Introduction

"Essay" originates from the old French word "Essai," whose direct translation is "trial, attempt." The two essays combined here both depart from a master's thesis. A thesis is a trial, but one that requires strict models and a firm destination. It attempts to overcome insecurity through claims to universality or truth. It promises discovery, but a format guarded by so many regulations can only ever open itself so much to the unknown. Theodor Adorno, in "The Essay as Form," reminds us that the essay reflects "a childlike freedom" and always needs play and luck.[1] He writes: "The way in which the essay appropriates concepts is most easily comparable to the behavior of a man who is obliged, in a foreign country, to speak that country's language instead of patching it together from its elements, as he did in school."[2] For this publication, we attempted to forget the dictionary to enter the essay. The process happened somewhat backwards. For our theses, we were first tasked with formalizing ideas into specific models meeting academic standards, only to then attempt to subvert those same standards from within. Trying is the point, though, or so the essay form tells us.

To write about fast-changing technologies and the conditions they give rise to is to accept a certain tension. Moving, fleeting, and breaking digital bodies resist the writing form. The essay, however, opens up more possibilities. Thoughts, observations, and interpretations do not have to be proven. It is composed of precariously dependent concepts that, for the time and place of the essay, become neighbors. They can live in harmony, but they can also quarrel. Reinserting these processes lies at the heart of this publication.

At the World Economic Forum in 2015, Google chairman and ex-CEO Eric Schmidt promised that "the Internet will disappear" into our environments. Since then, we've seen the slow dissolution of the digital into our lives. Whether it's the design of every new iPhone, which keeps getting smoother

1 Theodor W. Adorno, "The Essay as Form," *New German Critique*, no. 32 (Spring–Summer 1984): page number, http://www.jstor.org/stable/488160.

2 Adorno, "The Essay as Form," 60.

and thinner, or the smartification of household appliances, increasingly fragmented forms of technology have permeated our material realities. Technology today operates inconspicuously and smoothly, dissolving into our surrounding environments. For dissolution to be possible, the technological object must first become modular, flexible, and malleable. But dissolution of the internet does not only occur through permeation of the material; it is also a cognitive shift. Human cognition is being supplemented by technologies that think alongside us. Technology isn't solely comprised of microchips and electricity; it has become a feeling, *a vibe*. This process is slow and gradual, operating under the veil of innovation. It is steadfast and naturalized: we innovate for the sake of innovation. But at what point do we stop and question the course of technological process? At the point when humans become obsolete? Does technology leave any space for human cognition and temporality? What do life and death mean in the digital age? These are the questions motivating our text, and the moments we seek to explore.

As humans, we increasingly adapt to the mutability and formlessness of technology. Pervasive technologies have entered every aspect of human activity. Ranging from social life, to medicine to the military, both the industries that preserve life and destroy life are mediated through technologies on a planetary-scale. And while dominant imaginaries about data infrastructure continue to shift, it remains crucial to demystify the material realities that underpin our lives. While big corporations keep growing with seemingly endless resources and capital, human realities are increasingly marked by precarity and a sense of doom. There is little space left for agency and manoeuvring when going against systems that cultivate the myth of their own infinity. The reinsertion of materiality, of humanness, and eventually of death into the understanding of technologically-mediated life can also, in turn, provide us with counternarratives and alternative ways of being. And so, we assert this human position, which seems now more than ever to be at odds with current modes of power.

As researchers at INC, we are interested in the flattened, muted, and everydayness of technology and the digital. We want to challenge routineness and critically interrogate what is often deemed banal by other discourses. We seek to undermine the imaginary of dematerialized technological life, which is so often encountered in mainstream narratives.

The following texts emphasize urgency and fast-theory, taking on different cases, questions, and approaches while underscoring the importance of reintroducing materiality back into technology.

Somewhere Between Death and Life: On Temporality, Net Art and Glitch

MELA MIEKUS

"Obsolescence never meant the end of anything, it's just the beginning." – Marshall McLuhan

This is the age of the perpetual-now that pushes death into oblivion. Oversaturation, overstimulation, and overconsumption are the slogans of the day, driving society into a general overload that leaves few survivors behind. Everything happens in the *now,* but this *now* is not an embodied present moment; rather it is a hyper-*now* that scatters into many parallel *nows*. The *now* is essentially *everything everywhere all at once.* It is the life you are living in front of you, but also the one on your Instagram; the one at your office, as much as that of your avatar in your favorite video game or that of your online dating profile. Bombarded with images, information, sensation we can no longer cope. We depart from our bodily boundaries and into the mediated hyperabyss. Within this cloud-like environment (partially owned by Meta, Apple, Alphabet and Microsoft) notions like embodiment, reality, truth, or presence become strategically eliminated. All ends are removed. The world is your oyster and its shell is shut. All is possible but nothing is felt.

Bodily limits are constantly renegotiated: modern medicine keeps your heart beating thanks to an external device, your skin feels incomplete without the Apple watch that monitors your stats, and you cannot leave the house without noise cancelling headphones. Everything has been blown out of proportion. Is the sheer notion of an end still possible? What about death? What does death mean in a culture of the perpetual now? Has it, too, been blown up? Have we, culturally, moved past death? If so, what does this mean for human and non-human bodies and their relationship to their own disappearance?

The erasure of death from everyday life was one of modernity's most ambitious representational projects.[3] In, *The Symbolic Exchange and Death* (1976), Jean Baudrillard writes: "There is an irreversible evolution from savage societies to our own: little by little, the dead cease to exist. They are thrown out of the group's symbolic circulation."[4] Cities no longer have space for the dead: physically, as cemeteries are pushed to the peripheries, and culturally, as death is increasingly removed from our mental horizon. Modern times situate death as a deviancy and delinquency.[5]

Michel Foucault's theory of *bio-power* holds special resonance here. Foucault traced the history of power, showing that death once demarcated its limits: kings used to kill the disobedient as the ultimate punishment.[6] After the 17th century, societies adopted a different rationale; it became far more advantageous to manage populations and keep people alive.[7] Power's locus and operationality thus shifted: from putting people to death to allowing them to live. Life came to be regulated through the postponement of death, with an emphasis on improving the productivity of the population, marking the shift toward a capitalist society. As modernity spread, so did the exclusion of death from life–it was no longer normal to be dead.

Today, this logic is designed into the digital: death is made invisible, obfuscated, and abnormal. Every social media design eliminates the concept of an end by placing users in the infinite scroll, profiles outlive users, and Billionaires are busy finding techno-solutions to cheat death.[8] Where the boundaries between life and its technological extensions blur, traditional conceptions of death no longer hold. There is a necessity for a rethinking of death and a reinstitution of its processes into the social realm. While this reinsertion is most pertinent to humans made of blood and flesh, it is also pertinent to objects and all that lies between.

Judith Butler in *Precarious Life: The Powers of Mourning and Violence* (2004) examines the politics of loss and hierarchies of grievability. Butler questions who is classified as grievable and

3 Common Accounts, *The Death Report: An Inquiry into the Deep History and Near Future of Death and Architecture* (Berlin: Common Accounts, 2024), PDF file, https://www.commonaccounts.online/The_Death_Report.pdf.

4 Jean Baudrillard, *Symbolic Exchange and Death*, trans. Iain Hamilton Grant (London: SAGE Publications Ltd, 2017), 147.

5 Baudrillard, *Symbolic Exchange*, 147.

6 Michel Foucault, *The History of Sexuality, Volume 1: An Introduction*, trans. Robert Hurley (New York: Vintage Books, 1990), 139.

7 Foucault, *The History of Sexuality*, 139.

8 Tamara Kneese, *Death Glitch: How Techno-Solutionism Fails Us in This Life and Beyond* (New Haven: Yale University Press, 2023).

who is not. Who has the privilege of being publicly mourned? And if someone does not have that privilege, were they ever alive?[9] These questions are already disruptive and revealing of death's complex nature but gain even more urgency when expanded to include non-human beings. I am inspired by a meeting with the Dutch artist Rosa Menkman, where we spoke about the difficulty of thinking about making art in the backdrop of political crises and wars. Menkman reflected about her future as an artist and quickly turned to her virtual figure that narrates many of her net artworks, the *Angel of History*. If Menkman were ever to stop making art, would that mean the *Angel* would also have to die, or worse, be killed? Killed by her? Would she then be killing a part of herself? And if the *Angel of History* were to die, what would that death mean? This led me to more questions; how do we mourn bodies that exist on the brink between life and death? How do we think about death when encountering digital personas stemming from net artworks such as Menkman's *Angel of History*? These figures are often dismissed as not real and therefore not alive. Yet how can figures be unreal and non-living yet capable of death?

NET ART

Net art, understood as "art based in or on internet cultures" is always dependent on live technologies, networked infrastructures, and social entanglements.[10] While the anatomies and conceptual underpinnings may take very diverse forms, net artworks stem from a common interest: the net. "Network" precedes "net," with dictionaries defining it as a large, interconnected system that allows for communication and/or exchange between its components.[11] Annet Dekker discusses these terms in the context of net art, suggesting the following definition: "A network consists of linked structures and distribution systems that connect traces, projects, and people."[12] She traces the etymology of the word "net," which initially referred to physical constructs such as netting, networks, spider webs, or meshes used for capturing, as well as objects characterized by being knotted or interwoven.[13]

9 Judith Butler, *Precarious Life: The Powers of Mourning and* Violence (Verso, 2004).

10 Josephine Bosma, *Nettitudes: Let's Talk Net Art* (Rotterdam: Nai Publishers; Amsterdam: Institute of Network Cultures; New York: D.A.P./Distributed Art Publishers, 2011).

11 "Network," Cambridge Dictionary, accessed April 24, 2025, https://dictionary.cambridge.org/dictionary/english/network.

