be determined to be a Debordian system of spectacular domination as he plainly

discussed the clandestine relationships of information interception between

government agencies, chiefly the NSA, and technology corporations, including

Google (Appelbaum 58). While these relationships may not induce a Foucauldian

sense of behavior regulation under a panoptic gaze, University of Virginia Media

Law professor Siva Vaidhyanathan suggests that services provided by Google, notably Google Street View, indicate the rise of the Cryptopticon, his portmanteau to describe the phenomenon that people know they are being watched, but are unaware as to how they are subject to the gaze (Vaidhyanathan 112). Furthermore, sociologists Zygmunt Bauman and David Lyon allude to technological practices such as those implemented by Google, and now Facebook, not only provide a sense of domination, but also present a means of "maintaining and reproducing order" (Bauman and Lyon).

The proliferation of mass surveillance within these systems, both voluntary and involuntary, creates transparency in the ordered subject. While these systems demand transparency from the user, Scott Contreras-Koterbay and Lukasz Mirocha are quick to point out that computational materiality is well-hidden beneath "layers of user-friendly software, hardware, networks, cloud-based processing to the point of being invisible" (Contreras-Koterbay and Mirocha 26). It is in arguing against transparency that Byung-Chul Han, citing Walter Benjamin, claims that there is beauty in the secret, and transparency as the opposite of secrets not being the medium of the beautiful (Han 22). Here we return to Barthes and his notion of the erotic place (of the body) being located between "where the garment gapes," where the skin "flashes between the edges" (Barthes 9). I would like to emphasize that it is in the stripping away of privacy, of the exposure of human secrets, motivations, and desires that transparency that erodes what Baudrillard describes as seduction insofar as there is an "intuition of

something in the other that remains forever secret to him" (Baudrillard, The Transparency of Evil 166). Through the stripping away of the secret something we may find the punctum is lost along with temporal distance. We find no seduction and no secrets; only an overabundance of information: a Pornography of Information.

Hyperobjects: Imagining the Meontic, Or,

So Wide You Can't Get Around it, So Low You Can't Get Under it, So High You Can't Get Over it

Finally, as I am viewing The New Aesthetic as a collection of objects and systems that span the gamut from physical to digital, determining a singular understanding of this aggregate phenomena presents quite a challenge. How does one codify a series of entities that may include physical infrastructure, such as fiber optic cables and server farms, as well as the arguments created by machine-oriented and computational languages and languaging, digital art, object and systems-oriented ontologies, and the emergence of human and non-human networks? I contend that these myriad systems, when viewed under the auspices of The New Aesthetic, presents a set of phenomena that is collectively beyond the normal scope of human understanding. I further maintain that these aggregate phenomena fit the criteria of an entity that exhibits vast temporal and spatial dimensions; an entity that philosopher Timothy Morton refers to as a hyperobject.

I contend that Timothy Morton's concept of the hyperobject can provide a suitable framework in which to define The New Aesthetic. In the sense that a hyperobject is vast and can in some instances defy how we understand the spatiotemporal, the argument can be made for certain aspects of The New Aesthetic. Morton makes the case that hyperobjects exhibit viscosity, that they stick to everything they touch (Morton 27–37). The New Aesthetic is viscous across several fronts: humans are sussed by the aesthetic judgement some of us assign to artifacts produced; it sticks to our sense of the Sublime. Fiber optic networks adhere to the ocean's floors, growing over with aquatic flora and becoming home to an abundance of marine life, indistinguishable from the flotsam that has finally settled into the abyss. It entangles with our data-generated selves as we interface with social media networks and into other areas of the World Wide Web. Hyperobjects are also interobjective, that is, they are composed of relations of more than one object. It is through interobjectivity we can sense The New Aesthetic. Just as Heidegger claimed that we cannot hear the wind in itself but only in the door and in the trees (Morton 58), we cannot sense The New Aesthetic itself. However, we can understand that silica, a primary component of the myriad structures and systems that make up The New Aesthetic. is found in the earth, stars, planets, animal hair, and cannabis sativa. We can know that Jöns Jacob Berzelius discovered it, that it has 14 electrons, and on and on. In this sense, among others, we can see that The New Aesthetic

transcends Bridle, digital art, the internet, the Anthropocene, Kant, and even computation itself.

Through this understanding of The New Aesthetic as a hyperobject that is composed of vast networks involving human and non-human subjects, aesthetic judgements, and physical and digital networks, I am arguing that it is more than just the sum of its parts. It is the beginning of understanding that the digital is not something to evert into the physical, but that it is the physical world reconfigured.

Citing the defunct English rock group Love and Rockets, Paul Levi Bryant introduces us to the notion that "you cannot go against nature, because when you do, it is nature too" (David John Haskins, as qtd. in "Wilderness Ontology"). Through his exploration of natural and so-called unnatural sex, gender, and techne, Bryant presents us with the idea that "we've annulled the distinction between the phusis and techne, the natural and the artificial" ("Wilderness Ontology"); however, as he argues, whether it's Tokyo or the Rocky Mountains, it's all wilderness. In our understanding of New Aesthetic, it is imperative that we no longer regard ourselves as personae non gratae and come to terms with the distinction between the physical and digital being stripped away. Because the New Aesthetic can be argued to not only be a disruption of the physical in to the digital- but can be argued to be an amalgamation encompassing the physical machines, infrastructure, and systems as well as their digital byproducts- and our increasing reliance upon these systems and their derivatives not only further

obfuscate any delineation of a difference but shatter the progressively delicate terminator that separates the two realities.

If the separatrix between the physical and the digital is becoming thinner every day and our digital and physical realities are converging, that this project of James Bridle's is hinting at something larger, then what does it mean for those for whom the activist design collective Metahaven label as being held captive in the political spaces of the cloud (Metahaven 89)? As our lives are becoming increasingly digital and information is used piecemeal to construct versions of ourselves under emerging power structures, what recourse do we have? What options are available? In order to explore our decisions, we must first come to a deeper understanding of what the New Aesthetic is beyond quirky artifacts and Tumblr accounts.

Chapter 2. Vertiginous! Pixel-cultural Evangelicalism, Mind Expansion, Digital Fascism, or, A Funny Thing Happened on the Way to the (Internet) Forum: An Incomplete Historiography of the New Aesthetic

We had stayed up all night, my friends and I, under hanging mosque lamps with domes of filigreed brass, domes starred like our spirits, shining like them with the prisoned radiance of electric hearts. For hours we had trampled our atavistic ennui into rich oriental rugs, arguing up to the last confines of logic and blackening many reams of paper with our frenzied scribbling. →

-Filippo Tomasso Marinetti, The Foundation and Manifesto of Futurism

But of course! the esoteric nostalgia of those first days of discovery, the first little easing open of the doors of the mind with marijuana and that thing you do at that stage!—that goofing off the radio thing—You know? And it's beautiful, the kids beginning to pour in to Haight-Ashbury ... for The Life ... It's a carnival! the Garden of Eden! one big urban La Honda scene! right out in the open! with all things available.

-Tom Wolfe, The Electric Kool-Aid Acid Test

In the previous chapter I have made the claim that the New Aesthetic has come under intense scrutiny from both the intelligentsia and popular culture alike. This critique–that the New Aesthetic is somehow missing a codification that will allow for it to be taken more seriously as a technological and artistic endeavor–has been met with something just south of disdain by Bridle. In Bridle's digital worldview, manifestos and other formal declarations, being under the purview of the opaque, rigid, and obtuse Ivory Tower, are artifacts that are far too ancient and lack the dynamism, speed, and awe that saturates The New Aesthetic. Despite evidence that the academy is making strides to move away from an inflexible notion of scholarship (cf. Textshop Experiments, Kairos, and others) or of what a dissertation entails (cf. *Owning My Masters,* etc.), Bridle appears to have little to no interest in the academy's investigation and examination of the New Aesthetic as a serious scholarly enterprise.

However, despite Bridle's rough shod protests, the academy has taken notice and intellectual undertakings concerning the New Aesthetic have and are presently occurring. In addition to the aforementioned writings by Bogost, Cloninger, et al., Benjamin Bratton[4], Casey Boyle[5], and Justin Hodgson[6], among others, are examining at least in part Bridle's pet project. That two-thirds of the

---

[4] *The Stack: On Software and Sovereignty*. MIT Press, 2016.
[5] *Rhetoric as a Posthuman Practice.* The Ohio State University Press, 2018.
[6] *Post-Digital Rhetoric and the New Aesthetic.* The Ohio State University Press, 2019.

latter mentioned books have been published during the writing of this dissertation indicates, at least to me, that more scholarly works concerning the New Aesthetic, the Post-Digital, and other emerging neologisms that deal in part with Bridle's contributions are on the horizon.

In order to examine the New Aesthetic from multifarious scholarly viewpoints, it is paramount to establish a continuum in which it is plausible that *something* like the New Aesthetic could come to fruition. As with most things, the New Aesthetic didn't just materialize, James Bridle's assertion notwithstanding. Specifically, in this chapter, I am asking the question: *Does the New Aesthetic have intellectual lineages, and if so, what are they?*

In short, that answer is a resounding yes. Bogost writes of the New Aesthetic, "…the New Aesthetic could use a dose of good, old-fashioned twentieth century immodesty. Not naïve fascism or impulsive radicalism, but bigger eyes, larger hopes, weirder goals" (Bogost). Indeed, it is within this notion of Good old-fashioned twentieth century immodesty that we find the New Aesthetic's ancestry: a reconstitution of discordant art and literary movements, technological advances, and (counter) cultural phenomena. Through the lens of this composite assemblage that conceivably stretches across the twentieth century I find that the New Aesthetic is less aggregate and more akin to post-digital pastiche.

Curt Cloninger, in Theory for a Manifesto of the New Aesthetic, draws comparisons to Debord's notion of the Spectacle. He writes:

If, according to Debord, 'the spectacle is capital accumulated to such a degree that it becomes an image', then the New Aesthetic is technology accumulated to such a degree that it becomes an image. The New Aesthetic (NA) image is a special kind of image – an image which is bodily, affectively sussable by humans. The NA image is not merely (or even) an image to be intellectually pondered by humans. You 'get it' before you understand it (if you ever even come to understand it) (*Manifesto for a Theory of the 'New Aesthetic' | Mute*)

While this evocation of one of the more radical French Marxists is certainly tenable, neither the actual accumulation of technology to the degree it becomes an image nor the consanguinity of how technology is producing images is addressed in this pithy statement. While it is true that the New Aesthetic may be technology expressed as imagery, and that the expression of the New Aesthetic needs human interaction to be perceived. However, those who are *affectively sussed* by these images may not be actively considering the systems creating the images **.** My claim, which shall be addressed in another chapter, is that the images are a byproduct of the systems in place in a mutual production of desire between human and system.

What Cloninger does get right in his Theory is that the New Aesthetic is not a single aesthetic (*Manifesto for a Theory of the 'New Aesthetic' | Mute*). His

claim that the New Aesthetic is orthogonal makes sense, as manifold technologies, such as generative code, drones, application programming interfaces (API), glitches, and other phenomena all exhibit their own unique aesthetic signatures (*Manifesto for a Theory of the 'New Aesthetic' | Mute*). If we are to accept Cloninger's assertion of a New Aesthetic being composed of multitudinous aesthetics as accurate, then my assertion that this New Aesthetic having innumerable and orthogonal consanguineous genealogy is plausible. We must also ask ourselves to what extent the candidates for ancestry have influenced the current iteration of the New Aesthetic. My nomination for the first candidate was born in a car crash in Milan in 1909.

Speed! Violence! Youth! The Futurists and the New Aesthetic

I agree with Bogost in that the Italian Futurists can be a technological, if not fascist, fatherly figure to this investigative project we know as the New Aesthetic. However, it is essential to determine to what extent that the Futurists can be thought to be a precursor to the New Aesthetic. Aside from the concept of a manifesto, Bogost leaves us desiring more of the alleged weirdness that the New Aesthetic should be inheriting from the Futurists. One such avenue to be explored is the relationship between technology and speed.

The founder of Italian Futurism, Fillipo Tomasso Marinetti, writing in *The Foundation and Manifesto of Futurism,* make several allusions to speed associated with technological achievements of the day. Discussing the formation

of the Futurists, Marinetti clues us in to the convergence of technology and art. He tells us:

> Alone we were, with the stoking stokers working feverishly at the infernal fires of great liners; alone with the black specters that rake through the red-hot bellies of locomotives, hurtling along at breakneck speed; alone with the floundering drunks, with the uncertain beating of our wings, along the city walls (Marinetti 11).

For Marinetti, the jouissance associated with technology and speed was further inculcated when "the sudden roar of ravening motorcars" sliced through the silence and the darkness (Marinetti 11). It was at that moment Marinetti, deciding to reify 25 centuries of Platonic thought and chase after Death, jumped into his car and sped away from wisdom and towards the unknown (Marinetti 12). This lust of speed juxtaposed sharply opposite the lackadaisical cyclists (ironic, as the bicycle was a relatively new technology in 1909) led to Marinetti's car becoming airborne and landing in a ditch (Marinetti 13). It was in the aftermath of this accident that the Futurist Manifesto took shape.

Of the eleven tenets of Futurism prescribed by Marinetti, seven of them explicitly make a mention to the relationship between humans, technological superiority, and speed. It is worth noting that these seven precepts also allude to

the concept of the Anthropocene, which will be addressed later. In these seven edicts we find what could quite possibly be the subliminal keystones of the New Aesthetic. Here we find a desire for the love of energy (precept one), "a racing car, its bonnet decked out with exhaust pipes like serpents with galvanic breath…a roaring motorcar, which seems to race on like machine-gun fire, is more beautiful than the Winged Victory of Samothrace" (See Figure 3) (precept four)(Marinetti 13), praise "of the man behind the steering wheel (precept five) (Marinetti 13), the poet as the one who will "increase the delirious fervor of the primordial elements (precept six (Marinetti 14), "the prostrating of the universe at the feet of mankind" (precept seven) (Marinetti 14), the death of space and time (precept 8), and:

> … sing of the great crowds agitated by work, pleasure and revolt; the multi-colored and polyphonic surf of revolutions in modern capitals: the nocturnal vibration of the arsenals and the workshops beneath their violent electric moons: the gluttonous railway stations devouring smoking serpents; factories suspended from the clouds by the thread of their smoke; bridges with the leap of gymnasts flung across the diabolic cutlery of sunny rivers: adventurous steamers sniffing the horizon; great-breasted locomotives, puffing on the rails like enormous steel horses with long tubes for bridle, and the gliding flight of aeroplanes whose propeller

sounds like the flapping of a flag and the applause of enthusiastic crowds

(precept 11) (Marinetti 14).

Figure 3: Winged Victory of Samothrace. Also known as the Nike of Samothrace, is a marble sculpture of the Greek Goddess Nike that was that was created about the 2nd century BC. Since 1884, she has lived in Paris within the Louvre [Pubic Domain].

Analogously, Paul Virilio intimates a correlation between speed and

technology hinted at by Marinetti. Writing about the dromological in *Open Sky,*

Virilio postulates that technological energy will evolve to the point where

"telepresent man will no longer inhabit the energy of any machine whatsoever,"

but rather a reversal of energy will inhabit and govern him, "whether he likes it or

not" (Virilio 54). As we have become ever more contingent upon and conditioned by the computational, Virilio wasn't far off the mark. For example, as I sit at my desk writing this chapter, the computational is permeating and mediating my work life, social life, and entertainment. I am writing this paragraph using Word, the industry standard in word processing software. I currently have five tabs open on Google Chrome (given the topic of this dissertation I should know better), in which I have open my Clemson.edu email account, Google Scholar, two articles by Hito Steyerl that I will be referencing in a later chapter, and thesaurus.com. Apple Music is streaming the Chill Mix, a curated sample of songs that will help me "relax and unwind" (*Apple Music Chill Mix*).[7] Moreover, I am receiving updates via Facebook Messenger (again, given the subject matter of this dissertation I should really know better) from Eric Hamilton to read an article he posted *titled The "Advance Without Authority": Post-modernism, Libertarian Socialism, and Intellectuals* by Chamsy Ojeili. I also have opened a software application called Zotero, which helps me organize bibliographies and sources for references. Furthermore, because I am foolishly relying upon Google Chrome as a collaborator in this undertaking, I have several extensions loaded into the browser to help locate sources (Google Scholar Button), convert web pages to PDFs, and to obfuscate my data and search habits (Privacy Badger, HTTPS

---

[7] While I was writing this paragraph, *Lusitania* by Andrew Bird, featuring St. Vincent was playing. When I am writing I put these playlists on shuffle, partially to detach myself from the music and partially to discover songs I have never heard before. *The Letters,* by Leonard Cohen, from the album *Dear Heather* –which I have never heard before– is currently playing.

Everywhere, and Noizy). I am not only governed and inhabited by technological

energy; I am, like others, a willing conspirator.

New Aestheticians are not the first to revere technologies as an aesthetic

practice. In a similar vein to Bridle, Futurists such as Luigi Russolo writing in *The

Art of Noises* make a connection between art and technology in that "families of

noises will soon be realized mechanically (Russolo, *The Art of Noises*.). (See

Figure 4).
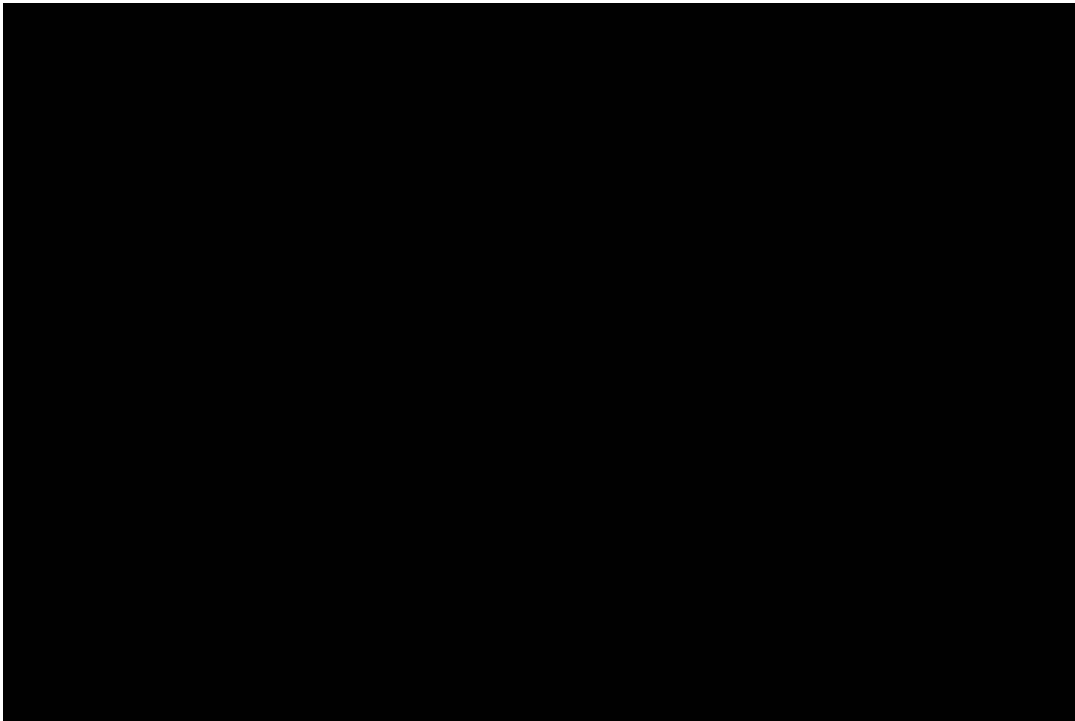
Figure 4: GUIDI AW1011 – Industrial. The description for this video, found on Vimeo, states that the recording is "Sounds extracted from Luigi Russolo (1885-1947) 'Risveglio di una città' (1913)."

While Russolo certainly allows for a traceable line between technological advances and artforms that emerge as a result, there is a rhetorical subtext that is occurring. There is a sense of an epideictic that praises these "happy accidents" and portends that the machinic as being a collaborator imbued with a form of agency while simultaneously critiquing the systems that allow for these so-called artistic advances to occur in the first place. Moreover, according to Paul D. Miller (DJ Spooky), Russolo was concerned with *how* music was consumed (Miller). In 1913, when Russolo drafted the letter that was to become *The Art of Noises* to his friend and colleague, the Futurist composer Francesco Balilla Pratella, Russolo's ideas about the relationships between music and machines were quickly becoming codified. In part seven of *The Art of Noises,* Russolo is explicit unambiguous when he states that:

> The variety of noises is infinite. We certainly possess nowadays over a thousand different machines, among whose thousand different noises we can distinguish. With the endless multiplication of machinery, one day we will be able to distinguish among ten, twenty or thirty thousand different noises. We will not have to imitate these noises but rather to combine them according to our artistic fantasy (Russolo, *Futurist Manifesto, 1913* 12).

It is here that Miller's assertion that recorded music, which is arguably a harbinger of a New Aesthetic (at least for the early twentieth century), was in part

alluded to by Russolo, and goes as far to make the claim that aesthetics and culture were fundamentally changed by the advent of recorded music (Miller). Spooky further appertains that Russolo's writing and the actualization of recorded music points heavily towards the 21st century practices of concertgoers broadcasting live performances via smartphones and social media platforms (Miller). Spooky/Miller draws comparisons to the oft-mention (at least within the New Aesthetic) Freudian concept of displacement–the unheimlich, or uncanny–in which audiences are at odds between "the way we lived, and the psychological sense of being present, and the edge of something we can't quite explain" (Miller). This phenomenon of the uncanny–the disassociation of being present and the terrifying quality associated with the unexplainable–presents a paradox of the simultaneousness of both being extant and not existent. This phantasmagorical quality can be observed in the video for Russolo's composition. It exists as data–sound, visuals, bits, bandwidth, and the expenditure of energy across a variety of platforms–but doesn't exist in that none of Russolo's recorded compositions have survived, existing in a space that Bridle refers to as a code/space, i.e., an interweaving of computation with both the built environment and daily experience (Bridle 37–39).

Pixels, Panes, Transubstantiation: New Ways of Seeing

"A hidden connection is stronger than an obvious one."

~ Heraclitus

The New Aesthetic, up until this point, has primarily concerned itself with ways of seeing. Looking within the artifacts of The New Aesthetic being "undertaken within its own medium" (Bridle 1), it is possible to view this interaction of the Beautiful and the Sublime developing both in theory as well as in praxis. Located within this plasticity of epideictic is where we can find other forefathers of Bridle's project: the rise of 1960s counterculture, specifically the testing and use of LSD and the advent of the personal computing revolution. From a perfunctory viewpoint, the interrelation between The Futurists, Virilio, and others before the onset of the New Aesthetic seems unreasonable; however, from the frame of reference of a multi-aestheticized worldview predicated upon the machinic, technological, and artistic, the discordant ancestors I have presented and those who are yet-to-come will become clear.

Writing about the images he has collected and curated in his Tumblr microblog, Bridle inadvertently reflects Kantian notions of aesthetics about the New Aesthetic qua the New Aesthetic by stating:

It is impossible for me, with an academic background in Computer Science and Artificial Intelligence, with a practical background in literary editing and software programming, with a lifetime of interacting with the internet and other systems, not to look at these images and immediately start to think about not what they look like, but how they came to be and what they become: the processes of capture ,storage, and distribution; the actions of filters, codecs, algorithms, processes, databases, and transfer protocols; the weight of datacenters, servers, satellites, cables, routers, switches, modems, infrastructures physical and virtual; and the biases and articulations of disposition and intent encoded in all of these things, and our comprehension of them (*The New Aesthetic and Its Politics | Booktwo.Org* 2).

Although Bridle contends that a consideration of *how* the artifacts came to be is a primary concern and cites myriad if not superficial reasons as to why he is concerned with New Aesthetic artifact origins, few, if any pixels have been expended on the subject.

Ahhh, pixels. The physical point in a raster image. The smallest addressable element in an all points addressable display device; the smallest controllable element of a picture represented on the screen (Graf 569). What is it about the portmanteau of *picture element* (Graf 569) that has Bridle so

bewildered? What is it about Lilliputian squares that create a sense of zealousness? Perhaps these infinitesimal units offer a way of seeing that was previously either nonexistent or, at best, hypnogogic. The 2012 South by Southwest Festival program describes Bridle's panel, The New Aesthetic: Seeing Like Digital Devices:

> We are becoming acquainted with new ways of seeing: The Gods-eye view of satellites, the Kinect's inside-out sense of the living room, the elevated car-sight of Google Street View, the facial obsessions of CCTV […] As a result, these new styles and senses recur in our art, our designs, and our products. The pixelation of low-resolution images, the rough yet distinct edges of 3D printing, the shifting layers of digital maps. In this session, the participants will give examples of these effects, products and artworks, and discuss the ways in which ways of seeing are increasingly transforming ways of making and doing
> (SXSW Schedule 2012, 'The New Aesthetic: Seeing Like Digital Devices', http://schedule.sxsw.com/2012/events/event_IAP11102. qtd. in Contreras-Koterbay and Mirocha 18).

The pixel, it seems for Bridle, offers much more than an irreducible unit by which we are able to view the grain of computation; it is a tangible dojigger that represents the eversion of the virtual/digital and the analog/real (Rieder 31). The

pixel, as a physical totality, is for Bridle, a manifestation of mind expansion, of transubstantiation, that is suggestive of other quadratic modes of altered realities: the LSD tab and the communion (see Figures 5 – 7).
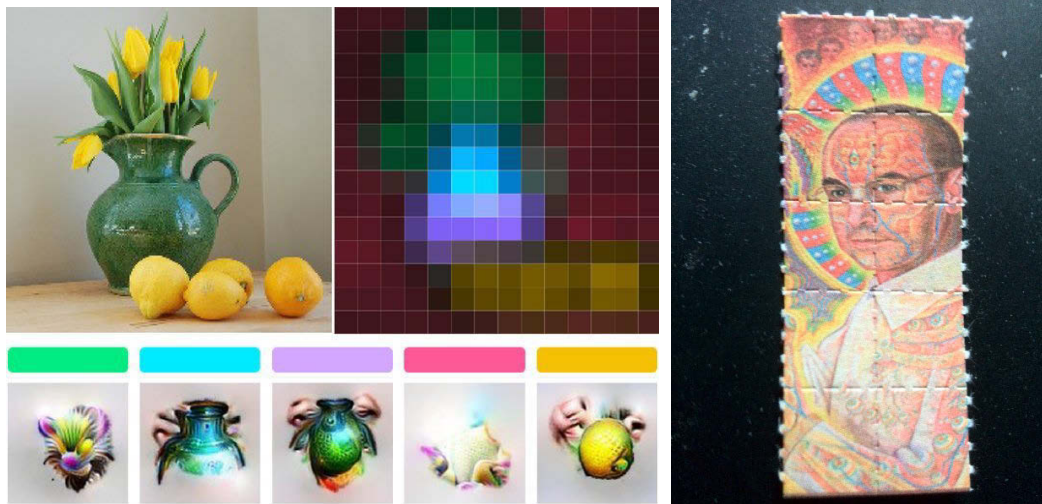
Clockwise from top- *Figure 5*: The New Aesthetic Tumblr blog post from March 8, 2018, showing a photograph from the article Google Researchers Are Learning How Machines Learn - The New York Times (http://new-aesthetic.tumblr.com/page/3); *Figure 6:* A "ten strip" (ten doses of LSD) of "Alex Grey" Hofmann LSD blotters, dosed at 100-120 µg each[8] (image courtesy LordToran [Public domain]); *Figure 7:* White Soft Communion Bread (image courtesy Living Grace Catalog [Creative Commons]).

Other than the one-dimensional observation that each of these items are in fact more or less squares, a closer examination yields much more than meets the eye. Each of these objects are a type of skeleton key filed down to their respective basal components. Like the skeleton key, these squares are capable of unlocking many doors. What we don't realize, however, is that what these disparate objects are unlocking esoteric realms that are larger on the inside than they are on the outside.