12 Annett Dekker, Collecting and Conserving Net Art: Moving beyond Conventional Methods (Routledge, 2018), 2.

13 Dekker, *Collecting and Conserving Net Art*, 2.

Over time, the concept expanded to encompass references to complex structures, signifying interconnected systems. By 1972, the term was applied within the context of computers, marking its integration into technological discourse. Subsequently, in the 1980s, "net" was further extended to describe humans and their relations.[14]

Net art is always contingent on networks and those are always contingent on being able to move, grow, and break. This condition brings Josephine Bosma to argue that net art is always on the brink of obsolescence and cannot be understood without the gaze of its mortality.[15] Nothing changes as fast as hardware and software, and so artworks made up of networks, code, files, images, and data are, by their very nature, precarious. Following Butler, precariousness is not an exception but one of the conditions of existence itself.[16] It reveals the ties that connect us all, and that those ties can come undone. Death then reveals those ties unlike anything else; an "I" cannot lose a "you" and return to how it was before, because the "you" was part of that "I." Net art already presupposes and assimilates the processual breakdown of the multiple ties that compose it. These works are living systems often relying on unstable and moving media like websites whose domains must be periodically paid for, or digital archives requiring ongoing attention. Removing it from these relations removes it from the "net" in net art. Net art, unlike static forms, survives only through its embeddedness in these ongoing systems of relation. The potential for loss of control—for glitch, for collapse, for death—is a prerequisite for net art's life.

Rather than seeing disappearance as a problem to be solved, I explore how loss, disintegration, and messiness might be understood as productive forces. This approach requires understanding net art's life through an analytic of death. By using death as an analytical framework, I ask: What can be gained from taking death as a method and generative process? Can the process of death open space for alternative ways of being that oppose current powers of stasis? What implications might this have for the way we understand net artworks and, more broadly, communities and technologies?

14 Dekker, *Collecting and Conserving Net Art*, 2.

15 Bosma, *Nettitudes*, 165.

16 Butler, *Precarious Life*.

BUILDING THROUGH DEATH

As society moved rapidly into the networked era where computers, media, and technology dominate our daily routines, the relationship between life and death radically transformed. Discussions of immortality take on a new level of plausibility, particularly in light of the eugenic and transhumanist discourse flourishing in Silicon Valley. Visions of tech billionaires freezing their bodies in hopes of future resurrection or developing technologies to preserve (at least parts of) their existence no longer seem distant or abstract. Think millionaire entrepreneur Bryan Johnson and his anti-death campaign, best exemplified through his website: *dontdie.bryanjohnson.com*. Greeted by the slogan "DON'T DIE," the audience is offered a glimpse into his rather ambitious project. The site states:

> We are at war with death and its causes.
>
> We are building towards an infinite horizon.
>
> We are fighting for the freedom to exist as long as one chooses.
>
> Why? Because we have things to do tomorrow. And tomorrow's tomorrow. Until we no longer want tomorrow.[17]

What Johnson's self-proclaimed "community" proposes is quite simple: let's cheat death together, *join or die*. This example may seem extreme but given the open prevalence of transhumanist medical technologies and cryogenics only available to the rich, one can assume there are several Johnson-esque projects unfolding behind closed doors. This context makes it ever more necessary to situate death within the mediated landscape and examine its relationship with technology.

17 Bryan Johnson, "Don't Die," accessed January 13, 2026, https://dontdie.bryanjohnson.com/.

Screenshot from Bryan Johnson's website: https://dontdie.bryanjohnson.com/.

François Bonnet, in *After Death* (2020), considers precisely the digital context and its relationship to death. Bonnet begins his book by presenting the concept of *decoupling* as a key mechanism in today's political order. He sees humans as composed of two *becomings*. He calls the first one *finite-being*: the fact that humans are bound.[18] We are bound by our bodily limits and boundaries, such as the skin that protects us from the outside; bound by relations to the external world; and bound in the sense that our being is finite and will come to an end. He explains that the finite character of our existence necessitates a constant building of oneself based on that which falls outside oneself. Bonnet writes: "to delimit the space and time of one's existence is immediately also to circulate, move, and orient oneself externally and in time. If I am not omnipresent, if I am not eternal, then I can move and become—or rather, I cannot avoid moving and becoming."[19] Thus, practicing and living with an awareness of human finitude allows space for fluctuation and an ongoing process of (re)orientation that delineates our being, or, in Bonnet's words, our becoming.

The second becoming is an effect of being a finite-being in an infinite world that makes countless relationships, sensations, affects, and events possible. Bonnet calls this the *projected-being*: a being that is inscribed with an expanse into space and time, a being that reaches beyond our borders. This can be better understood through thinking about one's online existence: social media profiles extend beyond our bodily boundaries (i.e. skin.) but are still (usually) seen as parts (or extensions) of the self. Another example would be religious practices that foster the belief of an afterlife, extending life beyond the borders of death.

18 François J. Bonnet, *After Death*, trans. Amy Ireland and Robin Mackay (Cambridge: Urbanomic, 2020), 6.

19 Bonnet, *After Death*, 6.

Bonnet points out that "nothing is possible without this coupling of constrained being and immeasurable expanse" and it is a duality that always accompanies humans.[20] A problem emerges when these two becomings "can no longer hold together," and one becomes swallowed by the other, a process he calls decoupling.[21] The process of decoupling entails a split between the finitude/expanse duality which within today's digital landscape gives the latter the upper hand. Bonnet exemplifies how projected-being begins dominating lives through the idea of sacrifice: the desire to give something up for a greater cause, one that extends our influence beyond our borders and surroundings.

Bonnet argues that the sacrifice that extends our finite-being into the boundless universe is labor. Individuals give up their time and energy, often for the benefit of the firm that employs them, trading their work for the growth of an entity that reaches far beyond themselves. Bonnet concludes: "[sacrifice] heralds the final stage in the disjunction between two becomings, and the potential elimination of one in the name of the other."[22] He exemplifies the potential consequences of the elimination of our finitude through the story of a young Taiwanese man who died from gaming at an internet café for 48 consecutive hours, sacrificing bodily needs and forgetting its limits in order to stay connected.[23] One can also think of "gooners," individuals who masturbate to an endless stream of digital pornography, they postpone climax for as long as physically possible (often harming their bodies in the process) to keep consuming content. Subtler examples, such as severely worsened attention spans due to an over-consumption of fast-paced stimuli like TikTok also visualize this process.

GOING ONLINE

When considering how it is that we can no longer situate ourselves in our bodies, in our own finitude, in our own space and time, it is evident that technology plays a crucial role. Bonnet highlights that the last 50 years have been marked by an information economy, established thanks to the rise of telecommunication technologies.[24] High-paced globalization allowed for global connectivity via diverse technologies, simultaneously creating a culture where people can (and today should) always be available,

20 Bonnet, *After Death*, 6.
21 Bonnet, *After Death*, 6.
22 Bonnet, *After Death*, 6.
23 Bonnet, *After Death*, 11.
24 Bonnet, *After Death*, 7.

reachable, and updated. News, events, codes, and images are constantly in a flow of consumption, extending human awareness, perception, and sensation far beyond one's bodily and immediate-community borders. Bonnet shows how the rise of technologies and the accelerated information flow engendered a new approach towards information and thereby towards the world.

When speaking about a shift toward constantly connected information culture, it is key to consider the rise of the internet along with its different phases. As the first computers began to gain popularity throughout the 1970s, the web provided an unprecedented possibility to be (almost) instantly connected to people and communities that would otherwise be beyond one's reach. The beginning of internet cultures that flourished in the 1990s was characterized by community and network building.[25] Further, it was still an online realm of messiness and play, where a user's online persona did not have to correspond to their offline persona. The network-based internet began shifting into a more structured and centralized place, commonly referred to as *Web 2.0*, that accompanied the paradigm shift which followed 9/11.[26] Anonymity started being seen as the ultimate danger, which forced higher physical as well as online surveillance. Online personas were forced to correspond to offline personas. As explained by de Zeeuw and Tuters:

> The rise of the mainstream surface web of social media platforms in the early 2000s can thus be understood as an attempt to transform what was, at that moment, perceived as the problematic nature of the early internet, into a more consumer-and business-friendly environment that would allow for the creation of well-defined, high-resolution data doubles linked up to users' real identities.[27]

With web 2.0, tracking IDs, cookies, personalized ads, profile-focused social media, and digital surveillance became the new markers of the online realm. Key players began quickly emerging and spreading their centralization quest, best exemplified through the company Meta, which now encompasses Instagram, Facebook, Messenger, Threads, and WhatsApp.[28] In today's globalized

25 Geert Lovink, "Platform Theory," lecture, *Art and Network Cultures*, University of Amsterdam, September 11, 2023.

26 Lovink, "Platform Theory."

27 Daniël de Zeeuw and Marc Tuters, "Teh Internet Is Serious Business," *Cultural Politics* 16, no. 2 (July 1, 2020): 214–32, https://doi.org/10.1215/17432197-8233406.

28 "Meta Platforms," Wikipedia, March 26, 2025, https://en.wikipedia.org/wiki/Meta_Platforms.

economy, there are fewer places that remain beyond the platforms' reach; in 2025, Meta apps reached 3.54 billion daily active users.[29] Platform technologies have slid into almost every aspect of our daily life—work, school, pleasure, love, and health—making it almost impossible to simply "go offline." As Lovink puts it, "we've reached a point where we can call out the platform as a disciplinary machine, in line with the clinic, school, factory, and jail."[30] And, as every disciplinary machine, the platform extends its reach into the realm of both life and death.

THE VICTORY OF THE PRESENT

Bonnet argues that two states have emerged alongside the rapid acceleration of the information era: amnesia and anesthesia.[31] In an environment where users are constantly bombarded with images, news, and experiences, it becomes nearly impossible to fully register or retain any one event (amnesia). Information is continuously remixed and replaced, making each experience fleeting and forgettable. This endless cycle of consumption leads to desensitization (anesthesia): an overstimulation of the senses that prevents them from unfolding naturally over time. As Bonnet explains, "the barely concealed dream of these combined strategies is to reduce the sensory horizon to a single, monopolistic stimulus that can be repeated as many times as necessary before a 'new' avatar with the same qualities arrives—as promptly as possible—to succeed it."[32] Bonnet suggests that amnesia and anesthesia are not accidental byproducts of the information economy but rather carefully designed mechanisms of control. By accelerating the flow of events, experiences, and stimuli, these mechanisms effectively manipulate what remains the most uncontrollable aspect of human life: time.

This acceleration traps users in a state of constant presentness. Events, sensations, and images do not follow a natural trajectory but are instead remixed and replaced before they can fully unfold. As a result, their finitude is erased. Bonnet's concept of decoupling becomes especially relevant here, as it highlights how projected-being flourishes in this hyper-saturated information economy.

29 María Bastero, "Meta Has More Than 3.5 Billion Daily Active Users Across Its Platforms," Marketing4eCommerce (October 30, 2025), accessed January 13, 2026, https://marketing4ecommerce.net/en/daily-active-users-meta/.