The communion wafer, in my simplistic understanding of how it works, when ingested by the true believer is thought to transubstantiate, to *literally* become the body of Christ. Through the reification of cannibalistic acts, the proponent becomes closer to the mercy and omnipotence of the Judeo-Christian god. In this understanding of omnipotence and love, the secrets of Life, the

---

[8] Albert Hoffman (January 11, 1906 – April 29, 2008) was a Swiss scientist known best for being the first person to synthesize, ingest, and learn of the psychedelic effects of lysergic acid diethylamide (LSD). Hofmann was also the first person to isolate, synthesize, and name the principal psychedelic mushroom compounds psilocybin and psilocin (Hoffman et al.). Alex Grey (born November 29, 1953) is an American painter, author, and sculptor who is quite popular with some adherents of a current iteration of the American counterculture.

Universe, and Everything[9], which is vastly beyond human comprehension, is without question much larger inside than out.

LSD, specifically Lysergic acid diethylamide-25, was synthesized in 1938 by Albert Hoffman at Sandoz Laboratories in Basel, Switzerland (*EMCDDA | LSD Profile (Chemistry, Effects, Other Names, Synthesis, Mode of Use, Pharmacology, Medical Use, Control Status)*). From a pharmacological view, intense color flashes are seen and inanimate objects may appear to move or dissolve in what is commonly known as "tracers" (*EMCDDA | LSD Profile (Chemistry, Effects, Other Names, Synthesis, Mode of Use, Pharmacology, Medical Use, Control Status)*) EMCDDA also cites synaesthesia, i.e., the perception of cross sensory abilities, as being prevalent while under the influence of LSD, as well as vivid hallucinations involving bright geometric shapes and the sense that time is moving slowly (*EMCDDA | LSD Profile (Chemistry, Effects, Other Names, Synthesis, Mode of Use, Pharmacology, Medical Use, Control Status)*).

---

[9] This is the title of the third book in the five-book series *Hitchhiker's Guide to the Galaxy,* by Douglas Adams. Ironically enough, Adams was an avowed atheist. Also, the answer the question of life, the universe, and everything is 42.
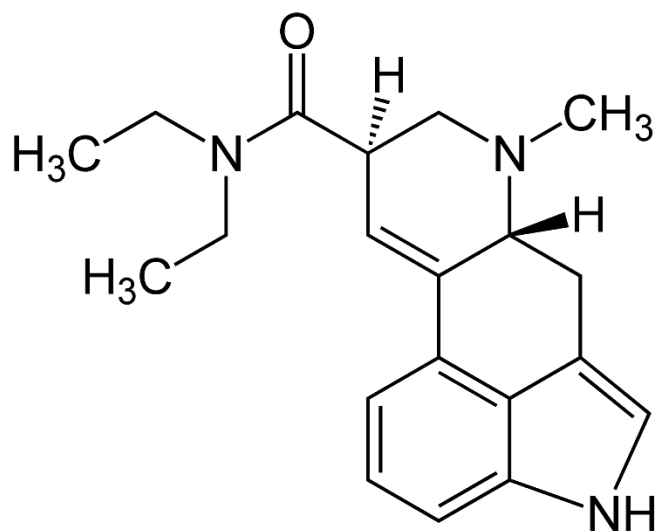
Figure 8: LSD structural formulae [Public Domain].

Within the hallucinations associated with LSD use, a type of elevated consciousness, an *instant mysticism* was thought to occur. However, James Bridle, despite his penchant for brightly colored and distorted imagery, as evidenced by the dizzying display of pixelated examples in his digital wunderkammer , most likely doesn't indulge heavily in drugs. Not that enjoying altered states of consciousness is the only societal marker of a devotee of the counterculture, nonetheless James Bridle is a hippie. If one were to ascribe a family tree to The New Aesthetic a startling revelation becomes clear. While seemingly not under the purview of a Merry band of acid casualties– unbeknownst to Bridle and his own coterie of digital Pranksters– share much in common with the counterculture of the Sixties and Seventies. If Bridle were so inclined to investigate–and on Tim Ingold's observation that filiation from the Latin literally denotes streams (Ingold 105)–he and his bevy of those enamored

with all things digital would find a closer kinship with Ken Kesey, Abbie Hoffman, and Timothy Leary than with the current iteration of computer scientist. Given the relative lack of historical context–and let's be honest; the New Aesthetic didn't materialize out of the ether– a small detour through a late mid-twentieth century counterculture is reasonable, as it paves the way for Bridle, et al., and their quasi-Evangelical take on turning the masses on and creating disciples within and of the New Aesthetic. For now, let's borrow from old Tim Leary's rhetorical move and TURN ON and TUNE IN to how the New Aesthetic might be a love child at least partially conceived at the height of the American counterculture[10].

Tom Wolfe, yes *that* Tom Wolfe, in the opening chapter of *The Electric Kool-Aid Acid Test,* introduces us to a cast of characters eagerly awaiting *One Flew Over the Cuckoo's Nest* author and psychedelic proselytizer Ken Kesey's release from jail. In addition to Cool Breeze, Lois Jennings, and Black Maria, Wolfe introduces and describes two men that other than their dress or actions probably leave no real impression on the reader. He writes:

---

[10] Before being known by Richard Nixon as "the Most Dangerous Man in America™," Timothy Leary was a respected psychology researcher, most notably being one of the principal investigators–along with Richard Alpert, now known as Ram Dass– of the Harvard Psilocybin Project. Leary's lifelong pursuit of mind expansion led him to the concept of the eight-circuit model of consciousness, in which the brain is described in part very much like a computer. Psychedelics and psychology eventually led Leary to the cyberculture of the 1990s. He was a regular contributor to the seminal yet analogue periodical, Mondo 2000, which folded about a year before his death in 1996.

Two more things they are looking at out there are a sign on the rear bumper reading "Custer Died for Your Sins" and, at the wheel, Lois's enamorado Stewart Brand, a thin blond guy with a blazing disk on his forehead too, and a whole necktie made of Indian beads. No shirt, however, just an Indian bead necktie on bare skin and a white butcher's coat with medals from the King of Sweden on it (Wolfe 2).

And here's Wolfe's account of the other:

There was a young psychologist there, Jim Fadiman—Clifton Fadiman's nephew, it turned out—and Jim and his wife Dorothy were happily stuffing three I Ching coins into the spine of some interminable dense volume of Oriental mysticism and they asked me to get word to Kesey that the coins were in there (Wolfe 6).

While appropriating cultural garb or interacting with Eastern thought are most likely nothing special or unusual regarding the cultural mores in certain circles in the late 1960s, the people, Stewart Brand and Jim Fadiman, are not your garden variety flower children; they are two links in the human bridge between LSD and the rise of personal computing. But before we turn our focus to Brand and Fadiman and on towards the New Aesthetic, we should make the anachronistic if not *hauntological* move and place ourselves in two places at once: The San

Francisco Bay Peninsula and Cambridge, Massachusetts in the 1950s, 1960s, and 1970s.

If You're Going to San Francisco, Be Sure to Wear Integrated Circuits in Your Hair

San Francisco, 1956. Moloch[11] Rising...

As the Bay Area was readying itself for "madness, starving hysterical naked" (*Allen Ginsberg - Howl*) and the throngs of "angelheaded hipsters burning for the ancient heavenly connection to the starry dynamo in the machinery of night" (*Allen Ginsberg - Howl*) that was to reveal itself in the rise of American Counterculture™, the machinations of new ways of seeing and thinking were already gestating behind closed doors from Columbus Avenue (home to City Lights Bookstore[12]), down to Menlo Park, Palo Alto, and into Santa Clara County, into the Valley of Heart's Delight[13]. With the Beatnik Benzedrine comedown of the late 1950s, a newer, better way of living through chemistry was emerging in the Bay. Albert Hoffman's Problem Child.[14]

LSD, which has become quite fashionable again in Silicon Valley in the form of microdosing, has ostensibly always been a part of networked computing.

---

[11] Moloch is the name of a Canaanite god in which children were burned to appease him. In addition to being mentioned in Leviticus, he figures prominently in *Paradise Lost* (Milton and Fenton 15, 16, 31, 173) and as a metaphor for America in *Howl (for Carl Solomon)* (*Allen Ginsberg - Howl*).

[12] City Lights Bookstore, now City Lights Booksellers & Publishers, was the literary epicenter of the Beat Movement.

[13] Present-day Silicon Valley.

[14] *LSD, My Problem Child: Reflections on Sacred Drugs, Mysticism, and Science* is Hoffman's account of LSD and other psychedelic drugs whose psychiatric use was eclipsed by the recreational.

In a place like San Francisco, where youth culture, elite universities, and artistic awakening buttress up against each other, a significant amount of cross-pollination among these different factions is bound to occur. While a complete history of the counterculture and the advent of personal computing is well beyond the scope of this project, some figures and accomplishments are worth noting[15].

Fred Turner, writing on the how the counterculture helped shape cyberculture, notes that Merry Pranksters like Ken Kesey came into regular contact with those, like Stewart Brand–who later went on to found the *Whole Earth Catalog and the Whole Earth Software Catalog*– whose respective visions of society reflected a means for achieving liberation from postwar puritanical attitudes. For Kesey, this manifested itself as a struggle to regain a sense of radical individualism in an increasingly autocratic America and for Brand it represented the dismal realization of a technological Armageddon from sea to shining sea (Turner 58–61). Hypocrisy notwithstanding, Kesey's introduction to LSD came at the hands of the Menlo Park Veteran's Administration hospital, where the CIA was conducting experiments under the MK-ULTRA program, and the doctors were supplying test subjects like Kesey with copious amounts of various psychedelic drugs and a nominal honorarium for their participation (Turner 60). It was in Menlo Park, between 1959 and 1960, that Kesey was introduced, by the United States government, to a host of hallucinogens: in

---

[15] Both Fred Turner and John Markoff offer excellent accounts of the sixties counterculture and its ties to computing.

addition to LSD, he was given psilocybin mushrooms, mescaline, and the psychoactive amphetamine IT-290 (60). For Brand, his first experience with acid came in 1962 at the International Federation for Advanced Study (IFAS), a loose institute founded by Myron Stolaroff, an engineer at the Ampex Corporation; Willis Harman, a professor of engineering at Stanford; and, Jim Fadiman, who was a key figure in Stanford Research Institute's Augmentation Research Center (61).

A question we should ask ourselves here is why would apparently buttoned up engineering types be leading curated, lab-like journeys into inner space to the tune of $500 per trip? One, because in the late 1950s and early 1960s, these types of drugs were still legal. Secondly, the use of these drugs was aiding in the development of some highly Avant Garde takes on what computing could be. Take Doug Engelbart, for example.

Engelbart, if folklore and anecdotes are to be believed, is the actual person responsible for Moore's Law, i.e., the postulation put forth by Gordon Moore that the number of components that could fit onto a silicon chip would increase well into the future, six years before Moore (Markoff 12-13). He was a pioneer in the development of the printed circuit, and in many ways is a visionary of the information age. His thoughts on human augmentation involving computing eventually led him to meet Myron Stolaroff, who turned Engelbart onto the drug along with others at SRI, including Hew Crane and Bill English (Markoff 65).

For Engelbart, experimenting with LSD seemed to be a hit or miss venture. His first experience under observation at IFAS left him catatonic through much of the experience (Markoff 66). His second experience, while more productive, led to the development of the "tinkle toy": a small water wheel that "floated in a toilet that would spin when water (or urine) was run over it" (67). This was to serve as a potty-training aid for boys in which activating the tinkle toy was an incentive to urinate in the proper receptacle (67). Eventually these experiments with LSD would evolve into more world-changing realizations. The Human Augmentation Project being one such concept (68).

By 1967, Engelbart had developed a workstation, the Online System, or NLS, with a built-in Cathode Ray Tube screen, a small (QWERTY) keyboard, and the device we now commonly refer to as a mouse (Markoff 69; Turner 108-109). These ideas were conceived under the influence of LSD and are mainstays in personal computing. The idea of making a computer *personal* carried with it significant implications: It marked the end of thinking about computation as a means of calculation and pointed towards the use of computers as a means of collaboration and text processing (Turner 107). Engelbart and his team at the Augmentation Research Center, in stark contrast to Cold War iterations of mainframes, were subsuming computers into communication networks, which echoed World War II-era ideas like Vannevar Bush's concept of the Memex, which parallels the personal computer, the ARPA/DARPA/Internet, and cloud

computing, the latter which is a prominent feature of the New Aesthetic. Bush writes:

> A memex is a device in which an individual stores all his books, records, and communications, and which is mechanized so that it may be consulted with exceeding speed and flexibility. It is an enlarged intimate supplement to his memory. It consists of a desk, and while it can presumably be operated from a distance, it is primarily the piece of furniture at which he works. On the top are slanting translucent screens, on which material can be projected for convenient reading. There is a keyboard and sets of buttons and levers. Otherwise it looks like an ordinary desk. In one end is the stored material. The matter of bulk is well taken care of by improved microfilm. Only a small part of the interior of the memex is devoted to storage, the rest to mechanism. Yet if the user inserted 5000 pages of material a day it would take him hundreds of years to fill the repository, so he can be profligate and enter material freely (Bush 106).

Well into the 1980s and through the present, Silicon Valley has never really severed ties with its psychedelic past. Myriad examples of this kaleidoscopic union still persist. Timothy Leary, before shedding this mortal coil, was a prime example of this long, strange relationship. Autodesk, which was developed at MIT in Nicholas Negroponte's Architecture Machine Group–the precursor to the

Media Lab– hired Timothy Leary to act as a spokesperson in several promotional videos for their cyberspace initiative (Turner 163). Leary was also a regular fixture in the cyberpunk periodical *Mondo 2000*[16]. *Mondo 2000* (see Figure 9)*,* which was published out of the Bay Area beginning in 1984 as *High Frontier* (had a moderate underground following –and is an object of inquiry that the New Aesthetic owes a great deal of gratitude towards– also prominently featured countercultural icons such as William S. Burroughs (whom we shall later see has a solid connection to computing), William Gibson (he coined the word cyberspace in his debut novel *Neuromancer*) and Grateful Dead lyricist and Electronic Frontier Foundation founding member John Perry Barlow (163).

---

[16] A great deal of this out-of-print piece of cyberpunk history can be found living at:
https://archive.org/details/mondohistory

MONDO
2000

Fall #7
$4.95
Canada $5.95

Cyberpunks

**Todd
Rundgren**

Tim Leary

Wm. Gibson

**Max
Headroom**

Virusgate

Future Media
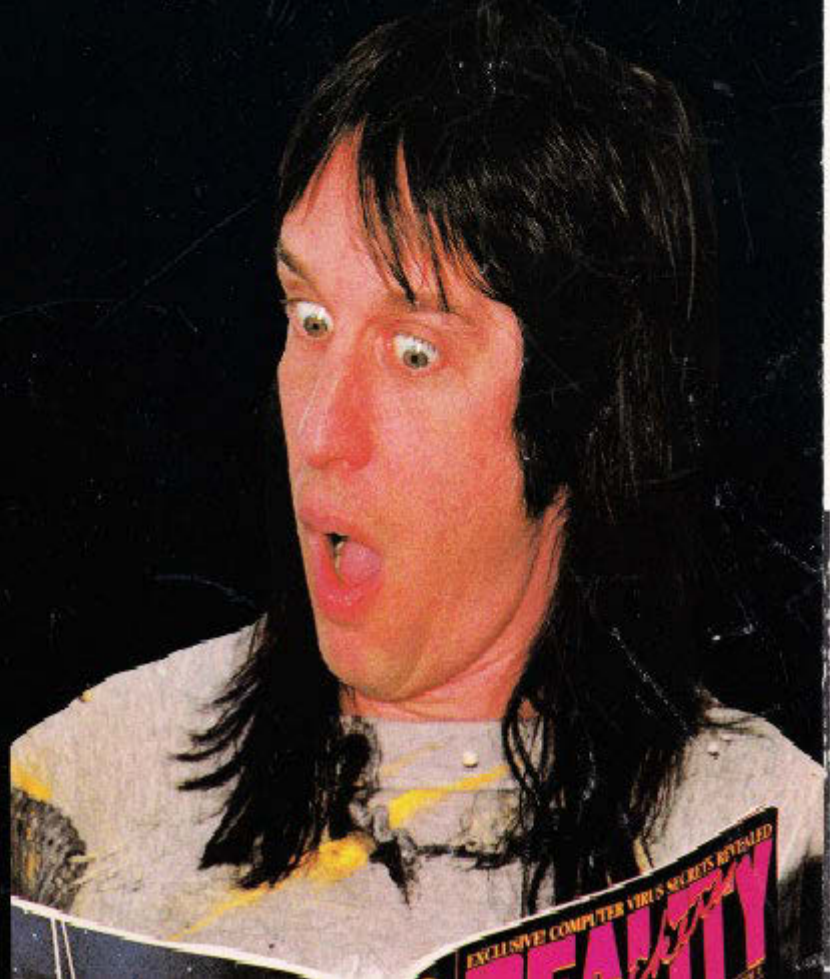
065 108 114 105 103 104 116 013 010 073 039 109 032 105 110 032 108 111

118 101 032 119 105 116 104 032 109 111 100 101 114 110 032 109 111 111

110 108 105 103 104 116 013 010 049 050 056 032 119 104 101 110 032 105

116 039 115 032 100 097 114 107 032 111 117 116 115 105 100 101 013 010

073 039 109 032 105 110 032 108 111 118 101 032 119 105 116 104 032 077

097 115 115 097 099 104 117 115 101 116 116 115 013 010 073 039 109 032

105 110 032 108 111 118 101 032 119 105 116 104 032 116 104 101 032 114

097 100 105 111 032 111 110, 0r, Alright/I'm in Love with Modern

Moonlight/128 When it's Dark Outside/I'm in Love with Massachusetts/I'm in

Love with the Radio on!!![17]

It's quite possible that Nicholas Negroponte is also a hippie. As a Baby Boomer, his formative and college years and subsequent appointment to the professoriate at Massachusetts Institute of Technology in the 1960s may place him squarely within LIFETIME MEMBER status of the Long Hair, Don't Care, Turn On, Tune In, Drop Out, Peace and Love Syndicate™. While this avowal isn't

---

[17] This section gets its title from the song *Roadrunner,* by the Boston-area proto-punk band The Modern Lovers. More specifically, the title is the first part of the second stanza of the song, which references Highway 128 in Massachusetts, a stretch of road associated with the high-tech industry since the 1950s. This stretch of road, known as "America's Technology Highway," features an array of technology companies, including giants like GE and Honeywell, as well as many entrepreneurial endeavors from Harvard and MIT grads. The title appears in both Standard English and American Standard Code for Information Interchange (ASCII) for obvious reasons.

warrantless, any number of photographs from this era offers several counterarguments to this claim. Negroponte, with his perfectly coiffed business cut, sensible glasses, and studious blazers is not only as far away from countercultural as one could look during this time; it screamed SQUARE® at passersby and reverberated through the halls of 77 Massachusetts Avenue in Cambridge. Although he may not have looked the part, Negroponte's vision, among others concerning computation acting as a vehicle for mind expansion that our stop here is appropriate, as it paves the way for Bridle, et al., and their quasi-Evangelical take on turning the masses on and creating disciples within and of the New Aesthetic. Even decades after DARPA and the Office of Naval Research pulled chocks (pun intended), Negroponte's assertion that *the digital* and computation "can flatten organizations, globalize society, decentralize control, and help harmonize people in ways beyond not knowing whether you are a dog"(Negroponte), we can still hear and feel vestiges of a bygone epoch that has been ensconced in (*counter*) cultural amber.

As an architect, along with Leon Groisser, Negroponte sought to further merge the disparate disciplines of architecture, engineering, and computation into an interdisciplinary juggernaut; a howling, multi-headed beast that sought to forever silence the Department of Architecture and Planning Dean Lawrence Anderson's thoughts on the Beaux-Arts teaching method, what he called a "residual influence [that] remains as an incubus that dampens our enthusiasm for any panacea"(Steenson). In the merger of architecture, engineering, and

computation was where Negroponte hinted at both the New Aesthetic and the rise of a machinic surveillance apparatus in 1969, some 43 years before Bridle unleashed the New Aesthetic at the 2012 South by Southwest Conference in Austin, TX. His article, Towards a Theory of Architectural Machines, explicitly discusses machine evolution, hints at partnerships between human and the interface, and most uncannily, posits that someday the world will be filled with "machines wandering the city" as a type of seeing and "data acquisition" (Negroponte 11-12). While the intended applications for this theorization is a means of advancing disciplines and has altruistic overtones, in a Capitalist Realistic Weltanschauung these magnanimous contributions have a way of being co-opted writ large for less than what is benefic for the masses. As we shall later see, this flattening and globalizing is what has ushered in a terra-surveillance apparatus.

While the Architecture Machine Group were at first blush a group of uptight architects, engineers, and others of their ilk, it would be prudent to know that along with Stanford Research Institute, conducted the first-ever transaction via a computer network. As Stephen P. Hull notes:

The first-ever online transaction was conducted over Arpanet, the university-researched, defense department-funded precursor to the world wide web, in 1972, when computer science researchers in a lab at Stanford negotiated for a bag of pot with their counterparts at MIT (Hull 15).

While negotiating for a bag of weed on a computer network in the Seventies doesn't necessarily constitute a direct lineage between the drug underworld and computation, it does portend darker avenues of the New Aesthetic. Those avenues affiliated with online piracy, where music, movies, books, and pornography are freely distributed, and the Dark Web, where drugs of all stripes, weapons, murder-for-hire, human trafficking, and specialized and highly illegal forms of pornography are freely traded in the flow of data. In each of these scenarios data is a commodity and each of these contains their own aesthetic.

Programmed Artonomy

The proliferation of personal computers and personal computing – while an important consideration in tracing a cultural historiography of the New Aesthetic–is but one aspect. As we saw previously in Russolo's concept of machine and human collaborators, postwar visual artists, too, heard the siren call of the machinic. After all, there would not be a New Aesthetic without the symbiosis and synergy of the partnership of human and machine.

Jonathan Flatley, writing in *Like Andy Warhol,* astutely clues us in to Pop Artists–like Warhol–and Conceptual Artists–like Sol LeWitt– having a "*shared desire* to model their artistic practices on the machine" (Flatley 87). According to Flatley, artists as disparate as Warhol and LeWitt both embracing the machinic was a reaction to Abstract Expressionism, or rather, a means of *not* becoming an Abstract Expressionist (Flatley 87). The subconsciousness of a perceived

predecessor to the Surrealists, with their painterly brushstrokes and drips à la Jackson Pollack were being supplanted by what Flatley describes as a return to a *noncompositional* form of painting that has a lineage that can be traced back to Duchamp and the Russian Avant Garde (Flatley 88). For Flatley, the notion of breaking away from Abstract Expressionism presented for artists like Warhol and LeWitt a return to the raison d'etre of art. He writes:

> The rhetoric of the machine was ready-made for the aesthetic-ideological work of negating the perceived humanism and romanticism of abstract expressionism because it aggressively references the rationalized and alienating mode of labor that had been for most of the century the opposite of "art"[...] Artists' baldly proclaimed and widely publicized embrace of the machine in the 1960s carried with it the danger of appearing to affirm postwar industrial society and the new forms of labor, organization, mass culture, and the commodity that characterized it (Flatley 89-90).

The concept of explicit collaboration between human and machine in an art production symbiosis extends beyond an art historical account. For example, Kansas City-based painter and printmaker Mike Lyon discovered that by altering a Computer Numerically Controlled (CNC) router he used for woodblock carving that he could produce highly detailed *and visually striking* portraits which began

in 2004. Lyon, writing on his process, clearly notes a breakdown in both the process of working in tandem with a machine and the interdisciplinary bewilderment that accompanies transcending the purportedly divergence of corporeal and incorporeal realities. In reflecting on an exhibition from 2009, he states:

> ...the Beach Museum commissioned me to produce an edition of small prints for sale to their patrons. Senior Curator, Bill North, and I had some interesting discussions about 'what is a print' in connection with this edition. Initially I'd intended to carve blocks and print each sheet in colors, then draw on top in register. In the end, I decided to draw in red, blue, and black inks to produce what is to my knowledge the very first fine-art edition of drawn drawings (or prints) [...] In the broadest sense of the word, I think, the noun 'print' is synonymous with the noun 'multiple.' But, since the image was created on a single sheet of paper, roughly 5 x 12 feet, even the word 'multiple' is subject to question. BEFORE I tore the sheet apart, it was most definitely a pen and ink drawing. Once I'd torn the sheet into 45 pieces, each about 10×15 inches, it became an edition of 'prints' I think, even though each is an original drawing and no traditional printmaking process was employed (Lyon).

This realization put forth by Lyon working *alongside* tools rather than *with* tools begs a few questions. One question we may have to ask ourselves is *who is using whom in the creation of images?* Another question is *how do we define and speak about images produced in a collaborative effort between human and machine?* Jack Burnham, addressing some of these issues through the lens of art and *unobjects* was correct in his assertion that, "As yet the evolving esthetic has no critical vocabulary so necessary for its defense, nor for that matter a name or explicit cause" (Burnham 31).

If we accept Flatley's premise that a move to the machinic in art production is a return to the crux of making art coupled with the artist as collaborator–along with the perception of the artist embracing Taylorization, or at the very least a Fordist approach to art *production* –then I argue that the collaboration of artist and machine is a precursor to Deleuze and Guattari's concept of the desiring-machine in which "one machine is always coupled with another" (Deleuze and Guattari 5). If we accept the presumption that art and artist are binaries in a desiring-machine, then we must also accept that one of these machines, art, is a flow producing machine and the artist is the machine that interrupts this flow (Deleuze and Guattari 5). We must also consider that Victor Vasarely suggested in 1953 that "mass art is a legitimate function of industrial society," and that," the entire phenomenon of reproducing an art object ad infinitum is absurd; rather than making quality available to a large number of people, it signals the end of concrete objects embodying visual metaphor"

(Vasarely, qtd. in Burnham 33). We must also accept that "Such demythification is the Kantian Imperative applied esthetically. On the other hand, a system esthetic…There is no end product that is primarily visual…It resists functioning as an applied esthetic but is revealed in the principles underlying the progressive reorganization of the natural environment" (Vasarely, qtd. in Burnham 31). This reorganization is unambiguously what is occurring within the New Aesthetic. For the New Aesthetic this reorganization, the flow, begins with data (See Figure 10).
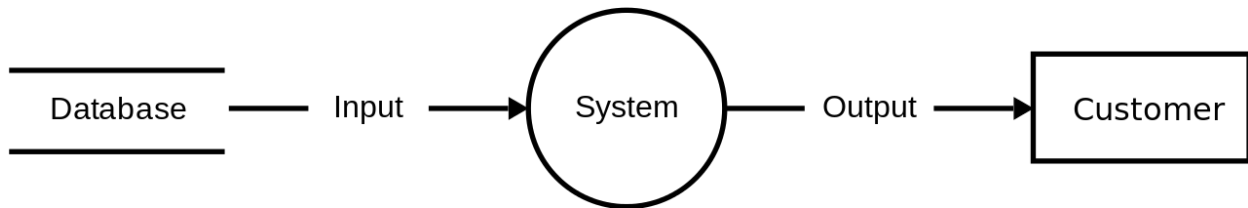
Figure 10: a simple diagram of data flow [Creative Commons].