30 Geert Lovink, *Stuck on the Platform: Reclaiming the Internet* (Amsterdam: Valiz, 2022), 13.

31 Bonnet, *After Death*, 5.

32 Bonnet, *After Death*, 9.

In this framework, temporality itself is transformed: the past is constantly overwritten, and the future is collapsed into an ever-intensifying now.

Bonnet calls this entrapment within a constantly updated present moment the *hyperpresent* and illustrates it through the well-known phrase *carpe diem*—Latin for "seize the day." Originally, this expression signified an acceptance of life's impermanence, a reminder to savor each moment in light of our inevitable mortality. However, in the contemporary digital economy, Bonnet argues, this notion has been co-opted to serve a different agenda. The present moment is no longer a space for becoming but rather a locus of immediate gratification and consumption. This logic is particularly evident in the rise of hyper-productivity culture. Figures like Andrew Tate and other grindset influencers push an extreme version of *living in the moment*, where every second must be optimized for maximum efficiency. One hustlepreneur has, in his words, actually managed to condense time itself. In the time us weak mortals live one twenty-four-hour day, he lives three:

> So I've compressed and condensed time; I've bent it. My day is 6 a.m. to noon, and I'm not crazy—you're crazy for thinking it takes 24 hours, just like some dude in a cave did 300 years ago. My second day starts at noon and goes till 6 p.m.—that's day two—and then the next day is 6 p.m. to midnight. What I've done now is I have changed and manipulated time. I now get 21 days a week. Stack that up over a month—I'm gonna kick your butt. Stack it up over a year—you're toast. Stack it up over five years—my entire life is different than it would have been otherwise.[33]

Considering the proliferation of such "life hacks," it makes perfect sense that today's general state is marked by an anxiety of not doing enough. Previously autonomous territories become steadily infiltrated by the hyperpresent. Sleep, a biological state that most closely resembles death, offers a clear example of how this process unfolds: it is increasingly optimized and technologically mediated. Beginners use apps to monitor their sleep cycle, while those more invested can even get smart beds. States that require logging off—especially in its most permanent sense—are visibly under attack. Consider, for instance, how difficult it is for users to delete their social media profiles. The "delete profile" button

33 Reachable Success, "I Have Changed and Manipulated TIME," YouTube short, https://www.youtube.com/shorts/dEDEMBMPsvg.

is strategically hidden behind several intermediary steps. The discouragement from exiting is a design choice.

One can begin to understand the hyperpresent's ability to extend its reach into all temporal planes, effectively reshaping both our perception of the past and our imagination of the future. Media theorist Richard Grusin explores this phenomenon through his concept of *premediation,* which describes how media technologies use the mediation of the present to exert control over the future.[34] In an era of continuous information flow, society is inundated with so many images and narratives that we have, in a sense, already "seen" versions of what is to come. Possible futures are entangled within the horizon of the now, leaving little room for manoeuvring. Linking back to Bonnet, these processes intensify the functions of amnesia and anesthesia. By locking society in an all-encompassing present, the hyperpresent minimizes the chance for disruption and change. As Bonnet explains; "but the hyperpresent, as much as it can, catches and suspends the unfolding of time in order to make of it a dead time. The toxicity of the hyperpresent lies precisely in this suspension of becoming—an extinguishing of temporal resonances that leads to the negation of the living being itself."[35] Clearly, the hyperpresent does more than just accelerate time; it freezes it. It creates a paradoxical form of stillness, where the illusion of constant movement conceals a deeper stasis. In this state, human beings become trapped in the constant now.

This temporal entrapment has profound implications for our understanding of death. The hyperpresent does not merely alter our perception of time but it actively pushes death into oblivion. If the digital sphere dissolves all boundaries and replaces linear temporality with an endless loop of instantaneous updates, then the concept of an *end* itself becomes unthinkable. The limits and finitude of human existence are eroded by the perpetual connectivity, where every moment is instantly replaced by another, actively eliminating death from society's mental horizon. This can be exemplified through the vastness of the feed scroll that quite simply never ends, in turn furthering the user's desire for a consumption that is not allowed to run its course.

The abstraction of death is not without its challenges, particularly within the context of platform capitalism. The very same technologies that work to render death distant and unreal also confront the complexities of managing it. Tamara Kneese's

34 Richard Grusin, *Premediation: Affect and Mediality after 9/11* (Basingstoke England: Palgrave Macmillan, 2010).

35 Bonnet, *After Death*, 12.

book *Death Glitch* (2023) investigates the techno-solutions that Silicon Valley has developed to handle death, offering valuable insights into how the technology grapples with the very thing it seeks to obscure. Her observations are key to understanding the tensions that arise when platform capitalism, which thrives on the myth of the infinite, encounters the finality and messiness of death.

DEATH AT SILICON VALLEY

Kneese shows how at an age where our digital footprints are increasingly seen as intimately interlaced with our offline existence, the issue of digital death has grown highly complex. Her study begins by demonstrating the proliferation of online mourning practices such as using deceased people's social media pages as shrines. Using Facebook as a case study, Kneese reveals the platform's ongoing struggle with managing the profiles of dead users.[36] On one hand, inactive profiles generate less revenue due to reduced engagement and ad traction. On the other hand, deleting these accounts has repeatedly led to public outrage and distress among the affected friends and family members. In response, Facebook has attempted various solutions, including automatic memorialization features, yet these efforts have often been clumsy and inadequate. The platform has mistakenly classified living users as deceased due to inactivity, while its automated systems have insensitively resurfaced memories of lost loved ones in annual recap videos.[37] These missteps illustrate that death remains profoundly difficult to design for within platforms.

At the core of Kneese's argument is a key tension she terms *platform temporality*: the conflict between individual immortality and platform ephemerality.[38] Kneese writes "Silicon Valley tech companies may talk about the future, but their bottom line is tied to short-term returns on a quarterly basis."[39] While there is a strong desire to find ways for technologies to outlast their makers, platforms are not built to sustain permanence. Their infrastructures are shaped by the rhythms of corporate interests, technological upgrades, and the ever-accelerating cycle of digital consumption. The utopian promise of digital immortality is thus at odds with the platform market dynamics and the ephemerality

36 Kneese, *Death Glitch*, 30–63.
37 Kneese, *Death Glitch*, 48.
38 Kneese, *Death Glitch*, 19.
39 Kneese, *Death Glitch*, 19.

of technologies. In this sense, the hyperpresent that removes death as far as possible is also embedded into the very structures of online platforms that struggle to find productive solutions to the messiness of death.

DEATH AGAINST CAPTURE

Kneese's research leads her to the overarching argument of her book: death is a glitch in the system for techno-solutionism. The relationality, the chaos, and the unforeseeable encounters that death offers mark it as a disturbance to power systems. Her analysis draws from queer, feminist, and trans media studies that define glitches as momentary failures of a system that can reveal its internal shortcomings. Legacy Russell coins the term *Glitch Feminism*, which she defines as follows:

> Glitch Feminism, however, embraces the causality of 'error,' and turns the gloomy implication of glitch on its ear by acknowledging that an error in a social system that has already been disturbed by economic, racial, social, sexual, and cultural stratification and the imperialist wrecking-ball of globalization— processes that continue to enact violence on all bodies—may not, in fact, be an error at all, but rather a much-needed erratum.[40]

Death, in Kneese's argument, poses potential for this much-needed erratum in that it reveals the contradictions between long-term care and tech-capitalist strategies. Kneese is not alone in her observations; Baudrillard and Bonnet, though using different means, also build their perspective for opposing hegemonic structures with death at the forefront.

Jean Baudrillard posits an understanding of labor power as instituted on death. He employs the analogy of the master and the slave to illustrate this relationship. The prisoner of war is captured and spared but why is the prisoner spared? In order to work, thereby becoming a slave. Baudrillard conceptualizes labor as *deferred death*; one's death is postponed in exchange for one's labor. He writes, "does capital exploit the workers to death? Paradoxically, the worst it inflicts on them is refusing them death. It is by deferring their death that they are made into slaves

40 Legacy Russel, "Digital Dualism and the Glitch Feminism Manifesto," *The Society Pages*, December 10, 2012, https://thesocietypages.org/cyborgology/2012/12/10/digital- dualism-and-the-glitch-feminism-manifesto/

and condemned to the indefinite abjection of a life of labour."[41] Baudrillard consequently conceptualizes the opposition to labor not as a mere absence of labor, but a violent death. Speaking in symbolic terms, Baudrillard is arguing that the capitalist system is built on symbolic stakes. In his view, the symbolic reinstatement of violent death represents the ultimate opposition to labor; notably writing: "If power is death deferred, it will not be removed insofar as the suspension of this death will not be removed."[42] The most radical response, then, is to reintroduce death into the stakes. Baudrillard uses the May 1968 barricades as an example, suggesting that through the reinstatement of violent death within the realm of possibility and symbolic exchange, power can lose its footing.[43]

Bonnet's analysis takes a similar path, emphasizing the necessity of reinstating death into life. He illustrates how contemporary society systematically removes melancholy, nostalgia, and the fear of death from our lives, and asserts that these sentiments are essential.[44] Nostalgia compels one to seek what is no longer present, thereby highlighting the finitude of our existence: we once were or possessed something that is no longer. It simultaneously evokes the transcendental aspect of our being in the world. This dual recognition, in turn, facilitates the necessary process of becoming, wherein various qualities alter and redefine one another in a continual, constitutive process. Bonnet argues that such becomings open the possibility of asynchronous spaces, which he defines as "a multiplicitous space—an ensemble of space-time localities, isolated by definition, patchy, secret, and hidden from the law of instantaneity," and, by extension, shielded from the dominance of the hyperpresent.[45] He posits that living in closer proximity to mortality, finitude, and death is necessary to escape the grip of eternal stasis.

If power has persistently sought to manage, obscure, or defer death, then reinstating death into our horizon is a necessary intervention. While many contemporary power structures, such as platforms, tech giants, and political leaders, have yet to develop a definitive strategy for overcoming death's inevitability, its messiness makes it irreducible to simple administration. Death, by its very nature, reveals networks and interdependencies that extend beyond the individual.

41 Baudrillard, *Symbolic Exchange*, 61.
42 Baudrillard, *Symbolic Exchange*, 62.
43 Baudrillard, *Symbolic Exchange*, 63.
44 Bonnet, *After Death*, 15.
45 Bonnet, *After Death*, 16.

Having built this understanding of death I would like to turn to an analysis of Rosa Menkman's net practice, with the focus on glitch as a mechanism of generative death. Rosa Menkman works with a variety of media but consistently engages with the politics of the computer. Research always acts as a starting point for Menkman's practice, and *glitching* has been one of its key themes. At the initial layer, a glitch is a noise artifact: a disruption that is caused by "errors in both analog and digital media" but Menkman expands the glitch beyond its technical iterations.[46] In her publication *The Glitch Moment(um)* (2011), Menkman conceptualizes the glitch as an "(actual and/or simulated) break from an expected or conventional flow of information or meaning within (digital) communication systems that results in a perceived accident or error."[47] She emphasizes that it "occurs on the occasion where there is an absence of (expected) functionality, whether understood in a technical or social sense."[48]

Glitch becomes a tool in Menkman's work, and as with every tool it serves a specific purpose even if the effect cannot be preplanned. Glitching—in the way it exists in her work—targets image resolutions. Cambridge Dictionary defines "resolution" as "the ability of a microscope, or a television or computer screen, to show things clearly and with a lot of detail."[49] Menkman entered the process from the inside by "poking at files and software."[50] She discovered that the "rendering of digital data depends on how hardware and software read, display and transform it: line by line, block by block, and sometimes frame by frame."[51] She continues, "[t]he resolution of a digital image is not determined at capture; it is shaped and reshaped through each stage of the render pipeline, from compression and encoding to decoding, display, and interpretation."[52] This means, as Menkman states, that "digital image data is never fully fixed or stable, but remains fluid."[53] This discovery is critical because it makes space for Menkman's operations.

46 "Rosa Menkman," *Monoskop*, last modified April 15, 2024,

47 Rosa Menkman, *The Glitch Moment(Um)* (Amsterdam: Institute of Network Cultures, 2010), 9.

48 Menkman, *The Glitch Moment(Um)*, 9.

49 "Resolution," Cambridge Dictionary, accessed June 30, 2025, https://dictionary.cambridge.org/dictionary/english/resolution.

50 Rosa Menkman, "Destitute Vision," *Beyond Resolution*, accessed June 8, 2025, https://beyondresolution.info/DESTITUTE-VISION.

51 Menkman, "Destitute Vision," accessed June 8, 2025.

52 Menkman, "Destitute Vision," accessed June 8, 2025.

53 Menkman, "Destitute Vision," accessed June 8, 2025.

I focus on Menkman's *glitch* as it manifests in one specific work, *A Vernacular of File Formats* (or *VOF*, 2010-ongoing). This artwork was acquired by the Stedelijk Museum as part of the MOTI acquisition in 2016, upon which the museum received a "16 - 18 GB archive of files put together by the artist in collaboration with the museums, containing Source Video and frames, Catalogue of Unstable Glitched files, Monglot (glitching software co-developed by Rosa Menkman and Johan Larsby), the PDF, stable printed iterations and production documentations of prints and exhibitions."[54]

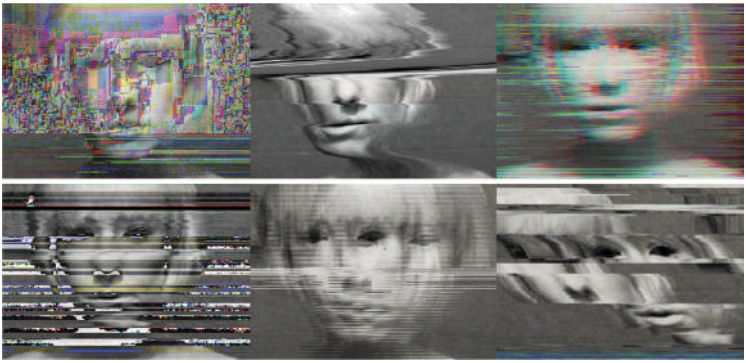
In *VOF*, Menkman takes the audience through her research into glitching file formats, which are encoding systems that organize data with specific syntax.[55] To create the glitches, Menkman takes image files and compresses them via different compression algorithms, which are methods used to reduce the size of data, while aiming to keep the original information unaltered or to minimize the losses.[56] These algorithms always operate through specific languages that depend on the intended use of the image. In Menkman's words, "the choice of an image compression depends on its foreseen mode and place of usage; if the file is meant to be printed or redistributed digitally, another type of accuracy is necessary than when a software or hardware will render the image on screen."[57] What happens is the compression syntax blurs, alters, or smooths parts of the image that the algorithm deems as less important to ensure smooth and fast file transfer. Most of these changes are indecipherable to the naked eye up until Menkman's intervention. To bring them to view, Menkman inserts the same or similar coding error into the image file and as a result makes visible the compression algorithm's bias.

54 "A Vernacular of File Formats – Summary," *LI-MA: Living Media Art*, accessed July 10, 2025, https://li-ma.nl/article/vernacular-of-file-formats-summary.

55 Menkman, "A Vernacular of File Formats," accessed June 8, 2025.

56 "Compression Algorithm," *ScienceDirect*, accessed June 30, 2025, https://www.sciencedirect.com/topics/computer-science/compression-algorithm.

57 Menkman, "A Vernacular of File Formats," accessed June 30, 2025.



Rosa Menkman, *A Vernacular of File Formats*, 2010–ongoing. Screenshot from "A Vernacular of File Formats," *Beyond Resolution*, accessed June 8, 2025. https://beyondresolution.info/A-Vernacular-of-File-Formats.

For example, the image above shows different outcomes of inserting the same or similar errors into images compressed using different formats: Photoshop RAW, JPEG, JPEG 2000, PNG, BMP, Photoshop, TIFF, GIF, and Targa. The bends, lines, and cracks emerge in the images because the compression algorithms can no longer render the files in their intended forms. These visual ruptures tend to appear in the most compressed, and therefore most fragile, regions of the file, revealing the algorithm's internal logic: what gets discarded, smoothed over, or lost in the compression process. In effect, Menkman's procedure draws the audience's attention to the inherent potential for manipulation and destruction that always accompanies image processing. The glitch, thus, becomes a tool to make the invisible visible and to counteract the obfuscation of destruction.

In practice the visuals seen in *VOF* are created using the glitching softwares: Swutits and Monglot (see image below). When interviewing the artist at her studio in Amsterdam, Menkman demonstrated how Monglot works: you run an image through the system, which inscribes an error into the image's compression syntax, each time getting an unexpected result. The result cannot be pre-planned because glitches by their very nature escape the sphere of control. This also means that each time a glitched image is opened, it may appear slightly altered, or might not open at all, rendering each version precarious and in constant flux.

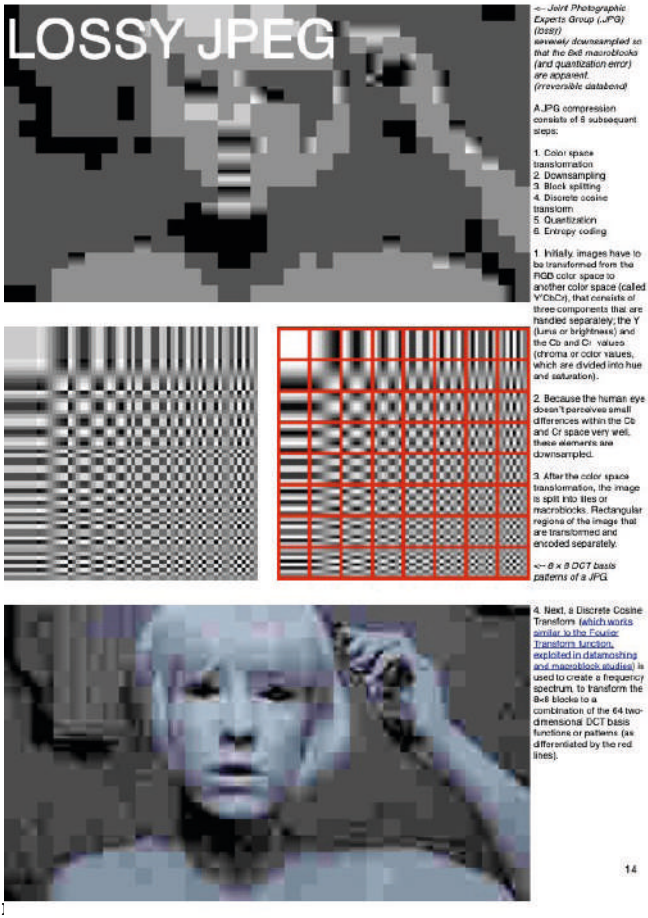
Interface of Rosa Menkman's glitching software Monglot. Screenshot from "Monglot," *Beyond Resolution*, accessed June 8, 2025.https://beyondresolution.info/Monglot.

Clearly, *VOF* is made up of various parts that each carry complex sub-parts. However, for this research I focus on one of them: the PDF. The 23-page-long PDF acts as a guide that details the entire glitching process, image by image. It is composed of two primary elements: the visual and the textual, each presenting the same image glitched through a distinct file format. The images themselves render visible the cracks, disfigurements, discolorations, and distortions that arise from glitching. While these could be interpreted as standalone artworks, Menkman embeds them within a process, emphasizing her commitment to what she calls "informational or process-oriented glitch research" over a "designed glitching" that serves predetermined aesthetic ends.[58]

Rosa Menkman, *A Vernacular of File Formats* (PDF), 2010–ongoing. Screenshot from the PDF, accessed June 8, 2025. https://beyondresolution.nyc3.

58 Menkman, *The Glitch Moment(um)*, 50.

On page 14 Menkman walks the viewer through the mechanics of JPEG compression, which is one of the most popular formats in visual media (see image below). She explains that because "the human eye doesn't perceive small differences within the Cb and Cr space very well, these elements are downsampled [reduced in size or resolution]."[59] This means that the JPEG compression takes advantage of the fact that the human eye does not notice small differences in color and reduces the amount of color information in the image, without visibly altering its quality.



from the PDF, page 14, accessed June 8, 2025. https://beyondresolution.nyc3.