New Aesthetic images are the result of desiring-machines in a state of flux. That flux–if we accept that machine and artist are collaborators–is a reversal of roles, *a reordering*, in the machinic coupling relationship set forth by Deleuze and Guattari. The artist, or rather the human in the New Aesthetic, has become the flow producing machine through a collaboration with networked devices: computers, tablets, and smartphones. These apparatuses, parsing, storing, aggregating, manipulating, and analyzing the flow (data) created by humans is the interrupting machine. Much like Deleuze and Guattari's view on desire and flow, New Aesthetic imagery is the result of continuous flows and "partial objects

that are fragmented and fragmentary" and in the vein of interrupting flows, our eyes interpret everything the machine does in its visual "speaking, understanding, shitting, and fucking" (Deleuze and Guattari 5–6). The machines are speaking to us through fragmented imagery! They are understanding through the convergence of the physical and digital! The machines produce their own shit through pixelated images and glitch aesthetics as carrion of fidelity. They *fuck* us, as the kids say. Fuck us up aesthetically, emotionally, and psychic-ly. They are *fucking with us* ontologically by inserting themselves into our corporeality ad infinitum! The machines desire us and cause us to desire them through rearranging our flow they interrupt and reveal back to us. WE NEED TO KNOW HOW AND WHY.

Chapter 3: The Systems of Control and Voyeurism, Or,

The New Aesthetic is More than Messed up Pictures[18]

She was under no illusion that every minute of every day was equally scintillating to her watchers. In the weeks Mae had been transparent, there had been downtime, a good deal of it, but her task, primarily, was to provide an open window into life at the Circle, the sublime and the banal.

¬*Dave Eggers, The Circle, p.312*

Any conjunction between aesthetics and politics (for a political aesthetic, an aestheticized politics, a geopolitical aesthetic, a politics of aesthetics, and so forth) is necessarily fraught by estranged agendas Đ all the more reason for us to conceive of their inter-activation from a willfully ahumanist perspective. Aesthetics and/or politics of what and for what? The cascade of Anthrocidal traumas from Copernicus and Darwin, to postcolonial and ecological inversions, to transphylum neuroscience and synthetic genomics, from nanorobotics to queer AI pulverize figure and ground relations between doxic political traditions and aesthetic discourses.

---

[18] Parts of this chapter have previously appeared in an essay I wrote titled Digital Détournement: A Situationist Approach to Resisting Surveillance in the Googlized World, which can be found in Exquisite Corpse: Studio Art-Based Writing Practices in the Academy, edited by Kate Hanzalik and Nathalie Virgintino and published by Parlor Press. A special thanks to David Blakesley at Parlor Press for granting me permission to upcycle some of those primitive thoughts in the essay for this chapter.

-Benjamin H. Bratton, Some Trace Effects of the Post-Anthropocene: On Accelerationist Geopolitical Aesthetics, e-flux, Journal #46 - June 2013.

As we have seen in the previous chapter, the New Aesthetic can be thought of as a reversal of roles in a desiring-producing machinic assemblage. I allege that this reversal of roles, that of the artist, or more likely the viewer, and the machine proper as the interrupting machine and the flow-producing machine respectively appears to adumbrate a privileging of systems in the New Aesthetic rather than that of the artifacts that are produced.

While the artifacts associated with The New Aesthetic are the subject of much debate, I argue that the systems that are responsible for the production of these artifacts are also worthy of examination. The systems, which share responsibility with humans in the production of The New Aesthetic artifacts, provide an interesting insight to the convergence of the physical and digital.

In the 21st century, and especially in the period following the events of September 11, 2001, there has been a noticeable upswing in surveillance in both corporeal and digital environments. Because of, or perhaps despite, the increase in the recording of human behavior and interaction, surveillance studies have emerged as a reaction to this scrutiny. Because of the both the relatively recent emergence of surveillance studies as a discipline in keeping with a Post-

Structuralist worldview, is fragmented, and as such is situated across a variety of disciplines and theoretical frameworks.

Echoing Chapter 1, we were introduced to Baudrillard's writing about metafunctional and dysfunctional systems being indeterminate in its functional paradigm as opposed to a machine, which is explicit in its purpose. Baudrillard states that "there is something immoral about an object whose exact purpose one does not know" (Baudrillard 123). While there is something teleological at work in Baudrillard's writing here, machines and systems operating outside of their unambiguous functions presents an uneasiness that can be described in the Freudian sense of the term "uncanny." While this uncanniness can be applied to New Aesthetic artifacts, it is in the systems, or to lift a name from a handheld gaming console to describe a world of systems that serve functions beyond the explicit, the Gizmondo, where the more unheimlich paradoxes occur. Nonetheless, while these machines and systems operationality may be uncanny it may not necessarily augur machines operating outside of their intended functions. Perhaps a better explanation is that the New Aesthetic is not necessarily comprised of machines and systems that are immoral based on actions whose functions are ambiguous, but rather that these apparatuses and organizations can be considered polychrestia; the assemblages, networks, and infrastructure of the New Aesthetic are tools with multiple uses (Miller and Miller 8).

All Watched Over by Machines of Loving Grace

I like to think (and

the sooner the better!)

of a cybernetic meadow

where mammals and computers

live together in mutually

programming harmony

like pure water

touching clear sky.

I like to think

(right now please!)

of a cybernetic forest

filled with pines and electronics

where deer stroll peacefully

past computers

as if they were flowers

with spinning blossoms.

I like to think

(it has to be!)

of a cybernetic ecology

where we are free of our labors

and joined back to nature,

returned to our mammal

brothers and sisters,

and all watched over

by machines of loving grace.

-Richard Gary Brautigan (1935-1984), All Watched Over by Machines of Loving

Grace

From a historical standpoint, the trajectory of the overlap of analogue machines into the corporeal portended the advent of the New Aesthetic, which in turn gives us a way of describing a global apparatus at least partially devoted to machine surveillance. As we shall see in this chapter, the convergence of these disparate realities has been forthcoming at least since the formative years of the Industrial Revolution (or depending on your philosophical bent, the Anthropocene). While much has been written about Jeremy Bentham and the Panopticon, Jacques-Alain Miller and Richard Miller offer an operationalized definition of the Panoptic Device that foretells the rise of a surveillance mechanism such as the New Aesthetic suitably. Describing the Panopticon as a "polyvalent apparatus of surveillance," Miller and Miller make the distinction that the Utilitarianist prison model was more than just a building; it was the "universal machine of human groupings" (Miller and Miller 3). As the two Millers

point out, the Panopticon has myriad potentialities beyond that of a prison. They are correct in their pronouncement that this device has no unique application, that "it is designed to house involuntary, unwilling, or constrained individuals" (Miller and Miller 3). It is in the spirit of the Panopticon as polychrest that Bentham and Miller and Miller make a unique comparison: that the prison mode portrayed by the panoptical device is a semblance of God (Bentham and Božovič 44–45; Miller and Miller 4-5).

Martin Jay makes a case for the panoptic device by pointing out the link between Miller and Miller's notion of the Panopticon as the "unreciprocal visual dialectic posited in Lacan's theory of the eye and gaze" (Jay 382) and reinforcing the concept of the Panopticon as a quintessential Utilitarian "temple of reason" (Miller and Miller 6-7; Jay 382). While these allusions explain the concept of the Panopticon as a semblance of God, I feel that the New Aesthetic, as an evolutionary system–a series of networks, infrastructure, fiber optics, and information– offers a more complete metaphor for an unreciprocated visual dialectic. While the Panopticon and its corollaries– like the factory or the school– are predicated upon the gathering and punishment of the involuntary, unwilling, and constrained. The New Aesthetic, as a symbol for a global surveillance apparatus, is not contingent upon a captive audience, but rather is a system that inculcates, that passes through borders, and is asseverated at almost every category of society. Miller and Miller posit that the Panopticon, the temple of reason, is:

a temple luminous and transparent in every sense: first because there are no shadows and nowhere to hide: it is open to constant surveillance by the invisible eye; but also because totalitarian mastery of the environment excludes everything irrational: no opacity can withstand logic (Miller and Miller 6-7).

Bentham, and subsequently Miller and Miller, have overlooked much about the Panopticon as a temple of reason, or for that matter, a perfect surveillance apparatus. The Panopticon, both as an emblem and through its physical coeval scions like the school and factory are anything but transparent in comparison to the New Aesthetic. To illustrate the Panopticon's opaqueness, an exploration of some of the relevant components apposite to Miller and Miller's claim of transparency is felicitous.

Aside from the self-evident observation that the Panopticon would have been constructed of stone, brick, or concrete–and some penitentiaries influenced by Bentham certainly are (see Figures 11 and 12) – and from a rote materialist standpoint is decidedly opaque. And while it is true that certain aspects of the New Aesthetic are constructed of the same opaque materials, beyond a fundamental likeness there exists an omnipotence in the New Aesthetic that is extrinsic to anything the Panopticon could ever achieve.

Gertrude Himmelfarb, writing on the Panopticon (and according to Jay, conveniently excluded from the Miller's or Foucault's writings on the Panopticon even though it was published in 1965), alludes to Bentham's notion of an illusion of the divine
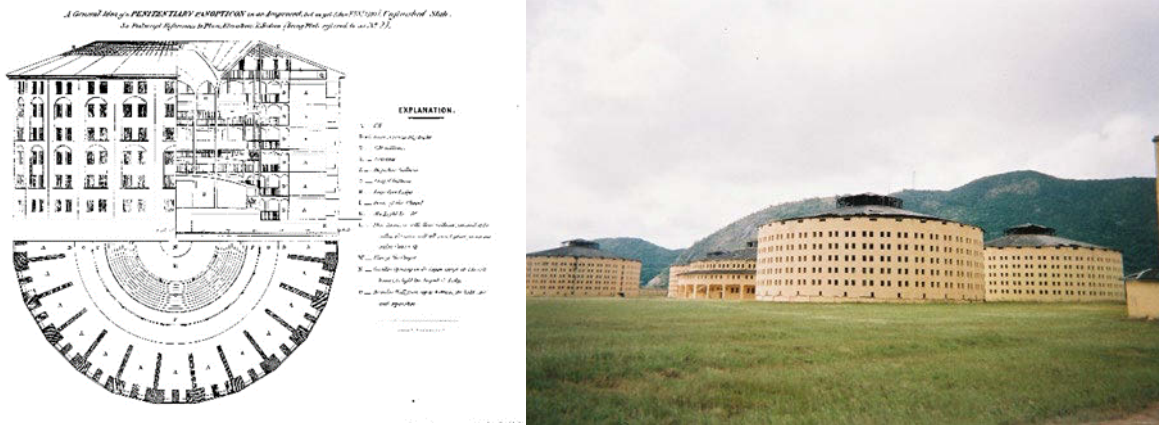
From Left- *Figure 11*: Jeremy Bentham's plan for the Panopticon; *Figure 12*: Presidio Modelo, Isla de Pino, Cuba. [Both images: Public Domain]

through the use of artificial light and reflectors, and "holding men captive by an intricate means of inspection" (Himmelfarb 201). While this does provide an illusory concept of the notion of divinity capable of omnipotence, that assumption of divine bailiwick ends at the prison wall.

While Foucault, in Discipline and Punish, asserts that, "The Panopticon is a marvelous machine which, whatever use one may wish to put it to, produces homogeneous effects of power" (Foucault 202), we must be cognizant tha the homogeneity of that power is internal. Thomas McMullan also cites Foucault in the role of the Panopticon in the projection of asymmetrical surveillance,

comparing "the watchtower at the heart of the panopticon is a precursor to the cameras fastened to our buildings – purposely visible machines with human eyes hidden from view" (McMullan). Given the decentralized tendencies of emergent technologies, the concept of a watcher in a digital watch tower is an outdated metaphor; however, vestiges of a Panoptical society are still discernable. The watcher and the watch tower, while still present, have now moved beyond the prison walls in an asymmetrical fashion that is discordant, amalgamate, and lives in har drives, clouds, and as fiber optic nomads; the watchers and towers have shape shifted and proliferated across devices such as Google Home and Amazon Echo.

The New Aesthetic, as a multifarious descriptor of various objects and systems, appears to reinforce the notion set forth by Casey Boyle, James J. Brown, Jr., and Steph Ceraso, that "the digital is no longer conditional on particular devices but has become multisensory, embodied condition through which most of our basic processes operate" (Boyle et al. 252). In terms of privacy and surveillance, these objects and systems as ubiquitous rings even more true. Jordan Frith, writing on the pervasiveness of Radio Frequency Identification (RFID) chips, lends credence to Boyle, et al by suggesting that contemporary surveillance does not rely on a "Panopticon with one large window through which institutions observe the public," but rather likens it to the "vison of a fly, broken into many relate windows on the world" (Frith 188). Moreover, Kevin D. Haggarty and Richard V. Ericson, writing in 2000, speak of a Deleuzian

"surveillant assemblage" which collects data across a throng of devices and sources, including "computers, cameras, people and telecommunications" that is rhizomatic in nature and exists to construct a "person comprised of pure information" (Haggerty and Ericson 612–15). This constructed body of information, what David Lyon refers to as the data double, is surveilled by a deluge of technology but is dependent upon the "humdrum, mundane communications and exchange we all make" (Lyon 1). This line of thought is consistent with Boyle, et al, who further argue this point, writing:

> We cannot assume distance from the digital since even the most innocuous of activities, such as grocery shopping, now rely on computational procedures that connect local purchases to global supply chains (252).

It is precisely through this claim of ubiquity coupled with the lack of distance associated with the digital that Boyle, et al propagate as being an inextricable component of humanity's postmodernity — and they are not incorrect in asserting their claim of "the digital" being "an ambient condition (252) — but technological eversion beyond the screen may be more pervasive than Aaron Hess's claim of it being "less like a technology and more like a common feature of modern existence" (Hess 6, as qtd in Boyle, et al 252, emphasis in the original). Not only are we in an age of producer and consumer looking "behind and beyond

the screen" (Boyle, et al 251), the screens themselves are looking into and beyond us. As New Aesthetic systems investigate through and beyond us, the methods by which they are looking transcends mere interface and intercalates us in corporeality. Previously, I have written about Google's indiscriminate exploitation of the poor with its Google Street View (GSV) project and how digital technological apparatuses, including GSV as well as others such as cloud computing, are subsumed into a Debordian concept of spectacular domination that is predicated by "the advent and acceptance of myriad computational technologies that are insistent upon both voluntary and involuntary capitulations of privacy by the user" (Gaines 106). The New Aesthetic, if we accept it as an agnomen for an assemblage of computation, networks, infrastructure, and data acts as an aggregate entity working in tandem with and through existing computational frameworks that infiltrate, construct, and predict the actions of the subject. In this respect the watcher has climbed down from the watchtower and rides the Info Strada. Speaking to the Committee on Civil Liberties, Justice and Home Affairs (LIBE) of the European Parliament on September 5, 2013, Jacob Appelbaum outlined a framework of how these machinations were put into place:

> Part of what we've learned from Snowden and his whistleblowing in the
> public interest is that the NSA has an all-encompassing spy program. But
> what is not really well described in public yet is that the FBI and CIA of the

United States also have similar access programs. When people talk about these PRISM-like programs, or PRISM itself, what the name actually means is: a program where people in corporations, or perhaps non-profits of any kind, or simply organizations, are complicit in helping the government. [Partly] because they are forced under the FISA[19] Amendments Act – FAA 702… (Appelbaum 54–55).

Appelbaum promulgates that these acts of subterfuge are di rigueur for technology corporations, by explicitly stating entities such as Google, Apple, Microsoft, and Yahoo have all succumbed to this governmental strong arming by having "systems either inside of their networks or attached to their networks, where they are willingly and knowingly assisting in secret interception (Appelbaum 55). Furthermore, the overreach of governments and corporate entities into the private lives of everyday citizens is situated at the forefront of the overlap of the physical and digital. Recent events, including the passage of the Senate Joint Resolution 34, passed by Arizona Republican senator Jeff Flake, which states, "S.J.Res.34 - A joint resolution providing for congressional disapproval under chapter 8 of title 5, United States Code, of the rule submitted by the Federal Communications Commission relating to "Protecting the Privacy

---

[19] The Foreign Intelligence Surveillance Act of 1978, which allowed for the creation of the Foreign Intelligence Surveillance Court (FISC). In 2013, Edward Snowden exposed the mass surveillance of American citizens authorized by FISC to reporter Glenn Greenwald and filmmaker Laura Poitras. The Greenwald article from June 5, 2013 can be found here:
https://www.theguardian.com/world/2013/jun/06/nsa-phone-records-verizon-court-order.

of Customers of Broadband and Other Telecommunications Services" (Flake) has set a precedent hereof to an essential nullification of the Fourth Amendment in the digital realm. This joint resolution, which was signed into law by Donald Trump on April 4, 2017, signifies that "Internet Service Providers (ISP) are now no longer obligated to protect Consumer Proprietary Network Information as they were under the rules put in place by the previous FCC Chairman" ("President Trump Signs Internet Privacy Rollback Bill").

Moreover, on March 7, 2017, "WikiLeaks released internal documentation of the CIA's massive arsenal of hacking tools and techniques. These 8,761 documents—called "Vault 7"—show how their operatives can remotely monitor and control devices, such as phones, TVs, and cars" ("The CIA Just Lost Control of its Hacking Arsenal. Here's What You Need to Know.") The leaked documentation, if presented in the context of government agencies leading the charge in dominance of the electromagnetic spectrum in the Global War on Terrorism™[20] outside of activist circles would ordinarily not be cause for alarm. However, the revelation that these software applications are, in part, developed to be used domestically causes a bristling terror; in short, U.S. government agencies are treating us all, whether allies or terrorists, as enemies of the state. This runs counter to Nick Land's, via Deleuze and Guattari, claim that "Despotism never accomplishes globality: 'the universal only comes at the

---

[20] I use the trademark symbol for certain ideas such as the Global War on Terror because they are directly related to late capitalism and earn untold profits for the aerospace, defense, and oil industries. I also believe it's impossible to declare war on and abstract adverb, but I digress.

end–the body without organs and desiring-production–under the conditions of an apparently victorious capitalism'" (Land 199; Deleuze and Guattari 139). The CIA, FISC, the FBI, and international actors, such as the U.K.'s Government Communications Headquarters (GCHQ) are capitalizing on Mark Fisher's suggestion that late capitalism provides a petri dish for the normalization of crises, such as the War on Terror™, where a catastrophe–such as the events of 9/11–allows for the stripping away of government to its military and police functions and everything else is subsumed into a business ontology where everything else is run as a business (Fisher 1-5; 17).). While the revelations behind these programs may be clandestine, at best, coupled with recent legislation a startling realization becomes quite clear: Hess's feature of modern existence is in the process of being co-opted and weaponized in an organized and systematic collusion involving both the public and private sector. A comprehensive investigation of the documentation of the contents of Vault 7 supplants the theoretical in this dissertation; however, a brief overview is necessary to highlight how the polychrestic nature of the New Aesthetic operates. Tools, like Athena, are an exemplar of how government intelligence agencies are working in tandem with technology corporations to capitalize upon the concept of the desiring-machine.

Wikileaks, in a press release for what they are referring to as "Year Zero," sets the overview for what they believe the CIA has been involved in at least since the actualization of the Snowden revelation:

"Year Zero" introduces the scope and direction of the CIA's global covert

hacking program, its malware arsenal and dozens of "zero day"

weaponized exploits against a wide range of U.S. and European company

products, include Apple's iPhone, Google's Android and Microsoft's

Windows and even Samsung TVs, which are turned into covert

microphones (Vault7 - Home).

For example, the CIA in conjunction with the New Hampshire-based Siege

Technologies, developed the Athena malware which is intended to attack

machines running Windows operating system. Athena uses what CIA

documentation describes as "a beaconing capability (including configuration and

task handling), the memory loading/unloading of malicious payloads for specific

tasks and the delivery and retrieval of files to/from a specified directory on the

target system (WikiLeaks - Vault 7: Athena). According to WikiLeaks, this piece

of malware can be customized to fit the parameters surrounding a specific target

or operation (WikiLeaks - Vault 7: Athena). Leveraging offensive cyberwar

technologies against citizens under the guise of bad actors ostensibly performs

Wendy Hui Kyong Chun's perception that computers are fostering a duality of a

dearth and abundance of knowledge, or as she colloquially states, "the less we

know the more we show" (Chun 15). Chun goes on to explain, as we shall later

see, that the proliferation of digital images and "total information systems,"

which software applications such as Athena exploit covertly (15). Data, including digital imagery, is subject to Barthes's argument that that these artifacts are not copies, but are "emanations of a past reality" (Barthes 88). These emanations, when linked to other emanations of past realities, acts as a social construction for the subject that tracks past actions and are used as predicative models for future actions and behaviors, in a sinister permutation of what Chun calls sourcery (Chun 68-72; 175). In addition to the vault of documents concerning the CIA's motives and techniques for spying on American citizens, WikiLeaks has released other caches that reify a darker version of sourcery, a black sourcery, through documentation that provides instructions on how to infect and disable Apple firmware and the source code for the anti-forensic Marble Framework, using smart televisions as recording devices, among others (WikiLeaks - Vault 7: Projects).

As I have previously mentioned, speaking to the European Parliament Civil Liberties committee on USA spying, Appelbaum articulated a version of this Debordian system of spectacular domination as he plainly discussed the clandestine relationships of information interception between government agencies such as the National Security Agency (NSA) and technology corporations, including Google (Appelbaum 55, qtd in Gaines 107). While these relationships may not induce a Foucauldian sense of behavior regulation under a panoptic gaze, law and media scholar Siva Vaidhyanathan suggests that free services such as those offered by companies like Google indicate the rise of the

Cryptopticon, a means of describing the phenomenon that people know they are being watched but are unaware as to how they are subject to the gaze (Vaidhyanathan 112). Furthermore, sociologists Zygmunt Bauman and David Lyon allude to technological practices such as those implemented by Google not only provide a sense of domination, but also present a means of "maintaining and reproducing order" (Bauman and Lyon 63). As Deleuze points out, a decentralized control mechanism like the New Aesthetic can be viewed as a shift from a centralized site to "societies of control, which are in the process of replacing the disciplinary societies" (Deleuze 4). "Control," Deleuze argues, "is the name Burroughs proposes as a term for the new monster, one that Foucault recognizes as our immediate future" (4).

Miller and Miller refer to constant surveillance by virtue of the "invisible eye" (Miller and Miller 6-7). While there is merit in the centrally located "eye" which can watch contained prisoners at will, it is far from invisible. Being centrally located in a position of prominence, the eye looks, but is also watched. As Frederic Jameson elucidates in his treatise on video in Postmodernism or, The Cultural Logic of Late Capitalism, a fixed dialogic such as daguerreotypes (or a theoretical prison in this instance) elides a mediation between machine and technology (73). Much like the Panopticon, Jameson notes that early forays into photography relied upon a centrally located eye, i.e., the camera, and an immobilized subject that was held in place by a type of armature which he likened to being strapped into another disciplinary object: the electric chair (73). Much

like the camera, the so-called invisible eye of the Panopticon "peers across like a gun barrel at the subject," the prisoner, like the photographic subject, is forced to peer into the alleged invisible eye, and for a time is "part of the technology of the medium" (73-74).

Conversely, the New Aesthetic, having manifold decentralized eyes, does not automatically intertwine the subject –whether it is the prisoner or the watched or other– into an unequivocal dialogical framework, but as polychrestia legitimately is the invisible eye, omnipresent and all-seeing beyond the comprehension of the subject; a truer, transparent and therefore more logical semblance of a god, or at the very least, speaks to "the incapacity of our minds, at least at present, to map the great global multinational and decentered communicational network in which we find ourselves caught as individual subjects" (Jameson 44). However, in order to understand how the New Aesthetic evolved into a polychrestic entity, we should look at how machines and technologies –both actual and theorized–since the Panopticon have been both created categorically for and utilized as surveillance networks and mechanisms.

Bernard E. Harcourt posits that Jacques-Francois Guillauté conceived of a perfect surveillance state in pre-Industrial Revolution Paris (Harcourt 62). In Guillauté's eccentric vision, the city of Paris was to be divided into twenty-four equal-sized neighborhoods, which were to be subdivided into districts of twenty houses, each under the watch of a syndic (62). This uniform reordering of la Ville Lumière, aside from clear bureaucratic minutiae, was to introduce the

watchman's raison d'être: the serre-papier. This paper squeeze was envisioned as a paper filing machine with wheels, twelve feet in diameter and thirty-six feet in circumference, could literally supply reams of surveillance information to the watchman at the tap of a foot (62) in what could easily be thought of in terms of a precursor to Big Data. While this system was never realized, other technological advances in machinic surveillance seem to portend the totalizing apparent in our surveilled society. While this system seeks to automate the intricate inspections that Himmelfarb mentions–and suggests a precursor to the petabytes of data that entities like Google collect annually–this system is still closer to the Panopticon than the New Aesthetic. While this system actuates a move towards decentralization, it was still predicated upon by a centralized, and therefore visible, eye.

Cynthia Haynes, in Chapter Two of the Homesick Phonebook: Addressing Rhetorics in the Age of Perpetual Conflict, draws parallels between IBM's Hollerith Tabulating Machine and the attempt at complete eradication of Jews in Nazi Germany (Haynes 41–42). Haynes proclaims, using the punch cards of the Hollerith machine as a primary artifact, that the tabulation machine acted as a forerunner of the modern-day search engine (Haynes 42). The holes created in the punch card identified and associated those who were considered undesirable by the Reich, such as homosexuals (Hole 3), gypsies (Hole 12), and Jews (Hole 8) (Haynes 42).

The Hollerith Tabulation Machine, devised from Herman Hollerith's idea to more accurately count populations during his time at the U.S. Census Bureau, was the result of capitalist greed run amok. Through a series of unethical business deals involving non-existent machines, excessive royalties, irregular pricing, and other unethical practices Hollerith was extorting the U.S. government (Black 34). By 1906, Hollerith's relationship with the Census Bureau was eradicated. Owing to his unscrupulous affairs with bureaucratic entities, it stands to reason that by the time of the ascent of Hitler the Hollerith machine was used as the premier head counting apparatus in the long-overview German census. It was here that the machine's most nefarious use crystallized. Through processing religion in the Prussia, Hole 3 (Jew) carried with it special instructions to also record place of birth (Black 64). The cards that designated Jews were processed separately (64). Much like the population it ultimately tracked, the hole in the punch card of the Hollerith created a paradox as theory object because as an artifact it both existed and did not. Such holes, predicated by an analogue eversion of technological advances into natural life, created a means of viewing what may have previously been concealed; this creates a transparency that flattens and condenses the sublime to the grotesque. This spectacular rendering of individuals to im/material object (or image) that supplants reality, such as the punch card hole is a representation of a wounding of ontological dignity (Cavarero 35; 55), and the flattening of the distance between the representation of the undesirable and the actuality of their unveiling as

objectionable strongly alludes to what Byung-Chul Han describes as pornographic (Han 21-22).

However, it is with the Lumiere Brothers that we are able to discern surveillance and the machinic as co-conspirators in the monitoring of humans. Through film we can see that the two has a shared history that can be traced back to the advent of mechanical motion imagery. As Catherine Zimmer has pointed out," imagery we have come to associate with surveillance has been with film from the beginning." Zimmer cites Levin's account of the 1895 "Lumière actualité, La sortie des usines Lumière [Workers Leaving the Factory]" in which the filming of the Lumière employees could be regarded as a form of corporate surveillance. The corporate gaze, as implemented by the boss/owner observing his workers leaving the factory, while innocuous at a cursory glance, appeals to "micro-dramas of surveillance" in which people are followed and are subject to both the visual and the acoustic (Levin et al. 581). The film, which was filmed by Louis Lumière with his personal Cinématographe, has a run time of less than two minutes, and portrays mostly female workers and dogs leaving the factory in Lyon.

Figure 13: La Sortie des Usines Lumière (Workers Leaving the Lumiere Factory) (1895). Uploaded to YouTube by MediaFilmProfessor [Public Domain].

also as the predecessor to the ubiquity of closed-circuit television cameras (CCTV), which in some instances now includes biometric information collection properties including facial and gait recognition.

Building from the recording of workers leaving the Lumière Brother's factory, John Turner has framed surveillance as "a narrative and structural device" that is ubiquitous. He claims that cinema as a medium can be regarded as

"hyper-surveillant" and that "the uninterrupted scopic drive of the motion picture camera as a recording instrument collapses all public/private distinctions, peering into the interior lives and spaces of its subjects." Turner frames this collapse of public and private within the philosophical and political, citing Debord's Society of the Spectacle, Henri Lefebvre's Critique of Everyday Life, and Baudrillard's concept of the spectacle as "a synonym for late capitalism" where cinema may be viewed as a new form of commodity production.

Building from the relationship between photography and surveillance, Google Maps, and more specifically Google Street View (GSV), has rendered much of the world in a pixelated 360° panorama available to anyone with a smartphone or WIFI connection. While this computational achievement has been a positive for navigating both urban and rural environments, it has also allowed for unintended labor practices such as community design and writing literature (Vaidhyanathan 99). However, GSV also presents darker implications. Using a fleet of Vauxhall Astras, Chevrolet Cobalts, and Toyota Priuses affixed with nine-lens cameras, Google has performed a form of corporate surveillance that both highlights exploited workers and is simultaneously complicit in these same workers being exploited as a form of labor for others. On a related note, Jon Rafman's ongoing art project "9-eyes" (Rafman 2017), has resulted in a curated collection of exploited workers and the economically disenfranchised that often portrays those photographed as violent and animalistic. The collection features possible "sweatshop" employees, sex workers, and others who have been

marginalized through an increasingly globalized economy. Rafman's art is a form of labor that, through his deliberate selection of such imagery, is situated in Guy Debord's notion that networks of promotion and control slide imperceptibly into networks of surveillance and disinformation (Debord 74). Through this notion of spectacular domination in which he is profiting directly through the exploitation of others' labor, Rafman also supports Debord's notion that individuals will collude to maintain this system of spectacular domination in a vast conspiracy (74).

Through a modern update of Debord's practice of détournement, those who are most vulnerable to Google's Street View collection schedule can appropriate this form of surveillance as a means of protest and resistance to turn expressions of the capitalist system and its media culture against itself (Holt and Cameron 252). By using components of the same systems that Google and Rafman employ to exploit, those that are being profited from can hijack the surveillance apparatus that has been established as a means of resistance. I contend that certain subversions of the corporate gaze highlighted in this essay can be viewed as a Situationist act by those who may have no other recourse to contest being surveilled.

A Street-Level Panopticon

GSV, launched in 2007 as a part of Google Maps, this service has already documented cities within the United States from San Francisco to Charlottesville, Virginia (Vaidhyanathan 98). In a 2012 article for CNET by journalist Dan

Farber, Google claims to have captured over 20 petabytes of data, roughly the equivalent of 20 million four-drawer filing cabinets filled with text ("Google Takes Street View Off-Road with Backpack Rig" 2017). While this imposing volume of documentation can be viewed as a boon for navigating the millions of miles of roads on Earth as well as for unintended uses such as community design (Vaidhyanathan 99), the sheer amount of data collected in the decade since GSV has been released presents scores of privacy concerns. However, University of Virginia Media Studies and Law professor Siva Vaidhyanathan notes that critical suspicion of GSV has waned in the decade since its release (Vaidhyanathan 99). This assertion is made despite his claim that it is among the most inescapable example of what he calls "Googlization" (Vaidhyanathan 101). Moreover, researchers at Google in an article published for the Institute of Electrical and Electronics Engineers in 2009 proclaim that by using sliding-window detection they have been successful at blurring 89% of faces and 94-96% of license plates automatically (Frome, et al. 2373). While on a superficial level it appears as if Google is exercising diligence to moderate concerns over privacy regarding GSV, a Situationist view of this service reveals possibly darker motives.

Debord, in his later work, is explicit in the spectacle's role in the rise of the surveillance state as well as the rise of new professions in this society. In addition to the aforementioned slide into networks of surveillance and disinformation, he also notes that as this slide occurs into spectacular domination, that individuals will collude to maintain this system of spectacular domination in a vast

conspiracy (74). This is evidenced in the advent and acceptance of myriad computational technologies that are insistent upon both voluntary and involuntary capitulations of privacy by the user. While it could be considered paranoid to assume that many web-based computational technologies are foci for a totalitarian surveillance state, some of these technological advances lend themselves quite well to its users being subjected to widespread scrutiny. Cloud computing, in which the user entrusts data storage to owners of remote servers, falls under this system of spectacular domination. Exact figures of how much data is being entrusted to technology corporations can only be estimated, usually in terms of unique users or entities. For example, companies such as Dropbox boast over 500 million users and 200,000 businesses ("Dropbox" 2017). While data management companies similar in scope and mission to Dropbox maintain that a user's data is private and secure, others remain skeptical.

These machines and systems, having conspicuously no commonality, in the New Aesthetic have come together as a global desiring-machine in which ostensibly "all things flow" (Whitehead 208): energy, data, Ashley Madison users' profiles, images of mass graves south of Damascus; the rhizomatic schizophrenia of the flux of who we are, where we've been and where we will end up. The convergence of disparate systems: satellites, drones, server farms, social media, routers, switches, cables, closed-circuit television cameras, biometric recognition software, generative code, and others have been systematized into a worldview

predicated upon the belief making things visible make it better, and that technology is the best means to make something visible (Bridle 242).

Talking 'Bout the Meontic Spatio-Temporal Partially Visible Blues

In 2010, I was standing on Juremeiah Beach outside of the hotel Burj al Arab in Dubai. In the distant skyline was Burj Khalifa, the freshly completed tallest building in the world. As I stood on the beach, I pulled out my iPhone 4 to photograph schooner-esque glass and steel seven-star hotel with a helicopter landing pad to email back to my mother in coastal South Carolina. It didn't occur to me then, out among the approximately seven quintillion, five hundred quadrillion grains of sand, some of it sticking to my feet, my clothes, and my skin, that I was standing within uncountable somethings massively distributed through time and space. While we are certainly influenced by massive systems, including religious, ideological, corporate, government and so on, others of these systems are so massive as to be meontic: we cannot conceive of their breadth across time and space. These massively distributed somethings are known as Hyperobjects, and what is commonly known as the cloud can be categorized as one of these so-called Hyperobjects. It is through the theoretical framework of the Hyperobject that I intend to make the case for the convergence of disparate systems as not just a metaphor for computational infrastructure and processes, but as a distributed entity that we are not only mediated by but reside within. Because the Hyperobject subsumes aspects of the social, economic, and

environmental components of our existence, I profess that the New Aesthetic, owing to its imbricating between corporeality and incorporeality, as well as its structural makeup fits into a formalization of a Hyperobject. It starts in the sky.

Bridle, writing in The Guardian, outlines how the cloud has become a metaphor for computational technologies. Its beginnings as an innocuous diagram connecting ideas, thoughts, and concepts has eventually given way to a quite literal physical infrastructure consisting of "phone lines, fiber optics, satellites, cables on the ocean floor, and vast warehouses filled with computers, which consume huge amounts of water and energy" (Bridle). While Bridle is accurate in his argument that the cloud is "not some magical faraway place," and correctly situates "weighty edifices of the civic sphere" (Bridle) within its purview in our networked age, it is precisely this proximity that situates our reliance upon digital and computational technologies that obscures our relationship to the cloud.

Keep in mind that Bridle, who is best known as coining the term the New Aesthetic to explain the convergence of the digital world into the physical, has only hinted at the cloud's ubiquity. Through this ubiquity, and with the knowledge put forth by Appelbaum that surveillant practices are actively attached to the objects that comprise the technological everywhereness we find ourselves intertwined in, it becomes apparent that the New Aesthetic is the predominant surveillant assemblage. I posit that the New Aesthetic and its subsequent surveillant architectural rhizomatic frameworks can be better defined by Timothy

Morton's concept of the Hyperobject. But, what constitutes a Hyperobject, and how does this theoretical notion subsume computational networks?

Morton defines a Hyperobject as something that is massively distributed in time and space relative to humans. According to Morton, this can extend to include things such as black holes, the Everglades and Styrofoam (Morton 23). While this seemingly may include any and everything under the sun, and including the sun, the concept is a little more nuanced. If we consider the attributes that comprise a Hyperobject across its spatio-temporal distribution, then we can begin to understand how this model may be suitable to describe the New Aesthetic in its current iteration. Speaking on the nature of science in the late-twentieth century, Buckminster Fuller states that the majority of science is concerned with "the ultra- and infravisible, the macroastrophysical and microatomic" are "99.9 invisible to the human eye" (Fuller 161). Framing Fuller's view of the scientific in terms of computation in the twenty-first century, we must not only come to terms with computation being mostly invisible, but like Fuller we must also realize that we are living in the midst of these very real processes that are "not apprehensible by humans" (161). By looking through five different criteria set forth by Morton, we can see how a global computational surveillance apparatus is inescapable and pervasive that it could be aggregated as a Hyperobject.

1.   *Hyperobjects are viscous.*

In the sense that a Hyperobject is vast and can in some instances defy how we understand the spatiotemporal, the argument can be made for certain aspects of the new Aesthetic. Morton makes the case that Hyperobjects exhibit viscosity, that they stick to everything they touch in immediate, intimate symptoms (Morton 28). The New Aesthetic is viscous, immediate, and intimate across several fronts: fiber optic networks adhere to the ocean's floors, growing over with aquatic flora and becoming home to scores of marine life, indistinguishable from the flotsam that has finally settled into the abyss. According to Nicole Starosielski, undersea fiber optic cables is the rhizomatic armature that links out global network society (Starosielski 1), and accounts for roughly 99 percent, or thirty trillion bits per second of information, including phone calls, emails and text messages, digital imagery, and even some television (1). Through the rhizome of cables crossing the oceans, the web, and by default, the New Aesthetic is truly global; if these cables were disrupted, global communications as we know it would cease to exist (2). Which brings us to an interesting impasse: The New Aesthetic, which acts as a series of decentralized systems that surveil in a decentralized means, is subject to centralization along governmental and corporately fixed routes that Starosielski situates as the result of "a small cable industry, which has navigated natural environments, built architectures of exchange, and generated new social and cultural practices, all to ensure safe passage through surrounding turbulent ecologies" (2).

Continuing with the fiber optic cable as a more tangible, albeit withdrawn emblem of the New Aesthetic, several avenues of centralized adhesion become apparent. Most notably, fiber optic cables typically stick to well-worn subaquatic paths that have been used for similar purposes: telegraph and telephone cables. These paths, lines traced over several times through either colonialist endeavors or corporate imperialism, and often the distinguishing between the two is quite blurry. As Starosielski points out, the laying of telegraph routes in the late nineteenth century more often than not stuck British colonial transportation and trade routes, which supported and stuck to already-existing networks of global business (31). Moreover, it must be noted that the relationship between cables and marine transport both rely upon "smooth transitions between land and sea," and both are subject to security issues including geopolitical strife and natural disasters (Starosielski 29–31). Cut off communication and transport lines you cut off the head of the colonizing serpent.

Aside from sticking to predetermined routes, the fiber optic cable also sticks to and leaves traces in more bureaucratic ways. The transport and dissemination of data and information has become a valuable, if not fetishized, commodity. Several organizations stake seemingly endless claims to fiber optic health: the Pacific Cable Board, the Cable Damage Committee, the Federal Communications Commission, the Australian Overseas Communication Corporation, the Cable Management Commission, and the Reliability of Global Undersea Communications Cable Infrastructure Summit (ROGUCCI) are only a

smattering of bureaucratic institutions stuck to cables and their well-being (Starosielski 28; 114; 116; 147; 154). These organizations do not account for the more clandestine stickiness that agencies like the Department of Homeland Security and the NSA bring into the equation. Trevor Paglen, who creates art based on the premise of mass surveillance, shows us the viscosity of the NSA to fiber optics, through the idea of choke points, i.e., areas where fiber optic cables converge and data can be easily extracted from and sent to the NSA Utah Data Center for analysis (Trevor Paglen's Deep Web Dive | Behind the Scenes - YouTube). The visualization of an undersea cable in the Paglen video makes apparent the viscosity that Morton elucidates and Starosielski quantifies. We can see the cables grow into the subaqueous terrain, hosting delicate skerries teeming with aqueous flora and fauna, predators and prey, and the capillaries of a living global computational network coursing with a new blood dynamic and animate with the hemoglobin of bits per second.

Beyond the glutinousness exhibited by the fiber optic cables is the networks themselves. They entangle and intertwine with our data-generated selves as we interface with social media networks and into other areas of the World Wide Web. The New Aesthetic through its algorithmic machinations determine stock trades, what we purchase, and increasingly, becomes surrogates for our corporeal selves. Quantcast, the San Francisco-based analytics company, brags that their data sets are so extensive it is the equivalent of having coffee with every online user every hour (Cheney-Lippold 108). It is here we see exactly how

viscous the New Aesthetic Hyperobject is: it sticks to us, and follows us from intimacy point to intimacy point, creating an assemblage that foregrounds no constant except from variation to variation. It is through the assemblage of a user's data and the machines that record and track such information movements that we see Deleuze and Guattari's desiring-machines come to fruition. In the same vein that they claim no distinction between man and nature, the New Aesthetic Hyperobject in its viscosity makes no distinction between human and data. Desire, like data, flows. As Henry Miller forecasts Deleuze and Guattari's desire, he writes, "I too love everything that flows: rivers, sewers, lava, semen, blood, bile, words, sentences. I love the amniotic fluid when it spills out of the bag. I love the kidney with it's painful gall-stones, it's gravel and what-not; I love the urine that pours out scalding and the clap that runs endlessly; I love the words of hysterics and the sentences that flow on like dysentery and mirror all the sick images of the soul" (Miller 232; Deleuze and Guattari 5-6). The symbiotic desires of the machines craving our data and our intense hunger for the collection and analysis of this data blur any discernable distinction between the symbiosis at play and reinforces this viscosity, this stickiness of desire between information and the computational.

David M. Berry and Michael Dieter refer to a blurring of the historical distinction between the digital and non-digital that becomes superfluous in everyday experiences. They see that computation is becoming experiential, spatial, and materialized in its implementation, and has become embedded

within the environment and embodied. It is in this realization that Berry and Dieter concur that neologisms including post-internet, post-digital, and new aesthetic may refer to a coming of terms with the disorienting and immersive qualities of computational infrastructure as they scale up and intensify. The New Aesthetic is literally sticking to and altering language. They cite Felix Guattari's concept of post-media as an orienting alternative to hedge against the contemporary lines of digitalization (citation from post digital aesthetics).

However, I would like to emphasize that surveillance in a machinic Hyperobject is less concerned with discipline within institutional boundaries than with building through this viscosity what Deleuze calls societies of control, where information technologies, codes and electronic cards work in tandem or contra computers versus physical barriers. Deleuze presciently indicates:

Types of machines are easily matched with each type of society-not that machines are determining, but because they express those social forms capable of generating them and using them. The old societies of sovereignty made use of simple machines-levers, pulleys, clocks; but the recent disciplinary societies equipped themselves with machines involving energy, with the passive danger of entropy and the active danger of sabotage; the societies of control operate with machines of a third type, computers, whose passive danger is jamming and whose active one is piracy and the introduction of viruses (Deleuze 6).

Deleuze's farsightedness former head of the National Security Agency General Michael Hayden proclaim that "we kill people based on metadata" (Ex-NSA Chief: "We Kill People Based on Metadata" - ABC News). Byung-Chul Han, writing on Heidegger and Being, notes that the properly acting hand is the writing hand. Because the hand is the medium of being, and typing, via typewriters or computer keyboards, involves only the fingertips, draws us away from Being. In a similar vein, the data generated by us in the New Aesthetic still sticks to our corporeal selves and acts as an agent that draws us away from our Being. The viscous information constructs us piecemeal as a sum of our parts: social security numbers, credit ratings, shopping habits, locations, phone calls, emails, social media check-ins becomes a proxy of and for our physical selves: a writ of habeous corpus involving a rendered ghost.

2. *Hyperobjects are Non-Local*

Data, much like art, sends us information from another place. Sometimes, that information is an accurate portrayal of events and society, many times it is not. Van Gogh's Starry Night, for example, has been believed to have been completed in June of 1889. However, in 2003, Southwest Texas State University astronomers Russell Doescher and Donald Olson, along with Olson's wife, Marilyn, an English professor, have determined that Van Gogh was working on the picture at 9:08 p.m. on July 13, 1889 (Kahney). Through the careful analysis of astronomical and meteorological data, these three killjoys have ruined an

aesthetic experience for many. What we also find is that the traces of phenomena such as moon phases and weather reports are left behind and have withdrawn from the phenomena they are describing. Such is the way with data: it is concerned with past events, which no longer exist. Data in its rawest form, much like radiation, cannot be seen yet it exists (Morton 38). Much like Doescher and the Olsen's disrespect of Van Gogh and his vision, rendered data within the New Aesthetic is predicated upon a lack of respect. Byung-Chul Han writes that respect is measured by a pathos of distance (Han 1). In the New Aesthetic Hyperobject, the pathos of distance is replaced by the spectacle of voyeuristic gazing that the data encourages. Han argues that respect is a deliberate turning away from what is deemed private; the spectacle of the New Aesthetic obscures the terminator between what is public and private, and all is put on display, whether its exposition through social media, or cookies tracking which sites you visit the most. In the New Aesthetic, we are all gazing and being gazed upon from a distance.

3.   Hyperobjects are Subject to Temporal Undulations

As you approach an object, more and more objects emerge (Morton 55). Like Zeno's paradox, Morton writes, Hyperobjects envelop us but are so distributed through time they seem to taper off (55). Much like Zeno's paradox, the New Aesthetic and its glut of data begets more and more data the closer we examine and interpret it. The Object-Oriented Ontologist, Paul Levi Bryant, likens our experience of Hyperobjects as being in a pool. He states: Hyperobjects are thus

like our experience of a pool while swimming. Everywhere we are submersed within the pool, everywhere the cool water caresses our body as we move through it, yet we are nonetheless independent of the water. We produce effects in the water like diffraction patterns, causing it to ripple in particular ways, and it produces effects in us, causing our skin to get goosebumps (Bryant 132–133). The New Aesthetic, as a Hyperobject, is no exception. Our social, civic, and professional lives are immersed within it. We are mediated by it. We are watched, examined, and constructed by it. Graham Harman writes that because objects withdraw irreducibly, we cannot get closer to them (Harman 31). The more data we have about each other, the more we realize we know so little about one another, as well as the algorithms and processes by which we obtain this information. Moreover, the rise of artificial intelligence, the ever-increasing fear that machines will replace humans in labor and more sophisticated endeavors, and the looming question of obsolete technologies, data retrieval from these outdated machineries, and e-waste affect not only our digital selves, but the physical world we inhabit will most likely long exist after we have run our course. Morton states that we have doubled the number of minerals found on earth, and that concrete artifacts will most likely form its own strata in the earth's crust hundreds of thousands of years from now. In a similar manner, the plastic, silicon, and refined copper from computational machinery will also have formed its own strata, creating veins and deposits of non-degradable substances that will evolve into a type of terraforming. Will the data encased within these future

earth-forming materials cease to exist, or will they lie dormant until such a time that a lifeform can extract them, or will they evolve alongside the materials they coexist within? What becomes of the relationship between container and contained? Will we have to rethink it?

4.   *They are also in phases*

In his concept of the Stack, or, his vision of the world as a vertical computational architectural structure, Benjamin Bratton writes that the nomos of the Cloud rotates from a two -dimensional map to a vertical, sectional stack whose topography is shaped by multiplication and superimposition of layers of sovereign claims over the same site, person, or event (Bratton 111). Strategic networks of data centers, fiber optic cables, energy pipelines, servers, nodes, and so on magnetize geographies around them, generating legal exceptions, monetized cognition, and platform struggles. As he points out, when one is looking at a mountainous region, trees above the cloud line are difficult to see form the valleys below (Bratton 111; 373). As we know the New Aesthetic exists, and we can retrieve data on our screens, we mostly do not see the former Siberian missile command centers converted into data centers, or skyscrapers in downtown Los Angeles that have been turned into switching hubs by CoreSite/Carlyle Group. Nor do we see line commands that in databases turn into actual traffic of goods, even though we can look at Amazon's interface. This speaks directly to Morton's idea that Hyperobjects are phased: they occupy a high-dimensional phase space that prevents them from being seen as a whole

Morton 70). Ed Finn, in What Do Algorithms Want, highlights the 1,000 pages of code of the Orion algorithm that keeps United Parcel Service deliveries efficient and timely (Finn 19; 47). We do not, nor should we, want to see such minutiae at work: but we do see when our Amazon packages do or do not arrive on time.

As Morton points out, phasing happens because one object translates another (Morton 77). This is a feature of how objects affect one another, and the new Aesthetic is no exception. A Fair Isaac credit score of 824 is an aggregation of every payment made on time, the number of open credit accounts a person has open, length of credit, the number of inquiries, and revolving utilization. What these discrete data points do not show explicitly is the number of jobs one has had, the ability one has to provide for one's self, or the intent of credit worthiness. It is a snapshot, or what Roland Barthes describes as an emanation of the referent. For Barthes, the truth of photography is that it is inseparable from its referent (Barthes 89). Unlike the photograph, phasing within the New Aesthetic exhibits neither love nor fidelity to its source. As an aggregated rendering of the subject, we are constantly re-envisioned in a Bayesian model by endlessly updated information about ourselves that courses through the cloud. As such, we can never truly see or know all there is to know about us, nor can we truly see or know what comprises the New Aesthetic Hyperobject. As a constantly evolving entity, the best we can hope for are glimpses that move in and out of view.

5.   Interobjective

Hyperobjects are also interobjective, that is, they are composed of relations of more than one object (Morton 81-82). It is through interobjectivity we can sense what Bridle has previously called the New Aesthetic. Just as Heidegger claimed that we cannot hear the wind itself, but only in the door and in the trees, we cannot sense necessarily sense the New Aesthetic itself (Morton 86). However, returning to that day in 2010 when I was emailing my mother a photograph from a beach in the Persian Gulf, this interobjectivity becomes clearer. The seven quintillion, five hundred quadrillion grains of sand, some of it sticking to my feet, my clothes, and my skin, others blowing in the wind, still others rolling out with the receding tide we can understand that silica, a primary component of the myriad structures and systems that make up the cloud. It is found in the earth, stars, planets, animal hair, and cannabis sativa (Morton). We can know that Jöns Jacob Berzelius isolated it in 1824, that it has 14 electrons, 24 isotopes, is the seventh-most abundant element in the universe and the second-most abundant element on the planet, after oxygen, according to the Royal Society of Chemistry. About 25 percent of the Earth's crust is silicon. Silica is not the New Aesthetic, nor is the New Aesthetic silica. Perhaps the New Aesthetic is a localized interobjective component of the silica Hyperobject? Besides computer chips, silicon has many uses; weirder spots where this element appears include

menstrual cups, breast implants and oven mitts. In this sense, silica and its oxidized derivatives is the linking object, something Morton refers to as the mesh (Morton 83). It is in this mesh we see the strange interconnectivity of things and concepts. Morton is quick to point out that there is not a lossless transmission of information in this mesh: MP3s are perforated versions of sound, JPEGS are perforated versions of vision, and as I contend, the New Aesthetic especially in regard to our ontologies, is a perforated version of humanity (84-85). At the other end of this, the rise of artificial intelligence, the ever-increasing fear that machines will replace humans in labor and more sophisticated endeavors, and the looming question of obsolete technologies, data retrieval from these outdated machineries, and e-waste affect not only our digital selves, but the physical world we inhabit. In this sense we can see that the New Aesthetic transcends Bridle, glitched artifacts, the internet, the Anthropocene, and even computation itself. It is in this abundant element called silica we see interobjectivity in the New Aesthetic. As a semiconductor, it allows for the passing of information across large distances, to be stored onto other objects, and to be retrieved at will. Even if we could conceive of the vastness of the physicality of interobjectivity that makes up a Hyperobject, we are nonplused when we consider that as an object, the New Aesthetic as a Hyperobject is larger on the inside than it is on the outside, much like Dr. Who's beloved Tardis (Morton, Realist Magic 49). The admitted boundless amount of data living inside of the New Aesthetic Hyperobject is akin to the Kantian sublime in that inner space is bigger than outer, but instead of

nothingness par excellence, New Aesthetic inner space is awash in the

information of everyone jacked in. However, unlike TARDIS, the inside of the

New Aesthetic is partially relative to its exterior.

Chapter 4: Machinic Eyes

The "new man"— the Bolshevik specialist, engineer, or functionary — came to represent a new code of social ethics, which was sometimes simply called kultura. In keeping with the cult of technology and sci¬ence, kultura emphasized punctuality, cleanliness, businesslike directness, polite modesty, and good, but never showy, manners. It was this understanding of kultura and the party's passion for the League of Time, with its promotion of time consciousness, efficient work habits, and clock-driven routine, that were so brilliantly caricatured in Eugene Zamiatin's novel We and that later became the inspiration for George Orwell's 1984.

> *-James C. Scott, Seeing Like a State*

Fingerprint file, you get me down

You keep me running

Know my way around

Yes, you do, child

Fingerprint file, you bring me down

Keep me running

You keep me on the ground

Know my moves

Way ahead of time

Listening to me

On your satellite

> *-Keith Richard and Mick Jagger, Fingerprint Files*

A nine-digit number

For every living soul

That is all they talk about

At Data Control

They know everything about you

> *-Grant Vernon Hart, Data Control (Hüsker Dü)*

Interlude: Looking in the King's Court

Figure 14: Execution of Louis XVI of France on 21 January 1793, from an English engraving of 1798 [Public Domain].

When Louis XVI, to borrow from Dickens, met his fate by "…the National Razor which shaved close: who kissed La Guillotine looked through the little window and sneezed into the sack" (Dickens 240), a systematized surveillance apparatus was firmly implemented within Versailles, la Ville Lumière, and throughout l'Hexagone as a passive, yet totalizing power. As Arlette Farge and Michel Foucault indicate, lettres de cachet, i.e., private petitions addressed were

addressed to the King to be decided, a commingling of public and private spheres was happening through both the "symbolic regime of letters and the optical realm" (qtd. in Ernst 460). Wolfgang Ernst, using the reign of Louis VXI as a case study, situates the role of mediation as a vehicle for surveillance. Aside from the petitions that the King allegedly presided over, mediated power, often under the guise of surveillance, was and continues to be a powerful symbol with French origins.

Vestigial nods to the legacy of Citizen Louis Capet, as Louis VXI was known after his arrest, are still present within a New Aesthetic framework. As Ernst argues, royal surveillance under ancien regime was not viewed as suppression, but as protection (Ernst 461). Ernst, through Louis Marin, tells us the link between an optical regime of power, an embodied King's Eye through currency, portraiture, and the national imagination has acted as a suitable prototype for the acceptance for surveillance. He argues that "these days, the paranoia of panoptic regimes in modern societies is being replaced by a productive, though fatal provocation of the public, by exhibition of the private" (Ernst 461). He is, of course, referring to an amalgamate of web and telecommunications.

A Bigger Big Brother

The integration of web technologies with telecommunications that is referenced in Big Brother, a popular international television show that was originally developed in the Netherlands, is the exemplar of Ernst's concept of the

exhibition of the private. Specifically, the French introduction of the show, which lasted for 100 days near Cologne (from March to June 2000), along with the slogan "You are Not Alone" (461) uses web and closed-circuit television to create what I posit is an Orwellian compliance with a totalizing watching. By creating a surveillant-normative performance through a popular show on a popular medium, then as Baudrillard states, we are living in a most radical democracy, one where there is "maximal exaltation for a minimal qualification" (Baudrillard 481). To put it another way, the rise of the reality television star is simply the beatification of the ordinary, or as Baudrillard states, "a man without quality" (481).