59 Menkman, A Vernacular of File Formats (2010–ongoing), PDF file, 14.

To make the compression operation visible, Menkman drastically downsampled the image's color information, exposing the compression's underlying logic. The result is an image fragmented into rigid macroblocks with harsh, geometric edges. The color palette is reduced to black, white, and grey hues with little smooth gradients or transitions. Beneath the top image, Menkman presents two magnified squares to zoom in on the compression process. By looking closely, viewers can observe how the macroblocks are subtly blurred and smoothed; a process that takes place each time an image is compressed by a JPEG algorithm but typically goes unnoticed. Menkman's intervention reveals how image manipulation can occur invisibly and without scrutiny. In effect, her process transforms an apparently stable, well-functioning image into one that exhibits its underlying instabilities, such as moments of reduced color, high compression, or limited fidelity. Destruction, then, is not simply introduced from the outside; it is already embedded in the compression's algorithmic structure. What the PDF makes visible is the invisibility of that destruction. Through glitching, hidden losses surface.

Destructions that emerge from these visuals also permeate the broader language of the PDF. Viewers encountering the pages stumble upon a vocabulary rooted in the corporeal: terms like "pixel bleeding," "ghosting," and "datamoshing," dominate, alongside descriptors such as "decay," "corruption," and "entropy."[60] These terms evoke not only technical malfunction but bodily injury and disintegration. The semantics of glitch thus revolve around a language of harm and destruction, inscribing technological systems with a human-like fragility. The rhetorical framing establishes a visceral entanglement between humans and digital systems. Inscribing computational mechanisms, compressions, and codes with death foregrounds their political and historical embeddedness. It becomes a method of revealing how technological systems (often regarded as neutral or objective) are actually inscribed with their human makers and thereby are marked with ideology and politics.

As Menkman writes, "[s]tandardisation does not only organize what can be seen; it actively enforces a hierarchy of visibility. It sets thresholds that define what qualifies as legible, while relegating everything else—bodies, faces, colours—to a domain of loss and misrecognition."[61] In this way, resolution becomes a

60 "A recently popularized wave of video artworks was based on the deletion of keyframes and the exploitation of the vector motion of P-frames. Which was also referred to as 'datamoshing,' 'pixel bleeding,' or simply 'compression art.'" See Menkman, A Vernacular of File Formats (2010–ongoing), PDF File, 21.

61 Menkman, "Destitute Vision," accessed June 8, 2025.

site of structural violence. It determines who is rendered visible and who is erased. The biases of machine vision, whether in facial recognition or automated surveillance, are not born in a vacuum; they are consequences of the data sets, training parameters, and aesthetic norms produced by society, including its racist and sexist legacies.[62] Technology is as social as it is machinic. Further, while the machine is always inscribed with the human, today's technological advancement allows the machine to think on its own. Learning how to cause file corruptions, hacking, or glitching can soon become a key tool for disrupting machine hegemony.

CULTURE OF SMOOTHNESS

In *The Death Report*, the writers collective Common Accounts examines how digital platforms design algorithms and tools to actively obscure death. They emphasize the paradox of our time in that "death, which is widespread in reality and online, is being managed discreetly, distanced by high-speed swiping and 'algorithm training' to foster a less graphic feed."[63] Menkman and Common Accounts meet in their scrutiny of smoothness employed as a strategy that blurs inherent destructions integral to image resolution and compression. To build this argument, Common Accounts delve into examples of how smoothness becomes weaponized in contemporary digital contexts. They explain that "Instagram has determined [what] must separate representations of violence from users is measured in smoothness—a 50-pixel radius blur and 50% darkening."[64] The app also employs a "Sensitive Content" algorithm, a tool designed to create distance between everyday life and representations of death or harm. When an image is flagged as sensitive, it is blurred to the point of illegibility. My own feed is increasingly populated with these warnings, selectively determining which images are hidden and which are allowed to circulate freely. Their analysis draws a parallel between this strategic smoothing and technologies of contemporary warfare, where computer vision can determine someone's life or death.[65] In this way, they too highlight how operations on image resolution become critical, political acts that permeate from social media feeds to the deadly precision of military targeting.

62 For further reading, see Ramon Amaro, *The Black Technical Object: On Machine Learning and the Aspiration of Black Being* (Berlin: Sternberg Press, 2022).

63 Common Accounts, *The Death Report*.

64 Common Accounts, *The Death Report*, 45.

65 Common Accounts, *The Death Report*, 45.

In contrast, glitches emerge as potent moments of rupture that disrupt tactical erasure. Before Menkman's intervention, the damage inscribed by compression syntax was invisible: smoothed over, rendered as an inoffensive grain too small for consumers to notice. A glitch causes a malfunction; it compels the viewer to inspect an image for a moment longer and to notice its composition. The pixels, bends, and cracks come to the forefront and remind us that we are consuming a biased image. Dramatizing the breaks forces a disruption of the cultural apparatuses that aim to gloss over death, violence, and failure.

FROM BREAKDOWN TO BECOMING

In *VOF*, the glitch becomes a mechanism of death—one that does not erase but rather reveals. It interrupts the political logic of smoothness, dragging destruction to the surface. In effect, viewers are confronted with a breakdown of function that invites an uncharted transformation resultant in the generation of something new. This newness resists the capitalist imperative of constant innovation and upgrade. Instead, we are offered an alternative mode of emergence, one that interrupts the linear logic of consumption. Newness is then not a product but a process: an ongoing unfolding that gestures toward the elsewhere. This "elsewhere" is also the operative sphere of the kind of death explored throughout this text.

What this text insists on is the importance of learning from spaces, objects, and subjects that refuse the logic of cultural stasis. Objects that manage to stay *becoming* do so through ongoing processes of breakdown. Rather than striving to be stronger, more powerful, or more impermeable, we might instead lean into the precarious, the unstable, and the fluctuating conditions of our composition. This means allowing for symbolic sensations that pull us away from the hyperpresent, such as resting, grieving, or daydreaming. It also means letting relationality exceed the demand for unity, and inhabiting the many *you*s that constitute the *I*. It follows, then, that there is much to learn from processes of breakdown. To learn that death reveals its own embeddedness within the systems it disrupts. To learn that disintegration can expose destructions that were already there. To escape the current political climate's drive to freeze society within an ever-intensifying present that leaves no room for becoming. Reintroducing death into the stakes is a potent and necessary tool for artworks and communities alike.

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The Boxification of Everything: Untangling the Spatial Logics of Data

RUBEN STOFFELEN

CONTAINERIZED DATA CENTERS

Capitalism is all about boxes—about *boxifying* things. Boxes fit the mundane logic of spatial efficiency; endlessly stackable, fillable, scalable. If everything is *boxified* then everything is compatible, you can fill a big box with a bunch of smaller boxes and eliminate every empty cubic pocket of space. A lot of buildings also resemble boxes (an Amazon warehouse is a box filled with boxes that are filled with even more boxes), in architecture the use of boxes is referred to as a *decorated shed*—denoting the function of spaces through signs on box-shaped buildings, rather than having the shape of the building itself do so. One of the most significant boxes that comes to mind when thinking about globalized capital is the shipping container: a box which is designed to be intermodal (meaning that it's optimized for and compatible with multiple transport formats) and enables the uninterrupted flow of capital across the world. This particular box was revolutionary, facilitating just-in-time production and optimizing trade flows so that your plastic slop can be ordered, produced, and shipped to you at hyperefficient speeds.[66] Shipping containers have breached the global shipping industry and have been used as modular building blocks for various uses; there are entire residential spaces made up of containers. When something, such as a house or a restaurant, is formatted through the shipping container, it is usually referred to as *containerized* architecture. Within the Software-as-a-Service (SaaS) industry, containerization also plays a key role. Containerization in the software context means that its application code, dependencies, and libraries are all packaged into a single unit called a container. Even the abstract workings of software cannot escape the conceptual shackles of the container. So, what happens when you put a data center in a

66 Marc Levinson, *The Box: How the Shipping Container Made the World Smaller and the World Economy Bigger*, (Princeton University Press, 2016).

shipping container? Does it also become stackable, transportable, adaptable, modular, and responsive? Can the physical servers of the already-globalized tech companies join them in the transnational limbo of capital?

Whereas global capital flows smoothly across the territorial grey area of international waters and the hydrosphere on cargo ships, data moves through the metaphorical grey area of *the cloud;* through cables and servers—cables which not-so-coincidentally also *run through the same hydrosphere*[67] populated by cargo ships. The use of the hydrosphere obfuscates the materiality of capital's processes. We don't see the underground cables similarly to how we don't see the cargo ships, with both materializing only at a *landing site* or at a harbour. Both industries and their respective machinery hum quietly in the background while we use their products and services in the foreground, both industries also seek to decouple themselves from nation states and territorial sovereignty.[68] This disarticulation is made evident by proposals for floating, offshore data centers,[69] *the underwater data centers being developed by Microsoft*, and even data centers in space. If it was up to corporations, they would always operate and exist in territorial grey areas—unregulated and unbothered. This is why Benjamin Bratton refers to tech companies as 'para-states', for example. Because their infrastructures are *superimposed* onto state sovereign territories, working alongside or against them, rather than under them. This results in unresolved tensions between state and corporate actors.[70] Similarly to intermodal shipping, the cloud is not tied to any *single* territorial sovereignty, through its distribution across several territories, the cloud mutates according to its needs, and the shipping container morphology further fragments the cloud into dust which can settle almost anywhere. Containerized data centers infrastructurally underpin technolibertarian and transhumanist fantasies, they allow tech companies to move around freely while facilitating an ever-deepening embeddedness of technology into human life. Considering the overlap between globalized intermodal transport and cloud computing, the containerized data center emerges as a conceptually destabilizing phenomenon, which is why artist duo Metahaven experimented with a hypothetical cargo ship carrying containerized servers in a series of fictional data centers for their *Black Transparency* show.

67 See Trevor Paglen's *Undersea Cables* series from 2016.

68 Keller Easterling, *Extrastatecraft*, (Verso, 2014).

69 Benjamin Bratton, "The Black Stack", *e-flux journal no. 53*, https://www.e-flux.com/journal/53/59883/the-black-stack.

70 Ibid.

It is through planetary-scale systems—like intermodal shipping and cloud computing—that our anthropocentric view of the world is unsettled; we go from seeing ourselves through a framework of individual autonomy and liberty to being entangled in complex infrastructural assemblages. Fredric Jameson has already remarked on the dizziness induced by globalized communication technology networks in 1991: being caught in a global computational system leads to a loss of agency, inducing anxiety and angst that results from a perceived loss of control over one's worldly position. A similar argument can be made for the proletarian subjectivity under globalized industrial capitalism, wherein the working class is increasingly deeply alienated from their labor.[71] This deterritorialization and creation of smooth space through the fluidity of technology, capital, and infrastructure disempowers individual agency and the ability to effectively politically organize. When systems of production become intangible because they are fragmented and distributed all over the world in the form of *hyperobjects*, the inability to identify ones position in them also leads to a blurring of class distinctions. Shipping containers played a central role in this process of destabilization, providing capitalism's spatial fix by moving productive processes wherever they were cheapest. And when applying this vector of movement for globalized capital and apply it to data infrastructure we are not only alienated from the modes of production, *but also from the modes of computation*: we don't understand where computation

71 Michael Shane Boyle, "Container Aesthetics", *Theatre Journal* vol. 68, no. 1, (March, 2016), 10.1353/tj.2016.0012.

takes place, which resources it requires, how algorithms work, and who governs all these processes.

So, containerized data centers unsettle the established notion of infrastructure as *fixed* by instrumentalizing the spatial affordances of the shipping container. These data centers also rely on very little fixed infrastructures to function: they require a power source (which is usually a connection to an existing power grid) and relatively stable ground, usually concrete, although something like gravel may also be used. The power grid can also be replaced by generators or another mobile energy source, which grants it further independence from existing infrastructures. There are several examples of data centers, usually configured as crypto mines, running on methane gas, for example. These opportunities for infrastructural mobility provide the containerized data center with a significant amount of spatial autonomy and flexibility. When it comes to territorial sovereignty, the containerized format—which is inherently global through its intermodality—transgresses the conventional territorial delineation associated with brick-and-mortar data centers. Containerized data centers can be positioned in territories where they are under sovereignties that serve the interests of tech oligarchs, or others seeking to exploit territorial quirks. One can imagine several cases in which this becomes problematic: circumventing labor laws or human rights violations by moving infrastructure from one place to another. The containerized data center becomes the deployable foot-soldier of technocapitalism

To take a notable example of the complexities of data sovereignty: in 2013 a U.S. prosecutor in a drug trafficking case requested data belonging to the accused which was stored on Microsoft's cloud. Microsoft refused to turn over the data because the data was stored in an Irish Microsoft data center and therefore not subject to U.S. jurisdiction. The person being prosecuted had selected Ireland as his country of residence when creating his Microsoft account, and so all data was stored there.[72] Whether or not he had ever even been to Ireland was irrelevant, only that his data was stored there and not in the U.S. This is now being undermined by the *CLOUD act:* new domestic legislation which allows local data sovereignty laws to be overruled if the data provider is based in the U.S. and the stored data is relevant for U.S. criminal investigations. Nonetheless, both the drug trafficking case and this kind of legislation demonstrate the

72 Thomas F Brier, "Defining the Limits of Governmental Access to Personal Data Stored in the Cloud: An Analysis and Critique of Microsoft Ireland." *Journal of Information* vol. 7, 2017, pp. 327–71, https://doi.org/10.5325/jinfopoli.7.2017.0327.

territorial tensions that arise between states and corporations. The corporation starts to resemble a rogue state more than a company.

We can also look at the containerized crypto mines along the Columbia River in Washington to further unpack the spatial complexities of data infrastructure. In this case, crypto miners used shipping containers housing computational hardware to appropriate the cheap hydropower generated by the river. The ease of transportability of these containers allows miners to move their operations to wherever its cheapest, exploiting low-cost power to widen tight margins so common in crypto mining. When the state-owned energy provider caught on to their exploitation, they intervened through price-adjustments. Crypto miners subsequently reacted by simply moving the mines—made possible by their containerized form—across state lines, repositioning them in a different jurisdiction where they could once again exploit and profit from cheap energy prices.[73] These containers became almost like infrastructural parasites, situating themselves wherever they could profit from a host—in this case the Columbia River, showing how this mobility can be instrumentalized to circumvent territorially bound legal frameworks and exploit spatial contexts.

Conversely, contested open-source data organizations like the Internet Archive have also used containerized data centers, granting them flexibility and intermodally-facilitated freedom of movement in case they were under threat of being compromised (similarly to digital libraries). The Internet Archive's containers were provided by Sun Modular Datacenter, which developed some of the earliest data centers housed in shipping containers. Perhaps the Internet Archive already knew that the open-source data landscape would become increasingly hostile as time went on. When spatial fixity becomes a liability, mobility can become the key to survival; as demonstrated by the crypto-containers in Washington. It's not hard to imagine open libraries operating out of shipping containers. Maybe Metahaven's speculative cargo boat was closer to reality than we think. Intermodal shipping containers already populate the freeports of the world where high-value assets enter a kind of fiscal abyss through these tax-free storage locations. Looking up images of freeports usually wields images of shipping containers. Freeports embody the same logic of disappearing into extraterritoriality through the logistics-machinery of globalized capital. What if one of the many containers pictured in the

73 Nick Lally et al., "Computational Parasites and Hydropower: A Political Ecology of Bitcoin Mining on the Columbia River." Environment and Planning. E, Nature and Space, vol. 5, no. 1, 2022, https://doi.org/10.1177/25148486198676o8.

freeports around the world contained a data center? Metahaven proposed a floating cargo ship in international waters, but a freeport data center is not implausible, either. Both the future of data and art seem to take place inside shipping containers

Internet Archive modular data center.

Exterior of the *Geneva Freeport*, the world's oldest and most famous freeport facility.

SHIPPING CONTAINERS AND THE END OF THE WORLD

What if, instead of thinking about the hyperscalers which occupy the popular imaginary of data centers as massive computational factories with an inexhaustible thirst for water and electricity, we linger on the smaller, splintered forms of data infrastructure? Smaller forms of technology, known as the Internet of Things, have become increasingly embedded in our material realities—from smart fridges, to doorbells, to cars—and these technologies are also increasingly equipped with AI capabilities, which is now necessary to stay competitive as a company. Your

smart fridge might place an order in your grocery-store app based on what's in it. Our world is permeated by technology and software, all of which are upheld by infrastructure. But it isn't only the hyperscaler data centers which carry out computation, smaller data centers often respond to proximity demands related to edge and fog computing (forms of computing that rely on being close to sources and nodes collecting, processing, and transmitting data) and a reduction of latency. Our world has quietly been restructured according to these technologies; machines communicate with other machines, maybe even making decisions without consulting us anymore. Perhaps they don't need us at all.

In the promotional text for their modular data centers, Amazon Web Services states: "Each modular data center unit is constructed using ruggedized containers that are designed and built for intermodal freight transport, which can be used across different modes of transportation from ship to rail to truck. The AWS Modular Data Center units are also air-transportable using military cargo aircraft,"[74] clearly demonstrating that its flexibility and modularity are primary selling points. AWS developed their containerized data center in a contract with the U.S. Department of Defense (officially renamed to the 'Department of War' at the time of writing), which makes a lot of sense: the shipping container is compact and structurally resilient, it can be easily transported and easily camouflaged, and can also be positioned almost anywhere, requiring little to no external infrastructure to function.

Amazon's modular data center developed for the Department of Defense

74 "AWS announces AWS Modular Data Center for U.S. Department of Defense Joint Warfighting Cloud Capability", Amazon Web Services (AWS), February 13, 2023, https://aws.amazon.com/blogs/publicsector/announcing-aws-modular-data-center-u-s-department-defense-joint-warfighting-cloud-capability/.

Vertiv, another company producing various kinds of data infrastructure, detailed the different spatial contexts that their containerized data center could be used for in the promotional video for the 'Smartmod' prefabricated container data center. They show renders of the data-containers on an oil rig, camouflaged in military contexts, and even standing strong in an urban landscape destroyed by an earthquake (although 'earthquake' could just as well be substituted with 'bombing').[75] All of these spatial contexts have an air of imperialism to them; the oil field and its extractivism, the battlefield and its conquering of territory, the destroyed city and the dissemination of the people who inhabited it. It is through this multiplicity of spatial contexts that the container morphology is marketed as resilient, mobile, and adaptable, appropriating the shipping container's inherent transportability and scalability. This video shows a dystopic, destroyed world in which the only structure which remains operational is the data center.

Similar landscapes are conjured when we imagine containerized data centers in the battlefield; when everything is destroyed, when buildings are reduced to rubble, the data centers will remain. When states fail, corporations will keep going. And containerized data centers *depend* on this world, they are specifically marketed as the most resilient infrastructures, imagined in the harshest of conditions. Without this world, they would be futile. Images like these evoke what is referred to by Luke Munn as 'operational imaginaries', which are the ways in which infrastructure "suggest[s] a set of future possibilities by enacting them concretely in the present".[76] For Munn, the resilient design of data infrastructure not only anticipates potential futures, it actively "prototypes" them. These data centers want the world to end if only to prove that they can keep on running, they are designed to outlive us.

75 "VertivTM SmartModTM outdoor Container Data Center", Vertiv, April 24, 2024, https://www.youtube.com/watch?v=06JF-1LcVSc.

76 Luke Munn, "Injecting failure: Data center infrastructures and the imaginaries of resilience", *The Information Society 36* (3): 167–76. doi:10.1080/01972243.2020.1737607

"VertivTM SmartModTM outdoor Container Data Center". YouTube, uploaded by Vertiv, 24 April 2024, https://www.youtube.com/watch?v=06JF-1LcVSc.

The affordances of the shipping container imbue them with an inherent level of resilience, as evidenced by the containerized crypto mines and the containerized data centers developed for military purposes. This imperative for resilience emerges from the guarantee of uninterrupted operability of data centers, a crucial selling point for companies providing data services. What we can learn from concepts like operational imaginaries is that data center design hinges on the "embrace of failure"[77] rather than anticipating concrete threats; data infrastructure should be flexible, adaptable, and modular in order to survive an unknown and precarious future. In this sense, operational imaginaries undermine human temporality—data centers' ultimate goal is to *keep on going*—uptime is the only time, system failure and infrastructural death are out of the question. These are data centers designed *for* disaster capitalism.

Munn underscores the importance of infrastructural imaginaries in shaping socio-material realities, stating that "infrastructures are not nebulous fantasies but functional realities, anchored in glass fiber and copper, switchgear and server racks". He goes on to say that infrastructure is "an operating system for shaping the territory, a means of reestablishing some kind of successful order."[78] Many companies advertise their containerized data center services in response to spatial contexts that require proximity solutions for operability of data services, particularly in light of the demand for accessible and fast AI services. These

77 Ibid.
78 Ibid.

infrastructures enable the heavy computational processes required for that kind of software to run effectively. And so, these containerized data center companies which are built for disaster capitalism establish themselves in particular spatial contexts. They shape infrastructures which, in turn, shape our socio-material realities. Operational imaginaries emerge from the notion of uninterruptedness and virtually infinite operability, suggesting a totalizing computational force in doing so. If the data centers never switch off, neither does the technology that depends on them.