The hint of a surveillant-normative practice hinted at by Ernst and Baudrillard in shows like Big Brother and Loft Story (which follows a similar premise as Big Brother) for me is exemplified in the documentary film We Live in Public. In this documentary Josh Harris, an early internet entrepreneur, cashed out of the business he founded and began what he called a "cultural history experiment," titled Quiet we Live in Public (We Live in Public YouTube). Quiet, as Harris colloquially referred to the project involved the building of a capsule hotel not unlike Japanese kapuseru hoteru. The kapuseru hoteru, or capsule hotel, are popular accommodations which are nothing more than a space roughly the length and width of a single bed. They are popular with frugal travelers, the working class, and salarymen who either missed the last train or are too embarrassed to face their families. In the economic recession in 2009 and 2010,

pod hotels such as Hotel Shinjuku were home to an estimated 10,000 unemployed, the "secret homeless" not accounted for in the official estimate of 15,800 homeless people in Tokyo (Tabuchi); something akin to a mausoleum or catacomb for those who cannot survive the Derridean "plagues of a new world order" (Comaroff and Comaroff 291) which are being realized through "instabilities of advanced capitalism and neoliberal policies to privatize all collective goods and services" (Monahan 60). While these innuendos of a dystopian economic present a bleakness associated with bodies in proximity to each other, it is the direct referent to the past that is most alarming; Harris likens his cultural historical experiment to the Holocaust by proclaiming that he envisions the Quiet project as:

A capsule hotel, underground, to house over a hundred people. The image I have my mind is like in a concentration camp, you know those pictures where they're all they're all facing forward, and an 80-foot-long dining room table with free food and drinks for a month. (We Live in Public YouTube). (see Figures 15 – 18).
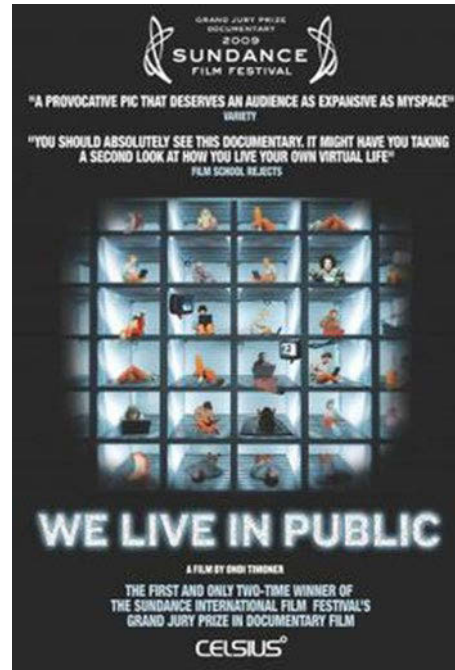
Clockwise, from Left- *Figure 15*: A Japanese kapuseru hoteru (By Chris 73 / Wikimedia Commons, CC BY-SA 3.0);*Figure 16*: We Live in Public movie poster depicting the Quiet pods (By Source, Fair use);*Figure 17*: Dachau Concentration Camp (Creative Commons 2.0 Generic CC BY 2.0);*Figure 18*: Horror chamber at the Buchenwald Concentration Camp near Jena, Germany (US soldier Pfc. W. Chichersky? [Public Domain]).

What Harris did not realize, as evidenced in the photograph attributed to Private

First-Class Chichersky, is that for the Jews, who as we have previously seen were

mediated by technology through the Hollerith Tabulating Machine, the closeness

he admires with the Nazi's method of efficiency had a pernicious endgame: the oven and the gas chamber. Max Heller, one of the cameramen for Quiet, corroborates Harris's autocratic tendencies through his account of the process: To be a citizen of quiet you had to really give up a lot there was a tremendous fascist overtone to the whole thing. If you want to be involved you had to be interrogated and then you, you get issued a uniform once you're in you're not allowed to go out literally you cannot leave the premises again we've got to make sure this discipline in the way his vision was 'you're gonna wear my outfit, you're gonna sleep where I tell you to sleep, you're gonna eat where I tell you to eat, and you're gonna exist here and I'm gonna film every part of it from you hanging out to you sleeping - you eating - showering - you shitting. Don't bring your money with you everything is free except the video that we capture of you that we own.' (We Live in Public YouTube).

Quiet, extending beyond Baudrillard's idea of radical democracy, lends an air of confidence to what might be considered the endgame of the New Aesthetic: that of a populace under the purview of a totalizing surveillance the "cast members" of Loft Story and Big Brother enjoyed the general promiscuity of living a life devoid of individuation or taboo. This included not only sexual taboos but also the auto-communicational ideal where they are simultaneously being watched and watching themselves enclosed in a zone, a "ghetto of luxury," where the laws of society are abolished (Baudrillard 482). For those of us who are watching the

disintegration of societal mores on the screen, the performance of abolition leads to what Baudrillard refers to as a "race towards insignificance," where the Heideggerian notion of the second fall of man, i.e., the "fall into banality," where even death is an event that is reduced to spectacle (Baudrillard 482-484). Baudrillard illustrates this claim by arguing that snuff films and "televised bodily torture" will soon follow (483).

Slavoj Zizek, echoing the sentiment of Deleuze and Guattari's desiring machine, argues for the psychoanalytic notion of fantasy that Baudrillard hints at in his treatise on reality television and the spectacle of stupidity. He states that "fantasy proper" Is not necessarily contingent upon the scene itself, but through the non-existent imagined gaze observing it, such as the same motivations that caused Aztecs to create giant figures onto the ground (Zizek 225). The fantasy of being seen, argues Zizek, has a powerful affect upon the human psyche. He compares the affective anal sex scene by the pool in Kundera's Slowness to the Khmer Rouge Cambodia laws that stipulated that married couples, who normally had to sleep in separate barracks, were compelled to engage in sexual intercourse on the first, tenth, and twentieth days of each month (225). These government-sanctioned coercions to create more Cambodians were watched over by Khmer Rouge guards whose charge was to visually verify that couples were copulating by looking through transparent bamboo curtains into the cubicles where strong-armed coupling was to take place (225). Zizek furthers the argument by his own assertion that in the days after September 11, 2001, that many of us experienced a

"'compulsion to repeat' and jouissance beyond the pleasure principle" in the desire to watch the twin towers fall and the pleasure we received was "jouissance at its purest" (Zizek 226-227). This masturbatory performance of annihilation played out across much of the 2000s. Beginning with the encrypted video feed of Timothy McVeigh's execution–which was allegedly hacked into in June 2001, YouTube and other video outlets were besieged with videos depicting disturbing events like the executions of journalist Daniel Pearl, humanitarian aid volunteer Alan Herring, Walter Foley, and backpackers Maren Ueland and Louisa Vesterager Jespersen. The jouissance associated with this specialized form of murder porn has led to another type of surveillance: Facebook and other social media platforms have been using hashing algorithms to detect and remove videos depicting extreme violence, often to no avail, for several years now ("Facebook and YouTube Use Automation to Remove Extremist Videos, Sources Say").

Eyes Without a Face

As we now have a sense of how systems of surveillance can be implemented, we must now delve into methodologies of surveilling. The New Aesthetic, according to several scholars, is manifested by a preoccupation with glitch as an aesthetic. David M. Berry is correct in that the New Aesthetic "revels in the possibility of revealing the grain of computation" as a means of describing how a glitched aesthetic has "permeated our everyday lives"(Berry and Dieter 44; Berry 2012, qtd. in Berry and Dieter 44). Moreover, Bolter and Gromala are somewhat equally correct in their assertion that the glitch is part of an

experiment in interaction design by so-called new media artists (Bolter and Gromala 24; Hodgson 158).

Justin Hodgson, who writes on the New Aesthetic as a saturation of digital mediations is not wholly incorrect in the notion, through Bart Hess's Digital Artifacts installation that the "computational process/mishap that result in glitch…and the embodied forms of simulation or representation that call attention to itself" is a rhetorical calling card of the New Aesthetic (Hodgson 158). Hodgson is also correct in his argument, through Achituv and Utterback's Text Rain when he refers to the "underlying human registers" through which certain mediations have meaning–what he refers to as a "folding of layers upon layers of awareness into the mix" –as exposing operative mechanics of this particular installation through upgrading the interactivity with a series of devices associated with The Quantitative Self™ (Hodgson 158–59; emphasis mine).

Reciprocal works of art notwithstanding, there is something fundamentally amiss in these descriptions of facets of the New Aesthetic. Glitch–whether as viewed as an aesthetic interpellation, an irregularity in operation, or a temporary setback–is not necessarily an experiment in interaction design as it is the revelation of an interaction that the interpellated does not know or care is occurring. Part of this unknowing, according to Rahel Aima and Madeline Ashby, is the ability to point out the problematizing of the New Aesthetic through a psychoanalytic feminist screen theory. Berry, et al., suggest that Aima is awkward in her suspicion that the "attraction of the New Aesthetic

might lie in the possibility to 'briefly inhabit a (conventionally) feminized subjectivity" (Berry et al. 32). What Berry, and others, are overlooking is that the New Aesthetic is, for the most part, the purview of an almost exclusively male authorship–and can be subject to a male gaze–and through a patriarchal connotation there exists a technocratic ogling that includes and transcends gendering. She states:

> The New Aesthetic is about being looked at by humans and by machines — by drones, surveillance cameras, people tagging you on Facebook — about being the object of the gaze. It's about looking through the eyes of a machine and seeing the machine turn its beady LEDs on you. It's about the dissolution of privacy and reproductive rights, and the monitoring, mapping, and surveillance of the (re)gendered (re)racialized body and building our own super-pervasive panopticon (Aima).

The tools, the drones, cameras, and social media platforms, which undoubtedly aid in a totalizing surveillance society, bring allusions to a Foucauldian concept of discipline, which the New Aesthetic surveillance apparatus concerns itself with on many levels.

Macleod and Durrheim, writing in Foucauldian Feminism: the Implications of Governmentality discuss the implications of Foucault, in Discipline and Punish, tracing the emergence of what he calls disciplinary technology (Macleod and

Durrheim 47). As we have seen in the case of Louis XVI, and as Macleod and

Durrheim discuss, the sovereign's power was displayed through both a sense of

protection and as forms of public torture (Ernst 461; Macleod and Durrheim 47).

Much like the drones, CCTV cameras, and GPS tracking of today, the king's

portrait on currency served to remind the subjects of the monarch they were

always susceptible to a controlling gaze. However, at least in the case of minor

crimes, the body is mostly no longer tortured and dismembered, executions

performed under ideological auspices notwithstanding. The offending bodies are

now trained, exercised and supervised, and torture meted out as punishment in

sovereignty meant that only the most heinous of crimes were checked (47). As we

know, humanist reform introduced a "more finely tuned justice" (Foucault 78) in

which "lesser" crimes and misdemeanors could be identified and dealt with

accordingly. As Macleod and Durrheim indicate, for this system to work of

rehabilitation to work an intimate knowledge of the individual was required. A

"closer. . . mapping of the social body" (Foucault 78) was and is still needed

(Macleod and Durrheim 47). It is this mapping of the body, as well as the

incorporeal self that new, hidden methods of looking and being looked upon have

emerged within the New Aesthetic. The uncovering of these clandestine methods

is worthy of investigation.

As Baudrillard again so presciently observes in Simulacra and Simulation

that "you no longer watch TV, it is TV that watches you (live)" (Baudrillard 29).

All veiled references to the comedian Yakov Smirnoff's satire of the Soviet Union

aside, Baudrillard's dystopic proclamation for television as the end of the panoptic system is partially correct. While he portends the "computer card" to be the retainer of dataveillance and biometric information (29), he could not have predicted that the television could be an intermediary for such collections.

Returning to WikiLeaks' Vault 7, we find that not even the television, the previous source of an absolute gaze, is safe from the notion of polychrestia. In Vault 7 we uncover that the television is no longer entirely a disseminator of information but is also a conduit through which information is collected. WikiLeaks released documentation pertaining to Weeping Angel–eerily named after a race pf predatory creature from the BBC's Dr. Who series– is an implant that has been inserted into Samsung F-model smart television sets[21] (WikiLeaks - Releases). Several features of Weeping Angel seem to appear from the pages of pulp science fiction novels. The leaked document outlines these features as follows:

> Close Access Installation
>
> The EXTENDING implant can be installed using a Close Access method. The EXTENDING installer is loaded onto a USB stick. This USB stick is then inserted into the target SAMSUNG F Series TV, and the

---

[21] A mostly-complete guide on extending, i.e., the art and science of using passive dataveillance systems like Weeping Angel, can be located at:
https://wikileaks.org/vault7/document/EXTENDING_User_Guide/page-1/#pagination.

installer is run. The installer deploys the implant and Settings file onto the TV. EXTENDING begins to run when the TV is next powered on.

Close Access Uninstall

The EXTENDING implant can be uninstalled either by Close Access installation, or at a pre-configured time. To remove by Close Access, a USB stick must be loaded with a certain file, containing a certain string, as set in the configuration file. When this USB is inserted into the TV, the implant uninstalls.

Close Access Audio File Retrieval

The EXTENDING implant can exfiltrate audio files to a USB stick. To exfiltrate files by Close Access, a USB stick must be loaded with a certain file, containing a certain string, asset in the configuration file. When this USB is inserted into the TV, files are copied onto it.

Remote Audio File Retrieval

The EXTENDING implant can exfiltrate audio files over a Wi-Fi hotspot. To exfiltrate files over a Wi-Fi hotspot, the hotspot must be setup within range of the TV with a pre-configured SSID, set in the config file. Files are then exfiltrated over this Wi-Fi network to a server as configured in the configuration file.

Live Audio Listening

The EXTENDING implant also exfiltrates audio over a Wi-Fi hotspot, to a Live Listening Tool, running on a laptop. The Live Listening Tool can save files locally to disk as well as playing the received audio through the speakers.

Fake-off Recording

EXTENDING will continue to record audio, even whilst the TV appears to be off. This is achieved by intercepting the command for the TV to switch-off and turning off the TV screen, leaving the processor running (EXTENDING User Guide).

Possibly the most disturbing feature of this piece of software is the Fake-Off recording. While several devices regularly found in 21st century homes have passive listening capabilities, including Google Home™ and Amazon Echo™, there is a posthuman caveat that is somewhat entered into willingly rather than the clandestineness of a potential sleeper awaiting the command to perform its perfunctory mission with no rationalization as to the ethics of its mission. However, Sarah Zatko, an information-security expert and the cofounder of Cyber Independent Testing Lab (CITL), a nonprofit software security-testing organization, believes the deployment method of the malware is a strong indicator that it is not intended to be as a means of widespread surveillance:

When your average cybercriminal launches a similar attack, they'd prefer to do it over the wire," she says. "The CIA, on the other hand, wouldn't want a cyber-attack to be traced back to the United States. Doing this through a remote exploit might have opened them up to greater chance of attribution, or maybe they were just confident they would have physical access [to the TV] (Willcox).

While Zatko makes a strong rhetorical claim for the CIA with this revelation, the sheer hubris of a government agency engaging in preemptive asymmetrical warfare against its citizenry is beyond any Orwellian pale imaginable, one that supplants any propaganda and blackmail by the media and creates an "illegible violence" (Baudrillard 30; emphasis mine). Even though the implicit claim that this system is geared towards specific targets is tenable, if not probable, other convergingly digital and physical assemblages have been and are actively used in an asymmetrical mode in the spirit of not finding a needle in a digital haystack, but rather in collecting all of the hay. To examine how, a trip to the United Kingdom is in order.

As has been widely reported, the United Kingdom is one of the most steadily and pervasively surveilled nations on Earth. Big Brother Watch, a United Kingdom-based surveillance watchdog group, estimates that there are over 500,000 closed-circuit television and other surveillance cameras in the greater London area alone (The-Price-of-Privacy 30). While this figure is heavily

disputed, the knowledge that London is under constant watch approaches axiomatic (see Figure 19).

Figure 19: Big Ben (now known as Elizabeth Tower) and CCTV camera. MFleischhacker [CC BY-SA 4.0 (https://creativecommons.org/licenses/by-sa/4.0)]

However, closed-circuit television cameras are not the only method the British use to watch over the public. Bridle alerts us to the fact that the British created, developed, and tested Automatic Number Plate Recognition (ANPR) cameras and software in the UK, where "its first major outing was in 1984, when police scientists set themselves up in a small, unmarked cabin on a bridge overlooking the busy M1 motorway" (Bridle). Despite protests within a 1984 report for the Greater London Council Police Committee warned that the ANPR system "made every car a potential suspect and handed policy on mass surveillance to the

police," and that "this possibility in a democracy is unacceptable," by the early 1990s a system of cameras and ANPR, known as the "Ring of Steel," creating a circumambient field of machinic sight around The Old Smoke[22] . While Bridle notes that this system was initially implemented as a means of deterrence against a string of Irish Republican bombings in the financial district, he is quick to point out that the efficacy of the system proved to be too great a beguiling seducer for British law enforcement; by 2001 legislation was enacted to make characters on car plates more easily recognizable by ANPR software (Bridle).

Even though protests concerning the adequateness of the ANPR system have invariably led to accusations that criminals can locate and avoid the ANPR system, and that the "Ring of Steel" unfairly targets Muslims in London neighborhoods such as Washwood Heath and Sparkbrook (Bridle), the British-born system has proliferated almost universally.

As I write this, several university Parking Services vehicles are traversing campus, with License Plate Recognition (LPR, as they are known in the United States) cameras mounted to the top of the cars scanning parked vehicles to determine whether or not they are adhering to the policies set forth by their parking registration identification. If it is determined that the car is illegally parked or not authorized to be on campus, a ticket is promptly issued to the offending vehicle. Admittedly, this ultimately serves the greater good, as it allegedly ensures parking, which is at a premium on campus, is available for need

---

[22] A nickname for London; named so because of the pollution from smokestacks.

it, and probably helps add a great deal of revenue to Parking Services coffers.

Despite claims from proponents of surveillance that technologies such as ANPR or LPR are in the interest of safety or national security, Bridle points out that a report by commissioned by the House of Lords found that in an area where a preponderance of CCTV cameras used to deter criminal activity could have just as effectively prevented by increasing the amount of light in the same given area (Bridle).

While there seem to be shreds of commonsense reporting still in place, it is not enough to stop the New Aesthetic surveillance apparatus. According to Chatterjee and Khalil, the surveillance network only continues to flourish. Chatterjee note that presently in the United States that there are 17 government agencies that are devoted to surveillance, not including divisions with other agencies devoted to watching (Chatterjee and Khalil 134). While the scope and depth at which these agencies gather data collectively will never be fully realized, we do know that at the time of Edward Snowden's whistleblowing efforts the NSA had the capabilities to collect 97 billion pieces of discrete data points within a 30-day period (Chatterjee and Khalil 133). To put the amount of data collected in a 30-day period into perspective, if we consider these data points to be a reflection of information collected on the entire population of the United States this comes out to roughly 285.29 data points for 340 million people. If we also consider this data collection endeavor to be an active one, then passive collection strategies along with the Five Eyes consortium with the UK, Australia, New Zealand, and

Canada as well as partnerships with international cable companies, including

Verizon (Chatterjee and Khalil 139–46), the breadth of globalized watching is

rendered unimaginable.

I'm Looking Through You: A Pornography of Information

Besides the overwhelming measure of manpower, coordination, and

energy expenditures resulting from the use of computation, data collection, or

dataveillance–which arguably all surveillance could be classified as such–is

contingent upon a forced agreement from those that are being watched:

transparency. Each website we visit, each phone call we make, each online

purchase, email, text message, and social media tag hacks away at privacy and

feeds into the multifarious New Aesthetic apparatus. However, not all sharing or

transparency is necessarily deleterious. As Clare Birchall points out, the sharing

economy, i.e., digital distributions of goods and services can be a positive

(Birchall 1). Activities like using rideshare services, peer-to-peer file sharing, and

enterprises like Creative Commons–where many of the images I am using in this

dissertation come from-creates a form of "positive exchange" that is an inherent

part of the 21st century (1). However, Birchall's idea of shareveillance, the idea

that data, location, connections, and habits run counter to the U.S. Constitution's

Fourth Amendment, Warren and Brandeis's idea that "solitude and privacy have

become more essential to the individual; but modern enterprise and invention

have, through invasions upon his privacy, subjected him to mental pain and

distress, far greater than could be inflicted by mere bodily injury" (Warren and

Brandeis 196), the European Union forcing Google to implement the "right to be forgotten" (Cheney-Lippold x; 10), and the multiple take down requests enforced each year (Cheney-Lippold 136).

However, some have erroneously suggested that complete transparency is a desirable quality in respect to our datafied selves. Citing the European General Data Protection Regulation, Kristie Byrum draws comparisons between the right to be left alone for those of us who aren't public figures or celebrities to Orwellian memory holes and the right that many citizens of the EU enjoy as a type of revisionist history on par with the efforts of Adolf Hitler and Joseph Stalin (Byrum 81). While delinking web pages to Byrum presents itself as a form of censorship and cites the "Marketplace of Ideas Theory, the Meiklejohnian Theory, and Absolutist Theory as proof points for repudiation" (Byrum 135) and is counter to the free flow of ideas (Byrum 16), it stands to reason that delinking information from a web page does not create a memory hole or a revisionist ideological hellscape, especially if that information is a matter of public record. Property and tax records, the recordings of births, deaths, criminal convictions, and other matters of public inquiry have and will continue to exist irrespective of the availability of that information in a digital interface. The relative availability of information to the average user does not necessarily equate a dictatorial purging of information. What Byrum is overlooking is the New Aesthetic's tendency to push users toward complete transparency; the right to be forgotten becomes a networked pipe dream.

The impelling of users to become transparent within the New Aesthetic framework–to become actors in a datafied world where terms of service, cookies, and other means of tracking render agency, and privacy, moot (Cheney-Lippold 244;246; 255–56)–creates a surveillant assemblage that constructs us within a New Aesthetic framework; what David Lyon refers to as the data double (Lyon), or what Bernard Harcourt calls homo digitalis (Harcourt 18), or the collection of these discrete data points composing digital dossiers (Solove).

It is within these assemblages of data that complete transparency of the user becomes the norm. Byung-Chul Han makes the case for transparency as a form of pornography: the pornographic image created by a transparency of the datafied self thus becomes deculturized, an advertisement-like image that is "direct, tactile, ...and post-hermeneutic" (Han 28). While NSA surveillance protocols such as PRISM and Upstream certainly portend a sense of totalitarian dread to systems we use and trust, and as we have seen with Facebook most recently with the Cambridge Analytica data "breach," mass surveillance is not only the purview of shadowy government agencies trying to locate terrorist needles in a digital haystack. The creators of these networks that government agents have leveraged for their nefarious projects are also complicit. Wholesale data-mining and profiting from the data collected, such as the high-profile Facebook situation involving Cambridge Analytica, has projected an additional uncanny patina to an already tarnished social network. While mainstream media outlets are referring to this system abuse as a data breach, it should be noted that

this may prove to be uncanny to the product/user as the networks in question reveal their potentiality to be manifold; however, this appears to be yet another gauge that the systems in question, are in fact polychrestia. We can see polychrestia across a wide spectrum within the New Aesthetic. A recent social media meme asks users to upload photographs of themselves spanning a ten-year period. Similar memes, such as Google's Art and Culture site, encouraged a user to upload a photograph to compare it to a classical work of art, have also been popular and may fall under a similar rationale. The Google meme indicate da strong correlation to machine learning, as the percentage that the computer matched the photograph to the artwork was prominently displayed atop the comparison (Figure 20).

Figure 20: Google Art and Culture meme where a computer matches a photograph to a work of art. [Brian Gaines]

While this meme presents itself as a means for the user and others to observe how much they have changed, a more sinister motive may be in order. It can easily be argued that users who engage in this photo sharing are providing labor detrimental to their own privacy free of charge. The "then and now" photographs supplied by users could be creating a considerably large and robust data set of carefully curated photos of people from roughly 10 years ago and now (O'Neill, "Facebook's '10 Year Challenge' Is Just a Harmless Meme—Right?"). Kate O'Neill makes a valid argument that training social media algorithms in facial recognition–especially technologies that employ age progression capabilities–has its benefits. O'Neill cites reports that police in New Delhi last year were able to locate approximately 2,930 missing children over a four-day period (O'Neill, "Facebook's '10 Year Challenge' Is Just a Harmless Meme—Right?"; "Police Trace 3,000 Missing Children in Just Four Days Using Facial Recognition Technology.").

Despite the perceived benefits of these types of technologies, the construction of the datafied subject, being constructed piecemeal through a plethora of databases and technologies, including facial recognition, is evident. Bernard E. Harcourt, citing facial recognition as a determinate feature of transparency and speaking on digital capabilities and the fundamental shift in

power flows in "advanced digital capitalism" discusses a "new digitized way of life" that a domination of the digital divide depends upon:

> [...] its rich circuit of texts, tweets, and emails, digital photos, scans and PDFs, Skype calls, Facebook posts, Google searches and Bings, pings and Snapchats, Venmo payments, Vimeo and Vines [...]Embedded in all these platforms, there is a technology of virtual transparence that allows for pervasive data mining, digital profiling, facial recognition, Amazon recommendations, eBay special offers, Netflix algorithms, and NSA surveillance (Harcourt 22).

While locating missing or lost children and determining shopping habits seems innocuous enough, Harcourt warns us that laws, such as the United Kingdom's Regulation of Investigatory Powers Act (RIPA) was developed with such surveillance in mind (Harcourt 113). These powers are not limited to the UK: while sanctions may be in place that allows some affordances in GCHQ overreach on British soil, no such laws prevent GCHQ from collecting, storing, and analyzing vast troves of data from other "Five Eyes" partners, including the United States (113).

Returning to the aforementioned warnings of Jacob Appelbaum and his articulated Debordian system of spectacular domination, the clandestine relationships of information interception between government agencies, chiefly

136

the NSA, and technology corporations, including Google may not induce a Foucauldian sense of behavior regulation under a panoptic gaze, but rather is indicative of something else. Siva Vaidhyanathan suggests that services provided by Google, notably Google Street View, indicate the rise of the Cryptopticon, his portmanteau to describe the phenomenon that people know they are being watched, but are unaware as to how they are subject to the gaze, that is, "we don't regulate our behavior under the gaze of surveillance; we just don't seem to care" (Vaidhyanathan 112). Furthermore, sociologists Zygmunt Bauman and David Lyon allude to technological practices such as those implemented by Google, and now Facebook, the online habitat and habitus created by these institutions provides a transparency that is devoid of surprises and worry, "a world with no contingencies or accidents," not only provide a sense of domination, or a security driven form of Thanatos, but also present a means of "maintaining and reproducing order" (Bauman and Lyon 116-117).

The proliferation of mass surveillance within these systems, both voluntary and involuntary, creates transparency through what John Cheney-Lippold refers to as "decentralized vestiges of data about us and our online behaviors–things we might not care about and/or things we might not even share with our closest confidant" (Cheney-Lippold; emphasis mine) within the ordered subject. Transparency, the voluntary disclosure of information through New Aesthetic mainstays like "Facebook posts, Twitter feeds, cloud services, and smartphone GPS pings" (Lyon 4) has created a culture of voluntary, albeit

unintentional, sharing and widespread (BIG) data extraction that aids in the ontological construction of the data double. Gary T. Marx points out an unequal, asymmetrical reciprocity in regard to transparency (Marx 37). While citizens, Marx points out, are able to view government proceedings and meetings, request information through Freedom of Information Act, and various disclosure statements, he is quick to point out that these same citizens are not legally able to conduct wiretapping, carry out Fourth Amendment searches, or see tax and census records (37). It is in arguing against transparency that Byung-Chul Han, citing Benjamin, claims that there is beauty in the secret, and transparency as the opposite of secrets not being the medium of the beautiful. Here we return to Barthes and his notion of the erotic place (of the body) being located between "where the garment gapes," where the skin "flashes between the edges" (Barthes 9-10). By stripping away the garments, the skin is on full display, and the punctum is rendered impotent. I would like to emphasize that it is in the stripping away of privacy, of the exposure of human secrets, motivations, and desires that transparency that erodes what Baudrillard describes as seduction insofar as there is an "intuition of something in the other that remains forever secret to him" (Baudrillard 166). Through the stripping away of the secret something we may find the punctum is lost along with temporal distance. We find no seduction and no secrets; only an overabundance of information: The Pornography of Information.