Let's return to corporate rhetorics again: at this point in time, almost every producer of containerized, modular data centers is presenting them as solving AI computing related issues. One such producer states that:

> As AI models proliferate and inference moves closer to the user, compute must follow. Modular data centers make this possible: deployable in constrained environments, scalable from kilowatts to megawatts, and reconfigurable as demand evolves.
>
> This flexibility opens up a new, very large, market — the distributed, edge AI infrastructure layer that will power autonomy, real-time analytics, and next-generation digital services.
>
> In this new model, growth is no longer gated by concrete or capital — it's driven by velocity, modularity, and the ability to scale infrastructure as dynamically as the workloads it supports.[79]

This is a recent text at the time of writing, but the need for a "*distributed, edge AI infrastructure layer*" has been on the horizon for a while. Such a layer would allow companies to quickly set up hosting infrastructure which can elastically respond to traffic demands, keeping hosting costs as low as possible. If more hosting storage and computational power is needed, one can simply add containers, conversely, if that need declines, they can also be removed. There is only one significant cost left, then: energy. But as was demonstrated by the crypto containers, the mobility of containerized infrastructure also allows companies to move their infrastructure to financially favorable locations. Similarly, its adaptability and modularity also allow them to be reconfigured

79 "Stop Building, Start Manufacturing: The Modular Data Center Revolution ", *Orbital Industries,* https://www.orbitalindustries.com/posts/stop-building-start-manufacturing-the-modular-data-center-revolution

according to different energy sources, which is significantly more difficult with brick-and-mortar structures. The abstract logic of financial capitalism is applied to the last tether between dematerialized software and the material infrastructure it relies on—data centers can no longer only get bigger, they can actively shapeshift and move around, too. And so, this promotional message says: "growth is no longer gated by concrete or capital — *it's driven by velocity, modularity, and the ability to scale infrastructure as dynamically as the workloads it supports.*" These rhetorics also reveal that, in the data-infrastructural landscape, fragmented data centers will diffuse into spatial materialities, deeply embedding themselves in the fabric of our lived environments and tightening the already oppressive presence of planetary-scale computation in our lives; "as AI models proliferate and inference moves closer to the user, *compute must follow*".

This is in line with Deleuze's now-famous Postscript on Societies of Control, wherein he argued that we've moved from Foucault's disciplinary societies, hallmarked by fixed enclosures (the prison, the school, the Fordist factory), to societies of control, which hinge on modulation (flexible modes of control that change and adapt, such as post-Fordist labor models). He describes modulation as "a self-deforming cast that will continuously change from one moment to the other, or a sieve whose mesh will transmute from point to point"[80]. The crux of societies of control is that they are in constant flux, adapting and morphing, the move from fixity to modularity. Deleuze describes how neoliberal individualism supplanted the simpler class distinctions which preceded because of these new societal models. This is why capitalism's so-called 'spatial fix'[81] is a good example of modulation: globally distributing productive processes is a form of flexibility and modulation that enables control, supposedly 'liberating' Western workers from the oppressive Fordist factory by shifting production to the Global South. These new forms of capitalism hinge on modulation, and this precisely Deleuze's point; not disciplinary institutions, but the market and its corporations exercise control The market is not fixed nor localized; it is dynamic, fluctuating, and modular. This new form of control allows for illusions of freedom while simultaneously reducing the individual to a data set for algorithmic manipulation, which can predict our behaviors to extract value from them. Every time we exercise our selfhood

80 Gilles Deleuze. "Postscript on the Societies of Control." October 59 (1992): 3–7. http://www.jstor.org/stable/778828.

81 David Harvey, "Globalization and the "Spatial Fix"", https://d-nb.info/1217929630/34.

through technology, we generate data which allows algorithms to form personalized timelines, recommendations, content, and digital pathways. Market-optimized algorithms present users with the path of least resistance and maximum extraction; this is the essence of modulation. And now, even the infrastructure itself has been uprooted, capable of moving from place to place, modulating alongside the will of the market. Regulatory control of the old world can be evaded, and infrastructural-corporate-settlements can position themselves in the physical places the market sends them.

Distributed technologies and algorithms are already mutable and dynamically shift to mold our available individualized pathways. They are able to do so because of technologies that have permeated every aspect of our lives, as well as the infrastructure which underpin them. If even your household appliances, like your smart fridge and smart lightbulb, are embedded with AI, the presence of these devices can shape the way you interact within your own house or apartment. Insofar as smart devices tacitly regulate the way we interact with our environments and each other, the need for infrastructures that can uphold them becomes crucial. Containerized data centers are therefore the next step in modulation: the infrastructure *itself* can also shift, scale up and down, and modulate our spatial realities. Distributed, mutable, and modular infrastructures become an integral layer of the technological stack that the society of control depends on. In Deleuze's definition, the key difference between molding and modulating is that molding has a fixed end-point, whereas modulation is in constant flux. The same could be said for the opposition between brick-and-mortar data centers and containerized ones. The former has a fixes structure, whereas the latter is in constant flux and may be modularly changed at any point. The containerized data center is a data center that is in a state of constant becoming.

The concepts of modularity and adaptability can also be transmuted to the concept of elasticity, discussed by Eyal Weizman in relation to colonial settlements which constitute so-called "elastic geographies." Weizman refers to territories which have relinquished the spatial fixity associated with conventional borders, becoming a dynamic and flexible constellation of "points and lines"[82] instead; borders become responsive and are in constant flux, which strategically benefits the settlers. In the case referenced by Weizman, elastic geographies materialize as outposts and other settler (infra)structures, which, through their mutability and mobility, crystallize and dissolve according to the settler's needs. This concept helps us understand one aspect of containerized data centers, which similarly fulfil the function of being spatially responsive. Weizman's case and its spatial context are characterized by the mobility of the settlers; by using trailers and containers, spatial occupation is adaptive and dynamic, as the settlements can simply be moved around. This results in a dynamic border, with the points being mobile and lines between them shifting along with the points,[83] like a nodal network. If an established settlement is legally or strategically compromised, it can be moved to ease up pressure and relocated to apply pressure elsewhere. If conventional geographies are rigid, then elastic geographies are modular. Using this framework, containerized data centers can be imagined as the "points" that come to computationally envelope a territory.

Amazon Web Services describes their modular data center as "[providing Department of Defense] customers with the ability to deploy compute and storage capabilities to support large-scale workloads wherever they need it", going on to state that they are "converting data centers from fixed infrastructure that is difficult to build and manage in remote environments, to a comprehensive service that is simple to use, secure, cost-effective, and can respond to large-scale compute and storage needs wherever the mission demands."[84] This clearly indicates that the containers can be flexibly positioned in a given spatial context,

82 Eyal Weizman, "Strategic Points, Flexible Lines, Tense Surfaces, Political Volumes." *The Philosophical Forum*, vol. 35, no. 2, 2004, pp. 221–44, https://doi.org/10.1111/j.0031-806X.2004.00171.x.

83 Eyal Weizman, "The Geometry of the Occupation", Centre of Contemporary Culture of Barcelona, 1 March 2004, https://www.cccb.org/rcs_gene/geometry_occupation.pdf.

84 "AWS announces AWS Modular Data Center for U.S. Department of Defense Joint Warfighting Cloud Capability", *Amazon Web Services (AWS)*, February 13, 2023, https://aws.amazon.com/blogs/publicsector/announcing-aws-modular-data-center-u-s-department-defense-joint-warfighting-cloud-capability/.

becoming a responsive infrastructure which exists throughout a territory according to 'mission demands.' Containerized (or other mobile) data centers thereby consolidate the domination over a particular territory through the establishment of infrastructure and subsequent datafication of its spatiality and inhabitants. They would not only serve as markers of a particular entity (whether that's a settler colonial state or a tech company) but also facilitate technological processes which are used to dominate a spatial context, namely those of technified warfare.

So, if we see tech companies as para-states which operate similarly to, often alongside, and sometimes against, sovereign states, they may also engage in strategies of occupation and domination the way that states do. One of Weizman's central points is that colonial settlements instrumentalize the notion of 'temporariness', which refers to the supposed temporary nature of settler housing and infrastructure. Colonial regimes often establish themselves through this paradoxical logic; temporariness allows settlements to be established with the least possible scrutiny, for it is argued that such settlements would only be there temporarily anyway. But once established, they would enter a paradoxical state of terminal-temporariness and slowly become permanent fixtures, sometimes actually expanding into more permanent modes of settlement, such as through brick-and-mortar buildings or fixed infrastructure. In Weizman's book, he includes an image of a settlement which is established according to this logic. A few residences are put down, and settlers move in. The image depicts a shipping container converted into a living space. It should come as no surprise that the structure of choice for the supposedly 'temporary' settlements is the shipping container. Containers inherently imply temporariness through their use in transport, through their intermodality they are always in flux. This temporal logic is weaponized by colonial settlements, which use containers not only for their easy transportability, inconspicuous demeanor, and structural resilience, but also because their implicit temporariness is disarming. They can be scaled up or down and moved around, granting them the temporariness that brick-and-mortar structures would otherwise be denied. Containerized data centers can be removed just as easily as they're put in place, as the crypto containers along the Columbia river demonstrated. Speed, adaptability, and unpredictability become strategies for occupation and establishment of power over a territory. By operating in a constant state of temporariness, entities can put pressure on a territory, disrupting and rechanneling its flows at its will.

Photograph included in Eyal Weizman's *Hollow Land* book

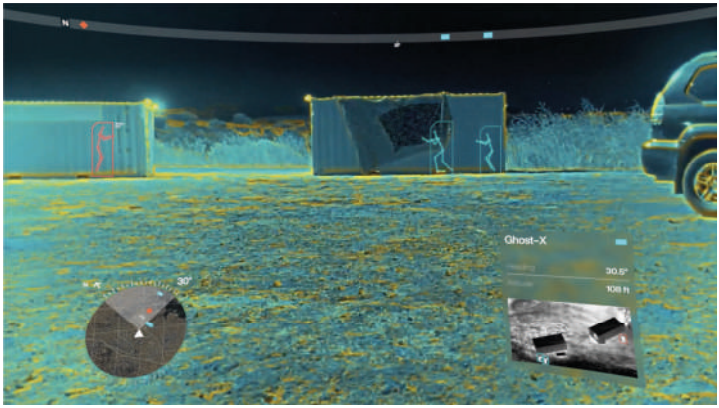
The logic of temporariness and adaptability has also been adopted by tech companies outside of military contexts. Instead of building a brick-and-mortar hyperscale data center which takes years to construct and often faces pushback from local populations, Meta has started using weatherproof tents to house its data centers.[85] The temporariness of these structures makes them feel innocuous, and if, for whatever reason, they came under scrutiny, they could simply be disassembled and repositioned somewhere else.