Through the transparent subject reproduced within a pornography of information, an ontological crisis for the ordered subject becomes palpable. Through the disappearance of the Benthamian panopticon, an "aperspectival, penetrating illumination" (Han 45) that attempts to answer David Brin's question of whether or not we "can stand living exposed to scrutiny?" (Brin 14; Han 47). The effluvium of information that emanates from our social media posts, spending habits, and other predicative models of "latent attributes" has constructed an ontology of a "dynamic measurable type" that is pooled across a variety of databases (Cheney Lippold 78-81).

Dave Eggers's The Circle–his 2013 dystopian novel on surveillance and technology –also provides an apposite metaphor for surveillance in The New Aesthetic. In the novel, the protagonist, Mae, is hired by the eponymous technology corporation, which has become the dominant player in Silicon Valley, in the Customer Experience department. Mae, upon arriving on the Circle's campus, notices that most of the offices (except for the "founding fathers") and common areas are "all walls, made of glass" and Lucite, rendering them completely transparent (Eggers 3). As the novel and the career of the protagonist progresses, it is Mae who becomes transparent as multiple screens, cameras, and various tracking devices are added as she moves from an entry-level position to eventually becoming the public face of the corporation, whose existence is validated based on the number of viewers (Eggers 361). In the acquisition of these new responsibilities (and devices), Mae is performing what Harcourt

believes to be the root of how surveillance works today in liberal democracies: through recommended and curated desires.

Additionally, Mae's acquisition of an arsenal of devices plays into a digital capitalist function that is also a byproduct of the New Aesthetic. The desiring-production taking place between user and machine here reaches a fever pitch: phones, tablets, small high-definition cameras (such as the GoPro and its various attachments and accoutrements) creates in itself a type of portable area network that continually constructs the individual as a datafied subject and also continually feeds into the larger databases and networks that organize and produce the New Aesthetic. Through Mae's "portable prison" of devices that track, monitor, and broadcast every facet of her life we see Zygmunt Bauman's two fronts of surveillance as technological: Confinement and exclusion as a means of discipline (Bauman and Lyon 64).

Mae, who previously within the novel was apprehended for joyriding in a kayak which was also broadcast widely, epitomizes Bauman's notion of confinement. While she is free to go and do whatever she pleases, Mae is essentially imprisoned by the millions of subscribers to her various feeds that monitor and comment upon her every action. This continual feedback is simultaneously monitored by coworkers at the Circle, who themselves are also monitored. Bernard E. Harcourt, who calls this hyperrealistic spectacle the Expository Society, tells us that these desires not only transform and shape us into our digital selves, but that these digital cravings are only surpassed by those

who are doing the watching, and specifically within The New Aesthetic, which is also creating. Here we see that the Panopticon model, attuned to Foucault's concept of a disciplinary society, which concerns itself with a centralized figure within the production of docile bodies, may not be the most apt metaphor for The New Aesthetic surveillance apparatus. Zygmunt Bauman, elucidating the role of surveillance in "liquid modernity," insists that aside from the absolute margins of society, the classical Panopticon model has been rendered redundant and obsolete. He cites Didier Bigo's ban-opticon, itself a portmanteau of Nancy's (and later Agamben's) ban along with Foucault's Panopticon.

Here we see not a centralized figure, but rather a network whose purpose is to determine, through a convergence of informatic and biometric data, who is welcome or not. While Bauman was thinking strictly in terms of transnational borders, this type of thinking has been applied to several scenarios, ranging from entry into sequestered spaces to hiring practices. The legal ethicist Frank Pasquale, writing on algorithms for evaluating job candidates, is skeptical of the claim to the lack of discrimination in these automated systems. His claim that the values and biases of the humans who develop these systems are embedded into such systems. This acts a further refining of discrimination and supports Ed Finn's claim that people are the operative force in any algorithm.

David Lyon refers to the data double, i.e., the "profiles of individuals and groups based on their activities, connections, performances, transactions, and movements" is subject to a flattening of the distance that the eversion of the

digital into the physical. The data double, which Lyon also calls our online persona, informs who we are and what we desire. It is a set of discrete flows that is afforded far greater mobility than our corporeal selves. However, as Graham Norton has postulated in his thoughts on Object-Oriented Ontology, knowledge of a thing cannot stand in for the thing itself, and as its converse, things cannot necessarily be converted into knowledge. The knowledge that I visited a website for Away luggage, for which I now receive numerous advertisements on YouTube, does not equal Brian. The credit card data, the GPS pings from my smartphone, and the social media check-ins complete with random photographs of overpriced snacks and airport codes do in fact suggest that in Spring of every year I do quite a bit of traveling. However, my traveling habits, shopping recommendations, and current locations, aside from making rather accurate predictions about future expenditures is not a surrogate. Lyon's data double, the transparent construction of discordant and discrete data points is both an ontological assemblage and a traded commodity within the New Aesthetic. Through the data double assemblage, we see a "shift towards a techno-ontological, post biological threshold" (Clough, qtd. in Murphy 226) that fuses our corporeal selves to our incorporeal identities in cybernetic sinew and sanguinary zeroes and ones coursing through fiber optic capillaries, veins, and arteries. It is this array of machines, devices, and objects, coupled with the surveilled that creates a hyper-fetishizing of data and ultimately the subject the data represents which leads into a totalizing transparency. These systems and networks speak solidly to Deleuze

and Guattari's desire machines, in that they do not exist outside of social networks, form on a large scale, and in terms of constructing a data double, do not seal themselves off from the production of the data double, but within the New Aesthetic, the techno-ontological threshold must be resisted.

Chapter 5. Resistance is ~~Futile~~ Worthwhile

The only way to support a revolution is to make your own.

— Abbie Hoffman

A revolution only picks up steam once two or more groups that have nothing to do with one another decide to join together for their mutual benefit.

— Srdja Popovic

Maybe even then

Exposure could be difficult thing

It's quick like rush for peace is

Because it's so much

It was like being naked

If you become naked

Hold that line, hold that line!

Block that kick, block that kick!

-John Lennon and Paul McCartney, Revolution #9

Cybernated Necromancy

Figure 21: Utagawa Yoshiiku, Specter frightening a young woman [Public Domain]

Google will never be destroyed. Neither will Facebook. Nor Apple or Verizon. Despite ironically targeted social media advertisements from Elizabeth Warren making claims that she, as president, will break up giant social media and technology companies who are profiting from our data, the beast keeps getting fed. The NSA, FBI, CIA, or any of the other 14 agencies that comprise the United States' intelligence community are going anywhere anytime soon. The same goes for the GCHQ, or any of the official and clandestine spook organizations of the Five Eyes consortium. To put it another way, we live in a

surveillance society with no foreseeable recourse. What then, if anything, can be done?

According to Aaron K. Martin, Rosamunde E. van Brakel, and Daniel J. Bernhard, "resistance is a central theme in surveillance studies, though the concept has yet to receive a thorough, systematic and focused elaboration in the academic literature" (Martin, et al 214). Lyon states that "Surveillance studies is an explicitly multi-disciplinary enterprise (Lyon), and as Martin , et al indicate (Martin, et al 214), it makes sense that an interdisciplinary, or transdisciplinary approach to resistance is in order.

Surveillance within the New Aesthetic, as a polychrest, must be informed by a resistance that is, in itself, polychrestic. To put it another way, the tools of widespread surveillance resistance must be functional, adaptive, and both convoluted enough to elude the machinic gaze yet uncomplicated enough that use of the tools can be easily accessed by factions across a wide throng of people from a variety of social, economic, and educational levels. We–whose data is claret for the vampiric New Aesthetic Hyperobject Surveillance Apparatus™–must find our metaphorical stakes, holy water, and sunlight to stave off the data-thirsty sanguisuge who comes for us at all hours of the day. To borrow and co-opt a phrase about the internet from Hito Steyerl, "the New Aesthetic is not dead. It is undead and it's everywhere" (Steyerl, "Too Much World."). What, then, can be done? How does a digital necromancy conversation come to an end?

To battle something that is exanimate is for us to become bokors and caplatas working within the corporeality and incorporeality of the New Aesthetic. We must be willing to create and use easily communicative texts, such as those afforded to us by visual rhetorics. We must also be willing to adopt a Cypherpunk ethos in regard to secret writing, such as that which can be obtained through processes such as cryptography and steganography. We must also be willing to engage in obfuscation within these forms of writing; we cannot stop the surveillance machine but we can, at present, make it more and more difficult for the watchers to look upon us with machinic eyes. We must become the collective Odysseus, to sharpen and harden the point of resistance, and ram it straight into the New Aesthetic's eye.

Art Class; Infinity Mirrors

Figure 22: Big Brother; a sketch I created in 1995. [Brian Gaines]

Visual rhetorics has a long history of being an arbiter of social change from the rulers and the ruled. As in the Louis VXI example from Chapter 4, his likeness on currency and his portraiture served as a reminder of his absolute power and divine right to the throne. Similarly, the engraving of Citizen Louis Capet's beheading brought about a visual means of providing a Girardian "mimetic interpretation of the Jacobin claim that the death of the king was the human sacrifice that founded the republic" (Hamerton-Kelly 68). In short, images have power. While a history of visual rhetoric as resistance and a survey of semiotics is beyond the scope of this dissertation, the consideration of a few examples

provides us with a basis for why visual rhetorics is a powerful tool in the art of resistance.

For instance, the sketch for the concept of 1984's Big Brother that I created hastily in 1995 is one such example. The simple appropriation of bathroom stick figures rendered in highly contrasting values (black and white) creates a gestalt that is rather obvious. Based on cultural mores, most any viewer can discern that the larger figure rendered in black is oppressing the smaller figure in white, even if the viewer has not read Orwell's book. This simple, yet heavy-handed use of icons stands in sharp contrast to examples of totalitarian control as exercised by the United States in the twentieth and twenty-first centuries. Much has been written about James Montgomery Flagg and the I Want You posters of the first World War, including WJT Mitchell's excellent revelation that the "real and imagined nation" was missing "bodies and meat," and that Uncle Sam (Flagg himself) was a mere "meat supplier" in "national drag" (Mitchell 38). However, examinations of Flagg and yet another visual rhetorical analysis of his most famous work is tantamount to flogging a dead horse. More abstract notions of visual oppression have been unearthed.

For decades, the National Security Agency operated in obscurity. When I was in the Navy, my first duty station was at Fort Meade, Maryland, which is directly across Mapes Road from the NSA headquarters. The obsidian-black monolith of the main compound sat squarely in the center of a giant parking lot, flanked by Interstate 295 about equidistant from Washington D.C. and

Baltimore. It was a common joke at Fort Meade–which coincidentally is home to the Army's Asymmetrical Warfare Unit as well as government LSD experiments in the 1950s and 1960s–that NSA stood for "No Such Agency." However, despite the agencies penchant for hiding in plain sight, in the 1950s and 1960s ran an extensive, and by U.S. government standards, quite creative visual rhetorical campaign to educate its employees on the virtues of operational security. Through a Freedom of Information Act request by a group known as Government Attic, the 135 posters produced with taxpayer funds are now part of the public domain (Sorene, "All 135 Vintage NSA Security Posters From The 1950s and 1960s."). In a keen sense of mimesis reflecting the major graphic design conventions of the era, the posters would not be out of place in the public sector, and even feature classical art references (the Mona Lisa), cultural icons (Santa Claus), and pop culture celebrities (John Travolta). Most notably, the use of intricate patterns, sophisticated complimentary, analogous, monochromatic, and triad color palettes, and cutting-edge illustration techniques would not be out of place in art school or Madison Avenue during the time periods they were produced (see Figures 23 and 24).
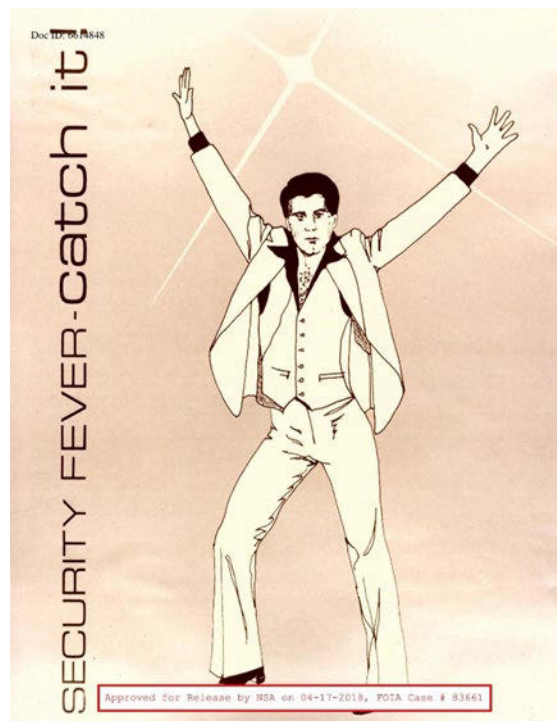
Figure 23 and Figure 24: Declassified NSA security posters. Note the use of Modernism design elements and use of celebrity. [Public Domain]

The NSA posters are, at best, a niche genre of an even more niche concept within a highly specialized organization. More recent, yet less nuanced examples have made their way into the conversation, such as the much-maligned Homeland Security Advisory System (HSAS) (Figure 25).

Figure 25: By derivative work: Pbroks13 (talk)Hsas-chart. [United States Department of Homeland Security - Hsas-chart.jpg, Public Domain]

While HSAS had the intention of alerting the populace to the perceived or actual threats of terrorist attacks in the months after the events of September 11, 2001, there was little to no observable criteria for how these threats were categorized. One thing more perceptive viewers may notice is the uncanny resemblance to another symbol that has no discernible signifiers to mainstream America: the Gay Pride flag (Figure 26). In both HSAS and the flag the viewer notices the bands of color follow a similar sequence. While this association of mine is purely

speculative, several things become clear. Both symbols use bright primary and secondary colors to convey messages about easily generalizable groups of people whose motives and agendas are unknown to the dominant culture, such as "terrorist," Muslim," and "homosexual" (and the many colloquial derivations, such as "towel head,"" camel jockey," "faggot," "dyke," or "tranny" for that matter). While this comparison is purely conjectural, one must wonder if there is a correlation between the two.

Figure 26: Depiction of the Gay Pride flag. [Public Domain]

Whatever the motivation for HSAS, one thing is clear: the design is emblematic of the prescriptive, ex oficio bureaucratic framework in which it was produced. In the weeks and months (and even today in regard to the Trump

administration), several parodies of HSAS flooded internet culture, which alludes

to a resistance rather than riot methodology, or the Situationist concept of

détournement.

As I have previously written, the Situationists' formed out of the Lettrist

Internationale in 1956 (Gaines 106). Guy Debord, Asger Jorn, and Giuseppe

Gallizio convened the Congress of Free Artists to experiment with what Gallizio

had named "ensemble painting" that fell outside of the scope of the Lettrists

(Wark 67, qtd. in Gaines 107). The Situationists, as McKenzie Wark describes

them, were both Communist and bohemian, a collective formed out of the

Surrealists and Dada movements who in many respects wanted to further the

destruction of culture portended by the war (Wark 2-13). While it is widely

associated with the Situationists, Debord, Gil J. Wolman, and others who were

later associated with the Situationists developed the concept of détournement in

the October 1955 edition of the Lettrist journal. In the article, Proposals for

Rationally Improving the City of Paris, Debord, et al. recommended a series of

what they called "solutions to various urbanistic problems" plaguing the French

capital (Chtcheglov, et al.12). Among the suggestions set forth in the journal was

converting rooftops into pedestrian walkways, the transforming of churches into

"houses of horror," the elimination of cemeteries, and the abolition of museums

with the masterpieces contained within being distributed to bars (12–13). In

keeping with the anti-authoritarian practices set forth by their predecessors, the

Lettrists and Situationists offer a critique of advanced capitalism as not being able to mask the degradation of society. Debord writes:

> The first phase of the domination of the economy over social life brought into the definition of all human realization the obvious degradation of being into having. The present phase of total occupation of social life by the accumulated results of the economy leads to a generalized sliding of having into appearing, from which all actual "having" must draw its immediate prestige and its ultimate function. At the same time, all individual reality has become social reality directly dependent on social power and shaped by it. It is allowed to appear only to the extent that it is not (Debord 10-11).

 To resist advanced capitalism, the Situationists, and especially Debord, were proponents of the return of adventure to life. This, they argued, could be attained through practices such as psychogeography, unitary urbanism, and détournement, i.e., the hijacking of aesthetic elements (52). Writing in the Basic Program of Unitary Urbanism, Attila Kotányi and Raoul Vaneigem adequately set the stage for détournement as a visual rhetorical resistance in the New Aesthetic by arguing that "we have to constantly defend ourselves from the poetry of the bards of conditioning–to jam their messages, to turn their rhythms inside out" (Kotányi and Vaneigem 89).

Détournement, even with radical beginnings, has been adopted into widely disparate facets of mainstream 20th and 21st century society. Douglas Holt and Douglas Cameron, a marketing professor and consultant respectively, associate the concept across a wide spectrum from the "mass political jujitsu" of labor activist Saul Alinsky to the cacophonic rise of punk icons The Sex Pistols (Holt and Cameron 252). They write of the Situationists as a:

> ... do-it-yourself repurposing of a well-known image or message to create a new work with a new meaning—what would come to be known as culture jamming two decades later in North America. They claimed that detournement turned the expressions of the capitalist system against itself, reclaiming individual autonomy and creativity from the passive "spectacle" that the system produces (252).

Everything Means Nothing to Me

While providing visual documentation of late-stage capitalism and its symptoms is most likely unintentional, its salience as a byproduct of both the scope and the tools used in this documentation cannot be overlooked. Arguably, Jon Rafman's ongoing art project, "9-eyes," which is nothing more than a curated collection of images that he downloads from Google Street View, aims to promote a tension of the immediacy of "low" art and what Immanuel Kant described as distance associated with "high" art (Ricardo 4;152).

While this project can be read as elucidating the harshness of living in a globalized economy, no artist's statement or manifesto is provided; we are encouraged to speculate. It is my conjecture that the selected images in Rafman's collection do epitomize Francisco J. Ricardo's argument of bridging the chasm between the Kantian distance associated with high art and the immediacy of low art to a degree. However, this traverse has not only connected the chasm from low to high but has also crossed a moral divide and has objectified those who are most vulnerable to Google's pervasive corporate gaze. In other words, Rafman, through magnifying the familiarity of web-based imagery to the purview of so-called fine art, is doing so at the expense of the those who are most susceptible to the reality of economic power (Bourdieu 54) through their subjugation by the ruling class. In an interview with Marina Chao, the Assistant Curator of the International Center for Photography, Rafman points out that "Google Street View reveals a world in which you are watched by everyone and by no one, a world in which everything is being recorded, but the meaning of everything is equivalent" (Cotton, Chao, and Vermare 142). Rafman also makes the claim that photography is a medium, like others before it, that "changes reality" (Cotton, et al 143). Here Rafman is both right and wrong. Vilém Flusser, the philosopher and media critic, tells us that as denizens of a photographic universe, that photographs are so commonplace as to be banal (Flusser 65). Flusser also states that photographs permanently displacing each other–such as how social media memes, tags, et cetera operate– there is a redundancy that "automatically

exhausts the possibilities of the photographic program (65). Each photograph that replaces another in a feed, or in a geographic location as determined by Google Street View is a type of digital palimpsest that is continuously rewritten to the point of meaninglessness. In this regard, Rafman is correct in that the indiscriminate eye of Google Street View has flattened the beauty and wonder, pain and suffering, marginalization and violence of human existence to a 72 ppi experience that is both watched and unwatched. We, as viewers, look upon the illicit sex acts and street brawls with the same level of excitement as we do the glitched artifacts, tigers prowling through parking lots, and babies crawling outside of haute couture store fronts. There is nothing new under the sun, and if there is, then it means nothing. Everything means nothing.

Rafman is also correct in his assertion that the internet–and by a logical extension–photography is subsumed by the "desire-machine nature" (Cotton, et al 143). The notion that certain types of images disseminated through a widespread series of totalizing global networks contributes to "the explosion of fetishes, subcultures, and political identities" in such a way that "more obscure or marginal desires can find an audience, a community" (Cotton, et al 145) is a given. What Rafman doesn't understand that it is surely this closeness that is the problem, and this problem isn't only concerned with viewers satiating their desires.

Debatably, Rafman's project may be extant as a harbinger to bring immediacy to the adversity faced by the defenseless, but this is not entirely clear.

Not only is he attempting to elevate his art and himself into a higher stratum of what Bourdieu may call cultural capital (Bourdieu 125) but is doing so through the mediation of imagery of disparaged bodies. Rafman is also endeavoring to do this by profiting from the labor of corporatized modes of production. I am further speculating that by employing techniques of détournement, those who are subject to the gaze can use the tools of oppression as a means of resistance. As Jack Burnham, writing on system aesthetics in 1968, created a New Aesthetic argument by stating, "...between aggressive electronic media and two hundred years of industrial vandalism, the long-held idea that a tiny output of art objects could somehow "beautify" or even significantly modify the environment was naïve" (Burnham 31). Fifty years ago, when computation was the exclusive domain of the engineer and the computer scientist, this held true. However, as the ubiquity of computation has even the most Luddite jacked into a system where his or her "disembodied consciousness is projected into the consensual hallucination" (Gibson 5), an experience of and of dismantling a "parallel illusion" that exists in an (digital) artistic influence prevails by a "psychic osmosis" given off by New Aesthetic objects (Burnham 31). Again, borrowing from Burnham, in an advanced technological culture the artist, or in this case the resistor, must "liquidate his position as artist/resistor vis-a-vis society" (31). Artistic nihilism, détournement, the hijacking of New Aesthetic systems occurs through turning the system(s) against itself.

Ouroboros: How to Teach a Snake to Eat Itself

Détournement, understood as using tools of oppression against itself, presents an interesting meta-corollary in the production of art as a means of resistance against the corporate gaze. Debord and the Situationists have all but fallen out of fashion, yet their aesthetic of turning systems against themselves live on. Writing on the personal computer as a means of cultural control, Nato Thompson cites the Critical Art Ensemble's particular brand of media sabotage by "infiltrating the systems of the powerful by using their very forms" (Thompson 237). Through the use of tactical media, the Critical Art Ensemble are practicing a form of resistance that Thompson describes as "au courant tendencies of political art" (237).

The pervasiveness of Google alone offers us numerous opportunities to bring au courant sensibilities into the digital. In keeping with a New Aesthetic – as well as a capitalist– ethos, technologies such as Google Street View (GSV) are unlikely to decline in the foreseeable future, some artists have embraced the roving panoptical and cryptoptical qualities suggested by GSV. As mentioned, Rafman, whose ongoing "project" makes use of imagery captured by GSV cameras and is curated as found art ("Jon Rafman"). Through this curated collection of "machine-produced art," the viewer is inundated with an array of images that span the gamut of human experience. Spontaneous landscape scenes are juxtaposed alongside unintentional portraits, crime scenes, debauchery, public sex acts, prostitute solicitation, and general weirdness (See Figures 27 - 30).

From Left- *Figure 27*: a group of people in animal masks on a rural desert highway; *Figure 28*: a RGB channel shifts; *Figure 29* : a baby crawling alone outside of a Gucci store; *Figure 30*: a woman seemingly being kidnapped. [Google and Jon Rafman]

Viewing Rafman's project through a spectacular lens, a pattern emerges that suggests Debord's concept of social relations between people are being mediated by images (Debord 7). Through the chosen images, with few exceptions, Rafman has illustrated the spectacular subjugation of humans through the imagery produced by subjugation from the economy writ large (Debord 10). The viewer, seeing the images of halcyon landscapes and festivals juxtaposed with those of people being the subjected to both state-sponsored and individual acts of violence, public sexual acts, and impoverished conditions, are free to venture that

the latter images are the Spectacle's representations of the distorted producer (10). Are the children walking down the street with the stereo equipment merely stealing, taking the speakers to a friend's house, or are they in fact the makers of the equipment? Is the public sex act on the highway the result of soliciting a prostitute? Why is a woman dragging another woman through the street by her hair? Is the aforementioned baby crawling alone outside more shocking because it takes place in a Gucci storefront?

Resisting compounded New Aesthetic surveillant exploitation like what we've witnessed with GSV and Jon Rafman, especially those who are most marginalized, can take many forms. It is precisely this type of exploitation that we must turn to Antonio Gramsci. In autumn 1926, Mussolini, who feared that an attempt would be made on his life, took it upon himself to eradicate bourgeois life. As opposition parties and their publications were banned, massive arrests throughout Italy occurred. Among those arrested was the secretary of the Communist Party in parliament, a young Marxist named Antonio Gramsci. Throughout his imprisonment, Gramsci produced 2,848 pages of handwritten notes that would be posthumously collected as The Prison Notebooks. It is within these handwritten pages that Gramsci may have laid the groundwork for participatory design.

Particularly in his writings on the intellectual, Gramsci concerned himself with the different categories of intellectuals, which led him to the conclusion that:

it should be possible both to measure the "organic quality" of the various

intellectual strata and their degree of connection with a fundamental social

group, and to establish a gradation of their functions and of the superstructures

from the bottom to the top" (Gramsci 144-145).

To put it another way, for Gramsci the whole of a society contains an

intelligentsia across a variety of disciplines and seeks to inform the philosophy by

which some educators function. Ellen Lupton, director of the Graphic Design

MFA program at Maryland Institute College of Art (MICA) in Baltimore may

provide more clarity. Upton draws upon Gramsci's Prison Notebooks as a

theoretical underpinning for her philosophy concerning design practice.

According to Lupton, Gramsci's concept of the organic intellectual provides a

basis for her assertion that everyone is a designer, a "particular kind of

intellectual," one who makes "informed decisions regarding her environment,

personal appearance, media consumption, and so forth" (Lupton). Lupton

further follows Gramsci in that she defines design as "a social function" rather

than a profession or academic discipline (Lupton). This notion of design as a

social function is further reinforced by Lupton, as the collection is written and

edited not only be her, but by her twin sister as well as graduate students within

the MFA Graphic Design program at MICA.

Using methods and tools at their disposal, those who have been doubly

marginalized by Google and Rafman, as evidenced by the curated collection of

photographs, have been moderately successful in the pursuit of resistance. "Mooning," i.e., the flashing of naked buttocks as a means of defiance or to elicit laughter, has been elevated from a show of contempt to a visual practice in recent memory. This transgressive act has been documented throughout antiquity. Perhaps the most famous account occurred under the purview of the procurator, Ventidius Cumanus, in Jerusalem when a soldier enforcing the Pax Romana exposed his buttocks to pilgrims traveling to the Temple to celebrate Passover (Bloom 55). Gluteus Maximus defiance, however, is not relegated to the annals of history. Twentieth century traditions, such as mooning passing trains, has given way to social media sites dedicated to showcasing the derrieres as curated collections. Where most social media platforms discourage display of nude photographs, showing naked buttocks appears to be an accepted visual display. Cheeky Exploits (@cheekyexploits), a social media user with over 200,000 followers, curates a collection of people exposing their naked buttocks in a variety of situations ranging from swimming, marveling at natural beauty, and more daring escapades such as ice climbing and BASE jumping ("Cheeky Exploits," n.d.). Bare bottoms on display for the public may be an emerging form of low brow art for social media but has been featured on GSV for several years (See Figure 31). Baring one's buttocks to a digital camera may not disrupt the corporate gaze but can send a clear message of defiance.

Figure 31: Exposing buttocks (Mooning) to Street View Car. [Google Street View/Jon Rafman]

Although mooning a camera attached to the roof of a car may not be the most effective form of resisting a corporatized New Aesthetic gaze, it nonetheless sends a clear message of disdain for a society predicated on total surveillance. Moreover, it provides a visual dialectic to users of GSV and to artists whose endgame is to monetize the distorted producer, showcasing rigid defiance and low brow closeness in a singular image.

Bright light and lasers provide a means of resisting the scopic view of the Street View Camera. The most current iteration of the Street View Camera, named R7, features up to 15 charged coupled device (CCD) sensors (Anguelov, et al. 34), which according to anecdotal evidence makes them susceptible to laser damage ("Avoiding Laser Damage to CMOS and CCD Camera Sensors, and Video Projectors Including DLP" 2017). Lasers, such as those that are found in presentation pointers and pet toys provide an inexpensive and highly portable means to subvert observation with cameras.

The idea of tampering with cameras, databases, or even entire networks speaks to what the Critical Art Ensemble delights in referencing the resistance work of the Slacker Luddite (Critical Art Ensemble 56). As any bureaucrat or technician has fantasized, the Critical Art Ensemble writes, destroying hard drives, mainframes, and company vehicles gives birth to a neoluddite (56). As the Ensemble point out and is apparent with resisting the gaze of Google Street View, the misappropriation of technologies and turning "the authoritarian codes inside out" is part and parcel of the long view; while destroying the material aspects of work provides a temporary fix, it is the destruction of the symbolic order that is confining and alienating the individual that is the most appealing (Critical Art Ensemble 68). While not as exhilarating as burning a Google Street View car and camera rig, rendering the corporate–and in the case of Rafman, corporate and artistic–gaze virtually meaningless is a disruption of the oppressing machinations.

War Clouds: Obfuscation is a Tool

Obfuscation as a means of resisting surveillance certainly presents an interesting methodology, as surveillance practices most likely work in tandem with other technologies. Even though Google is perpetrating transparency in this instance, others remain doubtful. In addition to Appelbaum, scholars such as Finn Brunton and Helen Nissenbaum claim that it is uncertain what an entity's intentions are with procured imagery. Citing the use of CCTV, Brunton and Nissenbaum correlate other technologies such as time codes on credit card

purchases, facial recognition, and emerging technologies such as gait recognition as creating an asymmetrical power relationship where scads of information is voluntarily and involuntarily given (Brunton and Nissenbaum 49). It is this type of uncertainty that is inherent in an asymmetrical power relationship that rendering a camera, a network, or infrastructure ineffective is a viable option.

Finn and Nissenbaum, in their opening argument, make the case for chaff as a viable means of obfuscation (Brunton and Nissenbaum 8). Its use in warplanes notwithstanding, the idea of chaff, i.e., pounds of black, aluminum backed paper ejected from an airplane can give the appearance of hundreds of planes to RADAR. How might other simple technologies be implemented in obfuscation within the New Aesthetic?

Faces Without Eyes

As facial recognition software becomes more sophisticated, and produced more cheaply, we can expect to find its application more readily. Amazon, who has developed Rekognition, touts the technology as a means to "make it easy to add highly accurate image and video analysis to your applications" ("The Facts on Facial Recognition with Artificial Intelligence."). The corporate double talk form Amazon is nothing more than an innocuous way to say that an AI-centric means of facial recognition is readily available, and it is cheap. The company advertises the technology on their site, stating "Rekognition's fast and accurate search capability allows you to identify a person in a photo or video using your private

repository of face images" ("Amazon Rekognition – Video and Image" – AWS). While this may be marketed as a harmless way to analyze video and photographs, Amazon has come under fire from privacy advocates and even some shareholders to halt the sale of this technology to governments. Open Mic, a non-profit group that encourages activism in media and technology companies, and the American Civil Liberties Union (ACLU) warn against the problems with technologies like Rekognition. The ACLU discovered, when testing the software, that "found that it incorrectly matched 28 members of Congress with mugshots in a database, and that the errors were more common with people of color" ("Amazon Shareholders Want It to Stop Selling Facial-Recognition Tech to the Government" – CNN). Pressure from shareholders and advocacy groups are unlikely to influence board members of large corporations, and as of the time of this writing, the technology is still advertised on Amazon's website. Given that facial recognition technologies will most likely become commonplace and are being used in social media platforms like Facebook and Instagram now, obfuscation become smore important than ever to privacy within the New Aesthetic.

Adam Harvey, a Berlin-based artist and technologist, has been seeking methods to disrupt the algorithms behind facial-recognition software. His projects, such as Hyperface, rely on face-like patterns in textiles to obscure a person's identity much in the same fashion as chaff can obfuscate the airplane's actual identity to RADAR (Hern "Anti-Surveillance Clothing Aims to Hide Wearers from Facial Recognition."). Examining the textile pattern (Figure 32),

one can see how the distribution of pixelated blocks are rendered in such a way as to denote eyes, noses, and mouths. According to Harvey, by "overloading an algorithm with what it wants, oversaturating an area with faces to divert the gaze of the computer vision algorithm" (Hern "Anti-Surveillance Clothing"). The overloading of an algorithm relies on a classic feature of camouflage: the altering and obfuscation of figure/ground relationships. Here, Harvey is implementing a type of reverse face-ism, where instead of hiding the face in favor of showing more of the body, he is essentially converting the body into a crowd of faces as a means of camouflage. Brunton and Nissenbaum argue for the "disruption patterns that hide edges, outlines, shapes, and movement" as a viable means for camouflage which is the outcome of the Hyperface project (Brunton and Nisenbaum 47).

Given the pixelated quality of the pattern, and its intended purpose of disrupting

software that deals exclusively in computer vision, one may argue that this is an

intrinsically New Aesthetic solution to a New Aesthetic problem. Harvey has

taken the project further with Dazzle CV, a project that is based upon naval

camouflage schemes from World War I and makes the argument of "style tips for

reclaiming privacy" (Harvey, "CV Dazzle: Camouflage from Face Detection.").

This obfustyle, composed of asymmetrical haircuts and pixelated makeup, follows

a well-organized system to bamboozle facial recognition software, which bases its

confidence scores upon the "identification and spatial relationship of key facial

features, like symmetry and tonal contours" (Harvey, "CV Dazzle) (Figure 33).

Here, Harvey outlines six categories, such as makeup that contrasts with skin

tone in unusual tones and directions, obscuring the nose bridge, obscuring one

ocular region, avoiding masks, obscuring the elliptical shape of the head, and a

reliance upon asymmetry (Harvey, "CV Dazzle").
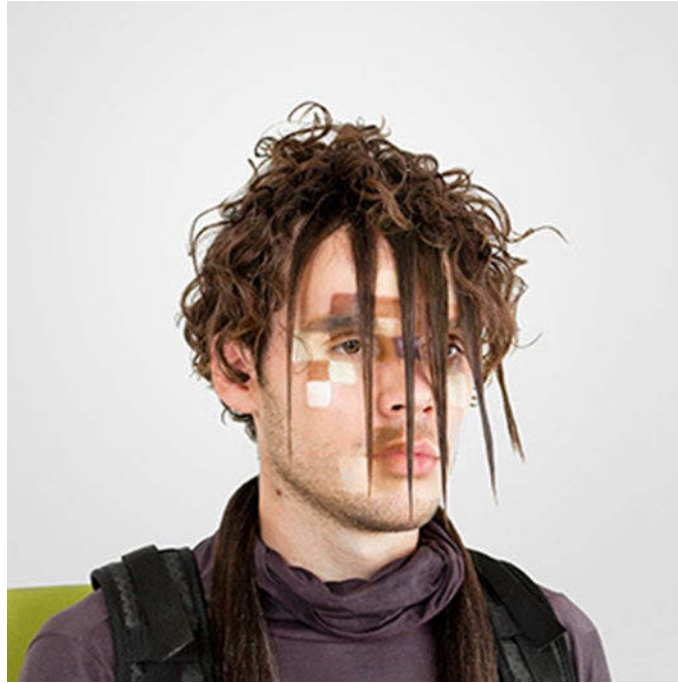
Figure 33: Look Number 3 from Adam Harvey's CV Dazzle Project. [Adam Harvey]

Aside from obscuring the corporeal body, obfuscation of traces such as written messages, is another way of resisting the totalizing surveillance of the New Aesthetic. Sang Mun, a former contractor for the NSA, developed the ZXX typeface after the Edward Snowden leaks in 2013. The typeface has been designed so that it can be read by humans but virtually undetectable by Optical Character Recognition (OCR) software (Mun, "Making Democracy Legible: A Defiant Typeface.") (Figure 34).

Figure 34: ZXX type specimens [Sang Mun]

Following Mun's philosophy, I, too, am interested in methods and means to "articulate our freedom" (Mun, "Making Democracy Legible). The viewer may notice in the fifth row of the type specimen the "C" in crime is shown as "X." This particular version of the ZXX typeface, ZXX False, provides a distinctive means of obfuscation which many human users may find daunting at first (the smaller letters are the actual text).

According to Mun, when tested against Google's OCR Training Text software, ZXX was 100% effective in causing the software to fail . While it is quite

possible that the NSA or other organizations have or are developing ways to circumvent OCR-proof typography, a foundation from which to build from is in place in the struggle for resisting New Aesthetic surveillance.

A Stronger Argument

While the previous examples showcase what is possible, it stands to reason that outside of ZXX, many are unfeasible. The average person will probably not want to present themselves in a way that is in many ways pure mimicry of the glitch aesthetic that many people associate with the New Aesthetic. We simply aren't there in mainstream culture. Less conspicuous, more conservative methods may provide a logical means of resisting New Aesthetic surveillance. For this, mathematics provides the ground. Through cryptography and steganography, one can make information disappear.

The parallel development of cryptography and steganography can be traced back to Herodotus, who chronicled their use in The Histories (Herodotus, qtd. in Singh 4). According to Herodotus, kryptos (secret) graphein (to write) and steganos (covered) writing is what saved the Greeks from defeat by the Persian king Xerxes in 480 BCE (4). As Xerxes amassed a fighting force five years in the making, the Greek exile Demaratus devised a method of writing on folding wooden tablets, then covering them with wax to conceal the message that Xerxes intended to attack Sparta, Demaratus was able to slip the message past the Persians and ruin the element of surprise (4-6).

Cryptography and steganography, now relying upon the rules of mathematics, is able to simultaneously scramble and conceal messages from both human and machinic eyes. The mathematical functions of cryptography and cryptoanalysis is capable of filling many books and lies outside the scope of this dissertation and runs counter to the earlier Gramscian claim regarding the organic intellectual. To gain an elementary understanding of how cryptography operates, we will look at a work of art.

Before we examine the art in question, a brief detour into the Cypherpunk subculture should be conducted to provide some context. Eric Hughes, a mathematician and author of A Cypherpunk Manifesto, emphatically stresses the need for privacy in an open society (Hughes "A Cypherpunk's Manifesto."). For Cypherpunks, privacy is a non-negotiable right that is guaranteed not by the "beneficence of governments, corporations, or other large, faceless organizations," but rather is conducted out of the guarantee of "anonymous transactions" built through cryptography, "anonymous mail forwarding systems" (this was 1993, after all), and the proliferation of encryption and cryptographic systems across the globe (Hughes "Cypherpunk"). Using A Cypherpunk Manifesto as a template, David Huerta made the NSA a mixtape.

Huerta, who describes himself as a technologist and software developer, has strong feelings about being a citizen of cyberspace. Based upon his dealings as someone working in the technology sector, Huerta has "goddamn feelings about mass surveillance, and they are not warm and fuzzy" (Huerta, "Why the

NSA Can't Listen to My Mixtape."). These goddamn (sic) feelings led Huerta to

the desire to want to create Laura Poitras and Glen Greenwald (the creators of

the documentary, Citizen Four, about the Snowden whistle blowing in 2013, and

the author of the book No Place to Hide: Edward Snowden, the NSA, and the U.S.

Surveillance State, respectively) a mixtape (Huerta, "Mixtape."). Huerta, who

doesn't really consider himself an artist, did create an artist's statement in which

he outlined his rationale:

> […]I instead made my own version of a mix tape with an Arduino and
>
> wave shield sandwiched in between two laser-etched pieces of transparent
>
> acrylic. The use of a giant-ass Arduino and wave shield was chosen since
>
> the (shitty) 44KHz wave file format gave it roughly the same audio quality
>
> I figured a wiretapped AT&T phone conversation would have. The use of
>
> transparent acrylic was to symbolically give transparency to the device you
>
> were using; A response to the hidden exploitation of proprietary
>
> smartphones by computery mercenaries like Finfisher and HackingTeam.
>
> This open-hardware device would not be a black box, figuratively or
>
> literally.

As 2013 came to a close, more and more revelations of NSA abuse became

known and it was made clear that the NSA intended to spy on basically

everything it could. Although it was revealed the NSA has several

programs to exploit and intercept systems of every kind, the actual

cryptography connecting those systems was still something it

fundamentally can't break. Encryption is the blind spot to the NSA's all-

seeing eye. Math doesn't need an information dominance center to enforce

its rules. Math is the legal framework which the universe can only obey

and will trump and outlast the rules of any human state. For the common

person to have access to encryption was the result of several Promethean

acts of defiance against the military powers that wanted to make

cryptography only available to themselves to weaponize. The US

government was basically trolled by the cypherpunks of the early 90s

when they released strong cryptography software to the public and began

to level that playing field.

In keeping that tradition alive, I used encryption (AES/Whirlpool for the

hash algorithm) to make my mix tape unplayable without the passphrase

needed to unlock the private key that would decrypt the SD card where the

music is stored. The list of music used was kept offline and only available

in a printed paper form for the aforementioned staff art show. I created

special transparent red acrylic pieces to indicate this one was the

encrypted version and mailed the device with the encrypted SD card to the

NSA's headquarters in Fort Meade, Maryland [...] (Huerta, "Mixtape.")

"The blind spot to the NSA's all-seeing eye" is important to consider when dealing with breaking encryption. For example, if Huerta's mixtape were encrypted using an Advanced Encryption Standard of 128-bits and having the required computation power to test one trillion keys per second, a brute force attack could still conceivably take 10.79 quintillion years (about 785 million times the age of the visible universe, which is estimated at 13.75 billion years) (Wood "The Clock is Ticking for Encryption."). While quantum computing could shorten that time, the chances of breaking an encryption key in an expedient time frame would still be up to chance.

As Phil Zimmerman, the creator of Pretty Good Privacy (PGP) states, cryptography used to be an obscure science, historically used for military or diplomatic communication (Zimmerman, qtd. in Singh 296). However, within the New Aesthetic, cryptography and steganography is the realization of power and the power relationships between people, governments, and increasingly, corporations (Singh 296). As freedom of speech, the press, freedom from search and seizure, and the right to privacy are rapidly eroding in the alluvial floodplains of society, assurances to shore up these unalienable tenets of humanity are paramount. Thus, processes like cryptography and steganography become strong(er) arguments in the attempts to hold onto these principles. Luckily for us, there's still quite a few cypherpunks, anarchists, and computer scientists who feel the same way.

Having everyone study cryptography, steganography, and computer science is neither reasonable nor practical. However, the open source movement ensures that powerful tools are available to anyone who needs them. Many of these are free or cost a nominal fee and offer features like the ability to secure vaults of unlimited size, and the use of Blowfish, Cast, 3DES and AES-256 encryption algorithms.

Within the New Aesthetic, using the visual language paired with tools like cryptography and steganography and ZXX are appropriate. The combined use of these tools creates an argument that firmly states that machinic eyes will not and cannot offer rebuttal. It provides a dialectic that informs our digital interlocutors that wanton surveillance in a corporeal or incorporeal reality is neither warranted nor welcome.

For example, in the images that I have created below, several things are happening concurrently. In the first image of William S. Burroughs (Figure 35), the viewer can see various fonts within the ZXX typeface family. The quote from Burroughs reads, "Americans have a special horror of giving up control, of letting things happen in their own way without interference."
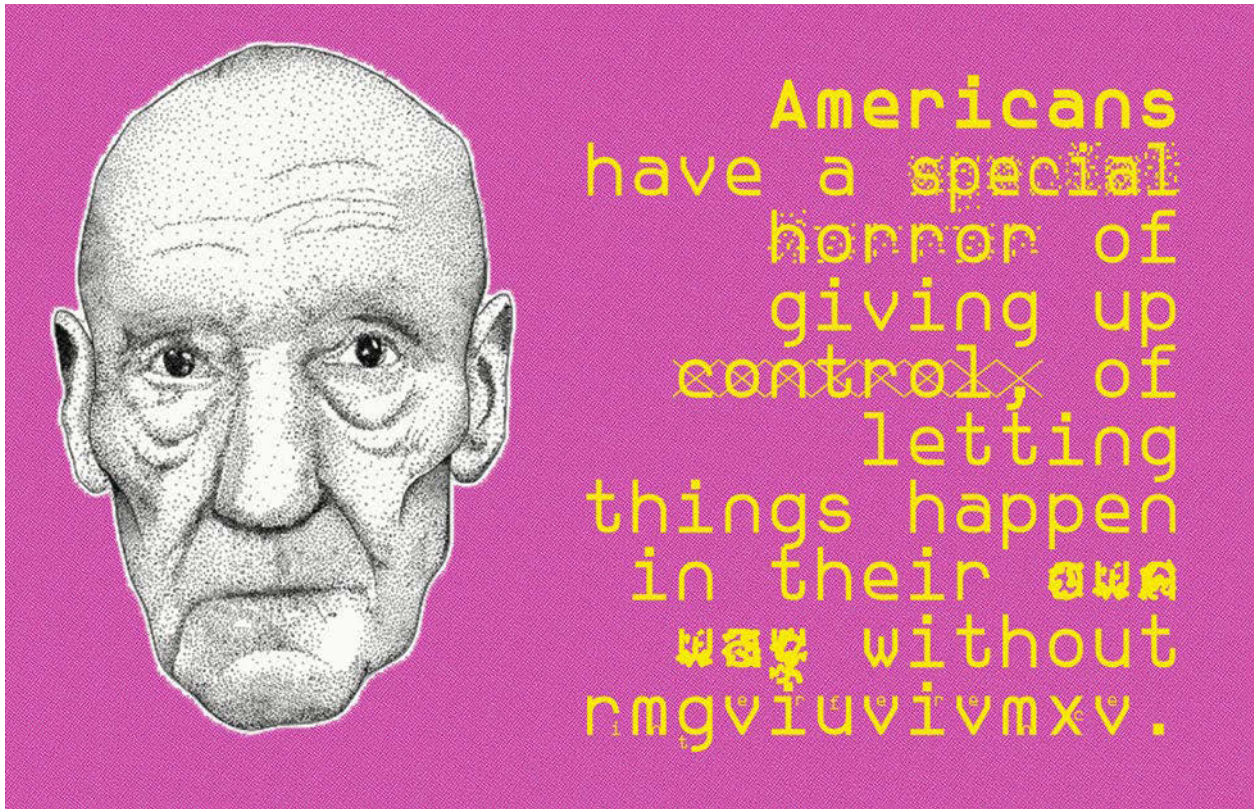
Figure 35: Image of William S. Burroughs with encrypted message hidden within. [Brian Gaines]

The message hidden within the image, taken from the Destructables website is a recipe for wheat paste, aka Marxist Glue, is as follows:

> Wheat-pasting is a great way to get detailed images up quickly. You can make posters, drawings, and paintings on paper and stick them up with this glue. Many people, from underground activists and street artists to concert promoters*, use wheat paste for adhering posters to walls. It is a

cheap and effective method to spread images and ideas. Included below are two recipes – They are both well-measured and heated recipes, which makes for a more durable and smoother paste. The first is a small batch. The second is a larger batch. You can always double or triple the recipes. It is pretty forgiving. If you think it came out to watery, just add some white glue or wood glue. If you don't like these recipes, there are lots of recipes and video tutorials on how to make a wheat-paste on the web. Look around and make up your own. *A note about concert and album posters. Most of these are put up illegally for big profit companies who want to pollute our public space with advertising. Don't hesitate to throw your images up right on top of these illegal corporate ads. Just don't let them see you do it.

You will need (tools or supplies):

flour (wheat works best)

sugar

water

container with a lid

Step 1

Boil 1 cup of water. Pour the cup of water into a saucepan and bring to a boil over heat.

Step 2

Put 3 tablespoons of flour into a bowl, add 10 teaspoons of cool water until it forms a runny mix.

Step 3

Once the water has boiled, add the runny mix to the boiling water. Stir well.

Step 4

Keep stirring. The mixture will foam up while it boils, so the constant stirring is essential to keep it from bubbling over and to keep it from getting chunky. Keep the mix boiling for 2 minutes.

Step

Take the boiled mix off the heat. Add 2 tablespoons or more of sugar (added strength).

Step 5

Let it cool. Pour into an appropriate container for carrying with you. It will keep well for about a week.

TIPS:

1. Don't store the glue for more than 2 days or it will start to stink. Adding copper sulphate will make paste toxic to moths and long lasting. You can also keep it in the fridge to lengthen its shelf life.

2. For a super strong glue, add wallpaper paste or wood glue. Do not use super glue, rubber cement, or anything else volatile! Glue does make it

smell weird and the wheat-paste is already strong, so I usually skip this step.

3. Clean your pots, tools, and brushes asap, before they dry.

Step

RECIPE for a LARGER BATCH:

Follow the directions above, but use these amounts:

- Boil 12 cups of water

- Mix 6.5 cups of flour with 6-7 cups of cool water until it is a little runny

- Add mix to boiling water and stir for a couple of minutes (longer if you want to thicken)

- Turn off heat and mix in 4.5 cups of sugar.

- Let it cool.

Step

Wheat-pasting: some basics for putting up your images:

Most paper will work. I've taped together large pieces of sketch paper and painted them with acrylic gesso to alter billboards. I've printed large regular printer paper posters at copy places. They all work well.

While pasting, put a layer of paste down on the surface, then your image, then another layer of paste (some people choose to not put on this top coat, but it will be more water resistant and durable if you do). Press firmly.

*A pasting technique that works for me is: use a wide brush 6-8" or wider.

1. Wet the wall with your paste and then smooth that paste out with some final smooth strokes, getting out the big blobs and chunks (this is messy, so wear old clothes)

2. Attach the top of your image, holding the bottom away from the wall. Helps to have a friend. (You can also roll it out side to side for larger images.)

3. Get your brush nice and goopy with paste. Run the brush straight down the center of your image as you lower it onto the wall.

4. Re-wet your brush with paste and paint outward from the center, working out bubbles. Do this quickly, as the paper can start to distort if you don't wet it fast enough.

5. Make sure you have the entire top covered with paste, then smooth it all out with even strokes in one direction, taking off any excess paste. It needs to be wet, not thick.

Think about picking a spot that is already a tagging spot or on an advertisement. Regular citizens are less likely to care if you are hitting these spots.

Have fun! (Destructables "Wheatpaste Recipe (for Putting up Posters/Billboard Alterations).

After decoding the message with the appropriate key, one may elect to wheat paste this image to a wall or billboard or other surface as a further means of resistance. One drawback to these "over the counter" steganography tools is the relative lack of size for which one may hide a file. Large text files would need to be broken up into smaller files and sent via several images or sound files in order for a message to be successful. Computer scientists, such as Wojciech Frączek, Wojciech Mazurczyk, and Krzysztof Szczypiorski have theorized and provided a proof of concept for what they have termed a "Multi-Level Steganography," but at present this technology is not readily available as open source or commercial software.

Endgame

The New Aesthetic, whether as an art project, a Hyperobject that transcends spatio-temporality, or a metaphor for a global computational surveillance apparatus, one thing is clear: the world is changing technologically at

a rapid pace. The means of resistance outlined in this dissertation will most likely be obsolete in the near future, or perhaps already are. Soon, many of the technologies, systems, and even the language we use to describe them will become e-waste, go the way of the eight-track, or become entries in a resuscitated version of Bruce Sterling's Dead Media Project. Others may find second lives as post-Digital virtu; a type of post-Cypherpunk detritus that people will pay good money for. People like tactile objects of curiosity.

As a surveillance apparatus, the endgame of the heads containing machinic eyes is the mythologies of conspiracy theorists, the claptrap of pulp science fiction writers, or at the very least the well-thought ideas of men with corporeal eyes and the gift of standing at a certain vantage point that enables a long view. For all that James Bridle is shortsighted about with the New Aesthetic, he makes up for in his other writings on data, information, and on surveillance.

While stopping the global surveillance apparatus from watching us with machinic eyes seems futile–it could be easier to empty the Atlantic with a red plastic cup–creating and implementing tangible means of resistance is a good place to start.

WORKS CITED

"A Cypherpunk's Manifesto." Accessed April 11, 2019.

> https://www.activism.net/cypherpunk/manifesto.html.

Aima, Rahel. "Desiring Machines." The New Inquiry (blog), May 29, 2012.

> https://thenewinquiry.com/desiring-machines/.

"Allen Ginsberg - Howl." Accessed January 21, 2019.

> http://www.wussu.com/poems/agh.htm.

"Amazon Rekognition – Video and Image - AWS." Amazon Web Services, Inc. Accessed

> April 7, 2019. https://aws.amazon.com/rekognition/.

"Amazon Shareholders Want It to Stop Selling Facial-Recognition Tech to the

> Government - CNN." Accessed April 11, 2019.

> https://www.cnn.com/2019/01/17/tech/amazon-shareholders-facial-

> recognition/index.html.

"An Appraisal of Technologies of Political Control," n.d., 56.

Appelbaum, Jacob. Talks 2005–2013. Greyscale Publishing, 2013.

"Apple Music Chill Mix," n.d.

Barthes, Roland. Camera Lucida: Reflections on Photography. Macmillan, 1981.

———. The Pleasure of the Text. Macmillan, 1975.

Baudrillard, Jean. America. Verso, 1989.

———. "Dust Breeding." CTheory 0, no. 0 (October 8, 2001): 10-8/2001.

———. Le Système Des Objets. Verso, 2005.

———. Simulacra and Simulation. University of Michigan Press, 1994.

———. The Conspiracy of Art: Manifestos, Interviews, Essays. Semiotext(e), 2005.

———. The Transparency of Evil: Essays on Extreme Phenomena. Verso, 1993.

———. The Transparency of Evil: Essays on Extreme Phenomena. Verso, 1993.

Bauman, Zygmunt, and David Lyon. Liquid Surveillance: A Conversation. John Wiley & Sons, 2013.

Bentham, Jeremy, and Miran Božovič. The Panopticon Writings. Verso Books, 1995.

Berry, D., and M. Dieter. Postdigital Aesthetics: Art, Computation And Design. Palgrave Macmillan UK, 2015.

Berry, David, Michel van Dartel, Michael Dieter, Michelle Kasprzak, Nat Muller, Rachel O'Reilly, and Jose Luis de Vicente. New Aesthetic New Anxieties. V2 Press, 2012.

Berry, David M. Critical Theory and the Digital. A&C Black, 2014.

Betancourt, Michael. The Critique of Digital Capitalism: An Analysis of Digital Culture and Technology. Punctum, 2015.

Birchall, Clare. Shareveillance: The Dangers of Openly Sharing and Covertly Collecting Data. U of Minnesota Press, 2017.

Black, Edwin. IBM and the Holocaust: The Strategic Alliance Between Nazi Germany and America's Most Powerful Corporation. Dialog Press, 2018.

Bloom, James J. The Jewish Revolts Against Rome, A.D. 66-135: A Military Analysis. McFarland, 2014.

Bogost, Ian. Alien Phenomenology, Or, What It's Like to Be a Thing. U of Minnesota Press, 2012.

———. "The New Aesthetic Needs to Get Weirder." The Atlantic, April 13, 2012.

      https://www.theatlantic.com/technology/archive/2012/04/the-new-aesthetic-

      needs-to-get-weirder/255838/.

Bolter, Jay David, and Diane Gromala. Windows and Mirrors: Interaction Design,

      Digital Art, and the Myth of Transparency. Cambridge, MA, USA: MIT Press,

      2003.

Bouchagiar, George, and Maria Canellopoulou-Bottis. "The Right to Be Forgotten:

      Memory Holes as the Default?" SSRN Scholarly Paper. Rochester, NY: Social

      Science Research Network, June 5, 2018.

      https://papers.ssrn.com/abstract=3226404.

Bourdieu, Pierre. Distinction: A Social Critique of the Judgement of Taste. Routledge,

      2013.

Boyle, Casey, James J. Brown Jr, and Steph Ceraso. "The Digital: Rhetoric Behind and

      Beyond the Screen." Rhetoric Society Quarterly 48, no. 3 (May 27, 2018): 251–59.

      https://doi.org/10.1080/02773945.2018.1454187.

Brand, Stewart. "We Owe It All to the Hippies," n.d., 3.

Bratton, Benjamin H. "The Black Stack - Journal #53 March 2014 - e-Flux." Accessed

      March 3, 2019. https://www.e-flux.com/journal/53/59883/the-black-stack/.

———. The Stack: On Software and Sovereignty. MIT Press, 2016.

Bridle, James. "About." Accessed November 19, 2017. http://new-

      aesthetic.tumblr.com/about.

———. "How Britain Exported Next-Generation Surveillance." Matter (blog), December 18, 2013. https://medium.com/matter/how-britain-exported-next-generation-surveillance-d15b5801b79e.

———. New Dark Age: Technology and the End of the Future. Verso Books, 2018.

———. "Rise of the Machines: Has Technology Evolved beyond Our Control?" The Guardian, June 15, 2018, sec. Books. http://www.theguardian.com/books/2018/jun/15/rise-of-the-machines-has-technology-evolved-beyond-our-control-.

———. "Something Is Wrong on the Internet." James Bridle (blog), November 6, 2017. https://medium.com/@jamesbridle/something-is-wrong-on-the-internet-c39c471271d2.

———. "The Rise of Virtual Citizenship." The Atlantic, February 21, 2018. https://www.theatlantic.com/technology/archive/2018/02/virtual-citizenship-for-sale/553733/.

———. "Whistleblowers Are a Terrible Answer to the Problems of Big Tech." Wired UK, June 11, 2018. https://www.wired.co.uk/article/silicon-valley-whistleblowers-james-bridle-book-new-dark-age.

Brin, David. The Transparent Society: Will Technology Force Us To Choose Between Privacy And Freedom? Basic Books, 1999.

Brunton, Finn, and Helen Nissenbaum. Obfuscation: A User's Guide for Privacy and Protest. MIT Press, 2015.

Bryant, Levi R. The Democracy of Objects. Open Humanities Press, 2011.

Burnham, Jack. "Systems Esthetics." Artforum 7, no. 1 (1968): 30–35.

Bush, Vannevar. "As We May Think." The Atlantic Monthly, 1945.

Byrum, Kristie. The European Right to Be Forgotten: The First Amendment Enemy.
Rowman & Littlefield, 2018.

Cavarero, Adriana. Horrorism: Naming Contemporary Violence. Columbia University
Press, 2010.

Chatterjee, Pratap, and Khalil. Verax: The True History of Whistleblowers, Drone
Warfare, and Mass Surveillance: A Graphic Novel. Metropolitan Books, 2017.

Cheney-Lippold, John. We Are Data: Algorithms and the Making of Our Digital Selves.
NYU Press, 2018.

Chessa, Luciano. Luigi Russolo, Futurist: Noise, Visual Arts, and the Occult. University
of California Press, 2012.

Chun, Wendy Hui Kyong. Control and Freedom: Power and Paranoia in the Age of Fiber
Optics. MIT Press, 2008.

———. Programmed Visions: Software and Memory. MIT Press, 2011.

Cloninger, Curt. "Manifesto for a Theory of the 'New Aesthetic' | Mute." Accessed
November 19, 2017. http://www.metamute.org/editorial/articles/manifesto-
theory-%E2%80%98new-aesthetic%E2%80%99.

Comaroff, Jean, and John L. Comaroff. "Millennial Capitalism: First Thoughts on a
Second Coming." Public Culture 12, no. 2 (May 1, 2000): 291–343.

Contreras-Koterbay, Scott, and Lukasz Mirocha. The New Aesthetic and Art:
Constellations of the Postdigital. Institute of Network Cultures, 2016.

Cornell, Lauren, and Ed Halter. Mass Effect: Art and the Internet in the Twenty-First

Century. MIT Press, 2015.

Cotton, Charlotte, Marina Chao, and Pauline Vermare. Public, Private, Secret: On

Photography and the Configuration of Self. Aperture Foundation, 2018.

Cox, Christoph, and Daniel Warner. Audio Culture: Readings in Modern Music. A&C

Black, 2004.

D, Randall Packer, PH, Randall Packer, Ken Jordan, and William Gibson. Multimedia:

From Wagner to Virtual Reality. W. W. Norton & Company, 2001.

Debord, Guy. The Society of the Spectacle. Last Word Press, 2016.

Deleuze, Gilles. "Postscript on the Societies of Control." October 59 (1992): 3–7.

Deleuze, Gilles, and Felix Guattari. Anti-Oedipus. A&C Black, 2004.

Dickens, Charles. A Tale of Two Cities. Open Road Media, 2014.

Dobrin, Sidney I. Writing Posthumanism, Posthuman Writing. Parlor Press, 2015.

Eggers, Dave. The Circle. Knopf Doubleday Publishing Group, 2013.

Elkins, James. The Object Stares Back: On the Nature of Seeing. Houghton Mifflin

Harcourt, 1997.

"EMCDDA | LSD Profile (Chemistry, Effects, Other Names, Synthesis, Mode of Use,

Pharmacology, Medical Use, Control Status)." Accessed February 24, 2019.

http://www.emcdda.europa.eu/publications/drug-profiles/lsd.

Ensemble, Critical Art. Electronic Civil Disobedience and Other Unpopular Ideas.

Autonomedia & Critical Art Ensemble, 1996.

"Ex-NSA Chief: 'We Kill People Based on Metadata' - ABC News." Accessed March 25, 2019. https://abcnews.go.com/blogs/headlines/2014/05/ex-nsa-chief-we-kill-people-based-on-metadata/.

"Facebook and YouTube Use Automation to Remove Extremist Videos, Sources Say." The Guardian, June 25, 2016, sec. Technology. https://www.theguardian.com/technology/2016/jun/25/extremist-videos-isis-youtube-facebook-automated-removal.

Farge, Arlette, and Michel Foucault. Disorderly Families: Infamous Letters from the Bastille Archives. University of Minnesota Press, 2016.

Featherstone, Mike, and Roger Burrows. Cyberspace/Cyberbodies/Cyberpunk: Cultures of Technological Embodiment. SAGE, 1996.

Finn, Ed. What Algorithms Want: Imagination in the Age of Computing. MIT Press, 2017.

———. What Algorithms Want: Imagination in the Age of Computing. MIT Press, 2017.

Fisher, Mark. Capitalist Realism: Is There No Alternative? John Hunt Publishing, 2009.

———. Ghosts of My Life: Writings on Depression, Hauntology and Lost Futures. John Hunt Publishing, 2014.

Flake, Jeff. "S.J.Res.34 - 115th Congress (2017-2018): A Joint Resolution Providing for Congressional Disapproval under Chapter 8 of Title 5, United States Code, of the Rule Submitted by the Federal Communications Commission Relating to 'Protecting the Privacy of Customers of Broadband and Other

Telecommunications Services'." Webpage, April 3, 2017.

https://www.congress.gov/bill/115th-congress/senate-joint-resolution/34.

Flatley, Jonathan. Like Andy Warhol. University of Chicago Press, 2017.

Flusser, Vilém. Towards a Philosophy of Photography. Reaktion Books, 2013.

"Foley Beheading Goes Viral - YouTube." Accessed March 31, 2019.

https://www.youtube.com/watch?v=F61yrDqfOkY.

Foucault, Michel. Discipline and Punish: The Birth of the Prison. Knopf Doubleday

Publishing Group, 2012.

Fraczek, Wojciech, Wojciech Mazurczyk, and Krzysztof Szczypiorski. "Multi-Level

Steganography: Improving Hidden Communication in Networks."

ArXiv:1101.4789 [Cs], January 25, 2011. https://doi.org/10.3217/jucs-018-14-

1967.

Freud, Sigmund. The Uncanny. Penguin, 2003.

Frith, Jordan. A Billion Little Pieces: Rfid and Infrastructures of Identification. MIT

Press, 2019.

Frome, A., G. Cheung, A. Abdulkader, M. Zennaro, B. Wu, A. Bissacco, H. Adam, H.

Neven, and L. Vincent. "Large-Scale Privacy Protection in Google Street View." In

2009 IEEE 12th International Conference on Computer Vision, 2373–80, 2009.

https://doi.org/10.1109/ICCV.2009.5459413.

Fuller, R. Buckminster. Critical Path. Estate of R. Buckminster Fuller, 1982.

Fussell, Sidney. "Why the New Zealand Shooting Video Keeps Circulating." The Atlantic,

March 21, 2019.

https://www.theatlantic.com/technology/archive/2019/03/facebook-youtube-new-zealand-tragedy-video/585418/.

Gibson, William. Neuromancer. Penguin, 2016.

"Google Takes Street View Off-Road with Backpack Rig - CNET." Accessed March 23, 2019. https://www.cnet.com/news/google-takes-street-view-off-road-with-backpack-rig/.

Gourgey, Hannah, and Edward B. Smith. "'Consensual Hallucination': Cyberspace and the Creation of an Interpretive Community." Text & Performance Quarterly 16, no. 3 (July 1996): 233. https://doi.org/10.1080/10462939609366150.

Graf, Rudolf F. Modern Dictionary of Electronics. Elsevier, 1999.

Gramsci, Antonio. Prison Notebooks. Columbia University Press, 1992.

Groys, Boris. In the Flow. Verso Books, 2016.

Gunkel, David. Hacking Cyberspace. First. New York: Routledge, 2001.

Haggerty, Kevin D., and Richard V. Ericson. "The Surveillant Assemblage." The British Journal of Sociology 51, no. 4 (2000): 605–22. https://doi.org/10.1080/00071310020015280.

Hamerton-Kelly, Robert G. "The King and the Crowd: Divine Right and Popular Sovereignty in the French Revolution." Contagion: Journal of Violence, Mimesis, and Culture 3, no. 1 (1996): 67–83. https://doi.org/10.1353/ctn.1996.0002.

Han, Byung-Chul. In the Swarm: Digital Prospects. MIT Press, 2017.

———. The Transparency Society. Stanford University Press, 2015.

Hanzalik, Kate, and Nathalie Virgintino. Exquisite Corpse: Studio Art-Based Writing

    Practices in the Academy. PARLOR PressLCC, 2019.

Harcourt Bernard E. Exposed: Desire and Disobedience in the Digital Age. Harvard

    University Press, 2015.

Harman, Graham. Immaterialism: Objects and Social Theory. John Wiley & Sons, 2017.

Harvey, Adam. "CV Dazzle: Camouflage from Face Detection." Accessed April 11, 2019.

    https://cvdazzle.com/.

Haynes, Cynthia. The Homesick Phone Book: Addressing Rhetorics in the Age of

    Perpetual Conflict. SIU Press, 2016.

Helfand, Jessica. Design: The Invention of Desire. Yale University Press, 2016.

Helmreich, Stefan. Silicon Second Nature: Culturing Artificial Life in a Digital World,

    Updated With a New Preface. University of California Press, 2000.

Hern, Alex. "Anti-Surveillance Clothing Aims to Hide Wearers from Facial Recognition."

    The Guardian, January 4, 2017, sec. Technology.

    https://www.theguardian.com/technology/2017/jan/04/anti-surveillance-

    clothing-facial-recognition-hyperface.

Hess, Aaron, and Amber Davisson. Theorizing Digital Rhetoric. Routledge, 2017.

Himmelfarb, Gertrude. The Haunted House of Jeremy Bentham. Duke University Press,

    1965.

Hodgson, Justin. Post-Digital Rhetoric and the New Aesthetic. Ohio State University

    Press, 2019.

Hoffman, R. Heim, A. Brack, H. Kobel, A. Frey, Th. Petrrzilka, and F. Troxler.
    "'Psilocybin Und Psilocin, Zwei Psychotrope Wirkstoffe Aus Mexikanischen
    Rauschpilzen.' Helvetica Chimica Acta 42.5 (1959): 1557-1572." Helvetica
    Chemica Acta 42, no. 5 (1959): 1557–72.

Holland, Eugene W. Deleuze and Guattari's Anti-Oedipus: Introduction to
    Schizoanalysis. Routledge, 2002.

Holt, Douglas, and Douglas Cameron. Cultural Strategy: Using Innovative Ideologies to
    Build Breakthrough Brands. OUP Oxford, 2010.

https://www.facebook.com/brian.d.fung. "House Sends Bill Rolling Back Internet
    Privacy Protections to Trump." Washington Post. Accessed March 20, 2019.
    https://www.washingtonpost.com/business/economy/house-sends-bill-rolling-
    back-internet-privacy-protections-to-trump/2017/03/28/db704ca4-13d5-11e7-
    9e4f-09aa75d3ec57_story.html.

Huerta, David. "Why the NSA Can't Listen to My Mixtape." David Huerta (blog), May
    24, 2014. https://medium.com/@huertanix/why-the-nsa-cant-listen-to-my-
    mixtape-739c147d9c04.

Hull, Stephen P. "Sinaloa World: The Dark Mirror of the Global Drugs Trade," n.d., 22.

"In Response To Bruce Sterling's 'Essay On The New Aesthetic' - Creators." Accessed
    November 19, 2017. https://creators.vice.com/en_us/article/eza9xa/in-
    response-to-bruce-sterlings-essay-on-the-new-aesthetic.

Ingold, Tim. Lines: A Brief History. Routledge, 2007.

"James Bridle | Booktwo.Org." Accessed November 19, 2017.

    http://booktwo.org/james-bridle/.

"James Bridle - Waving at the Machines." Web Directions (blog), December 5, 2011.

    https://www.webdirections.org/resources/james-bridle-waving-at-the-

    machines/.

Jameson, Fredric. Postmodernism, Or, The Cultural Logic of Late Capitalism. Duke

    University Press, 1991.

Jay, Martin. Downcast Eyes: The Denigration of Vision in Twentieth-Century French

    Thought. University of California Press, 1993.

"Jon Rafman." Accessed April 11, 2019. http://9-eyes.com/.

Kahney, Leander. "Van Gogh Was Here, But When? | WIRED." Accessed March 25,

    2019. https://www.wired.com/2003/06/van-gogh-was-here-but-when/.

Kant, Immanuel. Kant's Critique of Judgement. Macmillan and Company, 1892.

Kember, Sarah, and Joanna Zylinska. Life After New Media: Mediation as a Vital

    Process. MIT Press, 2012.

Knabb, Ken. Situationist International Anthology. Bureau of Public Secrets, 2006.

Land, Nick. Fanged Noumena: Collected Writings 1987–2007. MIT Press, 2018.

Larson, Quincy. "The CIA Just Lost Control of Its Hacking Arsenal. Here's What You

    Need to Know." freeCodeCamp, March 7, 2017.

    https://medium.freecodecamp.org/the-cia-just-lost-control-of-its-hacking-

    arsenal-heres-what-you-need-to-know-ea69fc1ce38c.

Leary, Timothy. Exo-Psychology: A Manual on the Use of the Human Nervous System
    According to the Instructions of the Manufacturers (Classic Reprint). Fb&c
    Limited, 2017.

Levin, Thomas Y., Ursula Frohne, and Peter Weibel. Ctrl [Space]: Rhetorics of
    Surveillance from Bentham to Big Brother. ZKM Center for Art and Media, 2002.

London, James Bridle, and Engl. "Living on the Electromagnetic Border." Creative Time
    Reports, November 10, 2014. http://creativetimereports.org/2014/11/10/james-
    bridle-electromagnetic-border-zone/.

Lyon, David. Surveillance After Snowden. John Wiley & Sons, 2015.

———. Surveillance Society: Monitoring Everyday Life. McGraw-Hill Education (UK),
    2001.

———. Theorizing Surveillance: The Panopticon and Beyond. Willan Publishing, 2006.

Lyon, Mike. "Biography & Technical Development." www.mlyon.com. Accessed
    February 26, 2019. http://mlyon.com/about/biography/.

Macleod, Catriona, and Kevin Durrheim. "Foucauldian Feminism: The Implications of
    Governmentality." Journal for the Theory of Social Behaviour 32, no. 1 (2002):
    41–60. https://doi.org/10.1111/1468-5914.00175.

Marinetti, Filippo Tommaso. Critical Writings: New Edition. Farrar, Straus and Giroux,
    2007.

Markoff, John. What the Dormouse Said: How the Sixties Counterculture Shaped the
    Personal ComputerIndustry. Penguin, 2005.

Martin, Aaron K., Rosamunde E. van Brakel, and Daniel J. Bernhard. "Understanding

    Resistance to Digital Surveillance: Towards a Multi-Disciplinary, Multi-Actor

    Framework." Surveillance & Society 6, no. 3 (April 26, 2009): 213–32.

    https://doi.org/10.24908/ss.v6i3.3282.

McMullan, Thomas. "What Does the Panopticon Mean in the Age of Digital

    Surveillance?" The Guardian, July 23, 2015, sec. Technology.

    https://www.theguardian.com/technology/2015/jul/23/panopticon-digital-

    surveillance-jeremy-bentham.

Metahaven. Black Transparency: The Right to Know in the Age of Mass Surveillance.

    First. Sternberg Press, 2015.

Miller, Henry. Tropic of Cancer. Penguin Books Limited, 2015.

Miller, Jacques-Alain, and Richard Miller. "Jeremy Bentham's Panoptic Device."

    October 41 (1987): 3–29. https://doi.org/10.2307/778327.

Miller, Paul. "The Sound of Science | Soundbreaking." The Sound of Science |

    Soundbreaking. Accessed February 19, 2019.

    http://www.pbs.org/soundbreaking/blogs/inside-look/the-sound-of-science/.

Milton, John, and Elijah Fenton. Paradise Lost. John Bumpus, 1821.

Mitchell, W. J. T. What Do Pictures Want?: The Lives and Loves of Images. University of

    Chicago Press, 2005.

Monahan, Torin. "Monahan, Torin Surveillance as Cultural Practice." The Sociological

    Quarterly 52, no. 4 (2011): 495–508.

    https://doi.org/www.jstor.org/stable/23027562.

———. Surveillance in the Time of Insecurity. Rutgers University Press, 2010.

Morton, Timothy. Hyperobjects: Philosophy and Ecology After the End of the World.
    University of Minnesota Press, 2013.

———. Hyperobjects: Philosophy and Ecology after the End of the World. U of
    Minnesota Press, 2013.

———. Realist Magic: Objects, Ontology, Causality. Open Humanities Press, 2013.

Mosco, Vincent. The Digital Sublime: Myth, Power, and Cyberspace. MIT Press, 2005.

Mun, Sang. "Making Democracy Legible: A Defiant Typeface." Accessed April 11, 2019.
    https://walkerart.org/magazine/sang-mun-defiant-typeface-nsa-privacy.

Murphy, Jay. Artaud's Metamorphosis: From Hieroglyphs to Bodies Without Organs.
    Pavement Books, 2016.

Negroponte, Nicholas. "Being Digital - A Book (p)Review." Wired, February 1, 1995.
    https://www.wired.com/1995/02/negroponte-27/.

O'Neill, Kate. "Facebook's '10 Year Challenge' Is Just a Harmless Meme—Right?" Wired,
    January 15, 2019. https://www.wired.com/story/facebook-10-year-meme-
    challenge/.

Packer, Randall, and Ken Jordan. Multimedia: From Wagner to Virtual Reality. W. W.
    Norton & Company, 2002.

Poitras, Laura. Astro Noise: A Survival Guide for Living Under Total Surveillance. Yale
    University Press, 2016.

"Police Trace 3,000 Missing Children in Just Four Days Using Facial Recognition
    Technology." The Independent, April 24, 2018.

    https://www.independent.co.uk/life-style/gadgets-and-tech/news/india-police-missing-children-facial-recognition-tech-trace-find-reunite-a8320406.html.

Popovic, Srdja, and Matthew Miller. Blueprint for Revolution: How to Use Rice Pudding, Lego Men, and Other Nonviolent Techniques to Galvanize Communities, Overthrow Dictators, or Simply Change the World. Random House Publishing Group, 2015.

Press, Associated. "Hackers Lay Off Death Video." Wired, June 11, 2001. https://www.wired.com/2001/06/hackers-lay-off-death-video/.

Raley, Rita. Tactical Media. U of Minnesota Press, 2009.

Ricardo, Francisco J. The Engagement Aesthetic: Experiencing New Media Art through Critique. Bloomsbury Publishing USA, 2013.

Rieder, David M. Suasive Iterations: Rhetoric, Writing, and Physical Computing. Parlor Press, 2017.

Russolo, Luigi. "(Futurist Manifesto, 1913)," n.d., 16.

———. The Art of Noises. Pendragon Press, 1986.

Schreber, Daniel Paul. Memoirs of My Nervous Illness. New York Review of Books, 1955.

Shaviro, Steven. Without Criteria: Kant, Whitehead, Deleuze, and Aesthetics. MIT Press, 2012.

Singh, Simon. The Code Book: The Science of Secrecy from Ancient Egypt to Quantum Cryptography. Anchor Books, a division of Random House, Incorporated, 2000.

———. The Code Book: The Secrets Behind Codebreaking. Random House Children's

> Books, 2002.

Sirc, Geoffrey. English Composition As A Happening. Utah State University Press, 2002.

Solove, Daniel J. The Digital Person: Technology and Privacy in the Information Age.

> NYU Press, 2006.

Sorene, Paul. "All 135 Vintage NSA Security Posters From The 1950s and 1960s."

> Flashbak (blog), June 5, 2018. https://flashbak.com/135-vintage-nsa-security-
> posters-401741/.

Soyata, T., R. Muraleedharan, C. Funai, M. Kwon, and W. Heinzelman. "Cloud-Vision:

> Real-Time Face Recognition Using a Mobile-Cloudlet-Cloud Acceleration
> Architecture." In 2012 IEEE Symposium on Computers and Communications
> (ISCC), 000059–000066, 2012. https://doi.org/10.1109/ISCC.2012.6249269.

"SPACEWAR - by Stewart Brand - Fanatic Life and Symbolic Death Among the

> Computer Bums." Accessed November 6, 2018.
> http://www.wheels.org/spacewar/stone/rolling_stone.html.

Starosielski, Nicole. The Undersea Network. Duke University Press, 2015.

Steenson, Molly Wright. "Radical Pedagogies » Nicholas Negroponte, Leon Groisser,

> Jerome WiesnerThe Architecture Machine Group and The Media Lab at
> Massachusetts Institute of Technology MIT." Accessed January 13, 2019.
> http://radical-pedagogies.com/search-cases/a13-architecture-machine-group-
> media-lab-massachusetts-institute-technology-mit/.

Sterling, Bruce. "An Essay on the New Aesthetic." Wired, April 2, 2012.

>https://www.wired.com/2012/04/an-essay-on-the-new-aesthetic/.

Stevens, Jay. Storming Heaven: LSD and the American Dream. Grove Press, 1987.

Steyerl, Hito. Duty Free Art: Art in the Age of Planetary Civil War. Verso Books, 2017.

———. "Too Much World: Is the Internet Dead?," n.d., 10.

STML. Life Among the Render Ghosts. March 15, 2013. Photo.

>https://www.flickr.com/photos/stml/8559615958/.

"#sxaesthetic | Booktwo.Org." Accessed October 12, 2018.

>http://booktwo.org/notebook/sxaesthetic/.

Tabuchi, Hiroko. "For Some of Japan's Jobless, Homes Just 5 Feet Wide." The New

>York Times, January 1, 2010, sec. Global Business.

>https://www.nytimes.com/2010/01/02/business/global/02capsule.html.

"The Clock Is Ticking for Encryption | Computerworld." Accessed April 12, 2019.

>https://www.computerworld.com/article/2550008/the-clock-is-ticking-for-
>encryption.html.

"The Facts on Facial Recognition with Artificial Intelligence." Amazon Web Services,

>Inc. Accessed April 11, 2019. https://aws.amazon.com/rekognition/the-facts-on-
>facial-recognition-with-artificial-intelligence/.

"The New Aesthetic." Accessed November 19, 2017. http://new-
>aesthetic.tumblr.com/?og=1.

"The New Aesthetic and Its Politics | Booktwo.Org." Accessed October 22, 2018.

>http://booktwo.org/notebook/new-aesthetic-politics/.

"The New Aesthetic: Archive." Accessed March 30, 2019. http://new-

    aesthetic.tumblr.com/archive.

Thylstrup, Nanna Bonde. The Politics of Mass Digitization. MIT Press, 2019.

"Trevor Paglen and Jacob Appelbaum: Autonomy Cube - Announcements - e-Flux."

    Accessed March 3, 2019. https://www.e-flux.com/announcements/2916/trevor-

    paglen-and-jacob-appelbaumautonomy-cube/.

"Trevor Paglen's Deep Web Dive | Behind the Scenes - YouTube." Accessed March 26,

    2019. https://www.youtube.com/watch?v=h7guR5ei30Y.

Trybotics. "Why the NSA Can't Listen to His Mixtape – Interview with David Huerta."

    Trybotics. Accessed April 11, 2019. https://trybotics.com/project/why-the-nsa-

    cant-listen-to-his-mixtape-68576.

Turner, Fred. From Counterculture to Cyberculture: Stewart Brand, the Whole Earth

    Network, and the Rise of Digital Utopianism. University of Chicago Press, 2010.

Vaidhyanathan, Siva. The Googlization of Everything: (And Why We Should Worry).

    University of California Press, 2012.

"Vault7 - Home." Accessed November 19, 2017. https://wikileaks.org/ciav7p1/.

Virilio, Paul. Open Sky. Verso, 1997.

Warren, Samuel D., and Louis D. Brandeis. "The Right to Privacy." Harvard Law Review

    4, no. 5 (1890): 193–220. https://doi.org/10.2307/1321160.

"We Live in Public (with Subs) - Мы Живём Публично (с Субтитрами) - YouTube."

    Accessed March 31, 2019. https://www.youtube.com/watch?v=P3HJpRbzT7U.

"Wheatpaste Recipe (for Putting up Posters/Billboard Alterations) | Destructables."

>   Accessed April 12, 2019. http://destructables.org/destructable/wheatpaste-

>   recipe-putting-postersbillboard-alterations.

Whitehead, Alfred North. Process and Reality. Simon and Schuster, 2010.

"WikiLeaks - Releases." Accessed March 31, 2019.

>   https://wikileaks.org/vault7/releases/#Weeping%20Angel.

"WikiLeaks - Vault 7: Athena." Accessed March 23, 2019.

>   https://wikileaks.org/vault7/#Athena.

"Wilderness Ontology." Larval Subjects   . (blog), September 1, 2017.

>   https://larvalsubjects.wordpress.com/2017/08/31/wilderness-ontology-2/.

Willcox, James K. "A Closer Look at the TVs From the CIA 'Vault 7' Hack." Consumer

>   Reports. Accessed March 31, 2019. https://www.consumerreports.org/privacy/a-

>   closer-look-at-the-tvs-from-the-cia-vault-7-hack/.

Wilson, Robert Anton. Prometheus Rising. New Falcon Publications, 1997.

Wright, Micah Ian. Surveillance Means Security: Remixed War Propaganda. Seven

>   Stories Press, 2011.

Zondervan. Holy Bible. Harper Collins, 1984.

N.d.

Accessed March 23, 2019.

>   https://books.google.com/books?id=SUgJCgAAQBAJ&printsec=frontcover&dq=

>   the+transparency+society&hl=en&sa=X&ved=0ahUKEwj4kMrDrZnhAhXHmO

>   AKHeSrAEAQ6AEIKzAA.