ALGORITHMIC CHOREOGRAPHING

In 2025, a notable tech-defense company started promoting their newest product; a helmet with integrated hybrid-reality glasses. This helmet would augment the perceptive realities of the soldiers wearing it, integrating other products—such as drones and mapping technology—into their view. All of these technologies are connected through an operating system, which is AI-powered and distributed across data centers and devices. The promotional video for their helmet shows the soldiers' point-of-view, demonstrating the capabilities of the system, such as its assisted aim by tracing a virtual line between the soldiers' gun and its target. A bit further on in the video we are shown how soldiers can see through objects and buildings using the AI

85 Nate Berg, "Meta is using tents to build its giant AI data centers", *Fast Company*, July 2025.

software: piecing together the aerial footage of drones as well as predictive computing to display allies and adversaries when they're hidden from the soldier's view. Notably the demonstration of this particular function takes place using two shipping containers, one hiding the enemy, the other hiding fellow soldiers.



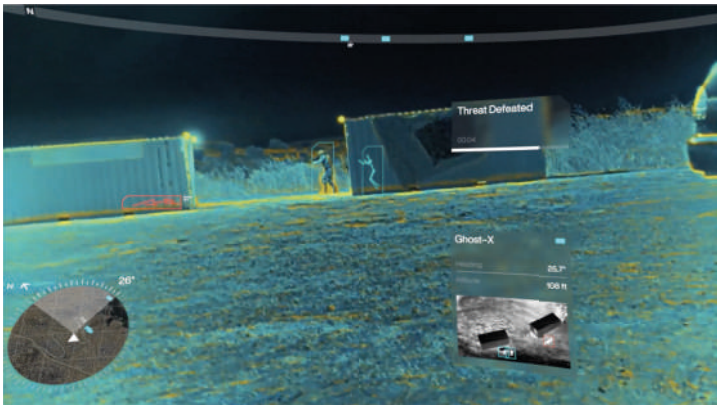
On the bottom right, a separate window shows the aerial view of a drone (another one of the company's products), and on the bottom left we see the soldier's geographic position. The drone has perceived and registered the enemy combatant, he is tagged by a red box, his limbs depicted by red lines, the other soldiers belong to the nodal network, they are tagged by blue boxes and made up of blue lines. The machine shows the soldier who the enemy is and who his allies are—who he should kill and who he should spare. The machine is also allowing him to see through objects. But at the same time, the soldier's front and back video feed, heat sensor, motion sensor, and geospatial position provide data which is relayed to the broader technological system. Whether it's the soldier or the drone who kills the enemy no longer matters, they are both just tools available to the machine. Warfare algorithms, similarly, to other cybernetic regimes, seek "to control and regulate the relations between organisms and their environments,"[86] and are no longer concerned with individual, supposedly autonomous humans.

Through this screenshot, the soldier's position within a post-anthropocentric relational network is evidenced: the other technologies available to the algorithm—such as the drone, the other soldiers, geographic data, cameras, and sensors which

86 Gilles Deleuze. "Postscript on the Societies of Control." October 59 (1992): 3–7. http://www.jstor.org/stable/778828.

inform the spatial context—allow the algorithm to shape the environment perceptible to the soldier. It subsequently provides him with the path of least resistance, it can even guide the soldiers aim, suggesting where to point his gun. The relationality between the inhabitants of this algorithmic frame is actively shaped by the algorithm, which has decided to mark some of them red and others blue.

The red box indicates a 'threat' and so the person inside of it is killed, and as they hit the ground the software provides a pop-up message: "Threat Defeated."



The video shows that, through this wearable technology, the soldier's entire perception is modulated according to an algorithmic and computational system. The system manages and shapes the relationality between human and non-human actors in the battlefield, organizing them according to the logic of the algorithm, which is constantly updated through new data flows and analysis. The software addressed the soldier as having agency while at the same time morphing his path according to its calculations. AI-forward algorithmic softwares like these mark a consequential step in the datafication of military operations enabled by machine learning. Software makes decisions based on algorithmic analysis of data which provides it with predictive models, it then decides the way forward for the soldier, modulating and shifting his view as the situation evolves. The soldier simply has to submit to the machine and its algorithmic logic, there's no chain of command telling him what to do, instead, he is intuitively guided through algorithmic choreographing. This process is subtle and exercises control through modulation, instead of discipline. Traditional military hierarchies are subtly flattened in the era of datafied warfare. Generals and lieutenants begin to be replaced by networks. And their replacement is

followed by reconfiguration of the means of control. Instead of being disciplined, soldiers are modulated, as Deleuze outlined in his postscript. The disciplinary higher-up in the military chain of command is starting to be replaced by a network capable of modulating the soldiers' actions and movements, a network facilitated through the technological military stack that includes containerized data centers, autonomous drones, and hybrid reality goggles. The company explicitly states that the helmet turns soldiers into 'connected nodes on the battlefield', it could not be more obvious.

Another product offered by them is an intermodal container that's been reconfigured to have wheels and antennas for connectivity. It's used as a command center and infrastructural layer to consolidate the network of military technologies in a given territory. It harnesses the same logic that the crypto-containers do: using the containerized form to facilitate spatial fluidity.

The container is designed to be positioned anywhere, using its wheels and intermodality for easy transportability. It becomes a node in a network of military technology, using its form to become a modular infrastructure positioned along the 'edge.' The modularity of contemporary warfare becomes evident through these technologies. Instead of having a top-down command structure, every part of the military stack—from the drone, to the soldier, to the command center—becomes a node. This entire stack is held together by the software which coordinates and tasks each of the nodes. Strategic decision making is no longer the commander or general's job; it's done by AI-powered software. And this software is described as being able to "integrate thousands of sensors and effectors to turn data into decisions at scales and speeds beyond human capacity,"[87] humans are rapidly becoming obsolete as decision makers. This might seem obvious: isn't one of computation's core utilities the ability to interpret and analyze mass amounts of data something we embrace? Shouldn't we be happy that we can relinquish the banality of data analysis to our cognitive counterparts? We might be inclined to agree in other contexts, but in the battlefield the ability for software to make decisions becomes much more severe. Software will decide who lives and who dies. The company states that the software "streamlines the complexity of the decision-making process by presenting decision points — not noise."[88] But what are decisions points, exactly? The software might provide an operator with

87 "Lattice, Command & Control" *Anduril*, https://www.anduril.com/lattice/command-and-control.

88 ibid.

the option to kill someone, and the operator is the one who presses the button required for the system to go ahead—but how was the software able to present this option in the first place? These questions are conveniently ignored. The reality is that the network autonomously make decisions based on predictive models constructed from the myriad of battlefield data.

Software actively modulates the relationality between technologies and people in the battlefield, algorithmically choreographing the way these things interact with each other to fulfil whatever aim the system has decided needs to be achieved. But what's key is that modulation isn't a process which only takes place on the software-plane, it is also infrastructural. Within globalized capitalism, shipping containers serve as the tools that facilitate the modulation determined by the market. When a supply chain is rearranged according to the price of production or labor, or when a new product is demanded by the market, shipping containers and their intermodality allow for the system of production, transport, and delivery to be quickly modulated. Shipping containers famously played an imperative role in just-in-time production—a form of production wherein goods are produced whenever the market demands them, instead of producing a large stock beforehand. In the case of the crypto containers, the crypto market and its variables—such as energy costs, currency exchange, etc.—determine the position of the containers. The ability to move around according to energy prices is also facilitated by the containerized form of the crypto-mines. And within the battlefield, the containerized control centers also move around in the battlefield according to demand. This is why the container seems to be ever-present, from the freeports, to crypto-mines, to supply-chains, to settlements, to data centers. Their morphology permits the modulation required by the market. The shipping container is central to the temporal and spatial rhythms of global capitalism and societies of control, and now, it is becoming important as one of the mediating infrastructural layers for the Internet of Things and AI. Scalability, modularity, fluidity, efficiency, and resilience are all core values of the container, and these values render them ideal tools for a globalized world governed by volatile markets. Containers adapt to and survive shocks in the market, facilitating the constant restructuring of the world that it demands. In the age of financialization, shipping containers therefore take up a significant part of the material-infrastructural layer that finance depends on. They become the metaphorical clay that molds according to the abstract logic of the market

We can go back to Deleuze here: he theorized that societies of control function according to information—packages of information which are processed by computers to actively modulate and shape our environments and the choices we can make according to market logic. He imagined a "computer that tracks each person's position—licit or illicit—and effects a universal modulation."[89] And now, we bear witness to this modulation, in both subtle and explicit ways. Military technology tends to the reveal the mechanisms of violence and control most boldly, demonstrations are there to sell the technology within the military-industrial marketplace. But these demonstrations also uncover the relationship between modularity and control in shocking ways. The situation engendered by containers is one of a totalizing view. In the case of colonial settlements, the containers are used to occupy strategic points—usually on hilltops[90]—so as to perceptively dominate a territory. Similarly, military data center containers are positioned within the 'edge' to better enclave a territory by mediating a technological stack. A totalizing view, whether literal or in the form of data, allows softwares to run predictive models. If a network is granted access to as much information as possible, then machine-learning softwares can most accurately run statistical analysis and predictive modeling on the grounds of that data. This is a process that's only possible because of technology, without sensory devices the amount of data needed for these processes could never be gathered, and without the software and computational capabilities, it could never be analyzed as effectively. Humans are simply outmatched when it comes to these information processes.

But where do we find the origins of the totalizing view? Like many other aspects of Western society, the answer lies in financialization, wherein totalizing perspectives are operationalized to speculate about movements in volatile markets. Nestled deep in the framework of neoliberalism is the idea of rational actors and access to information. In the contemporary form of financialized capital, this means employing technology to conduct data analysis, and whoever has access to most data and can process it most efficiently will make the most money. This pervasive logic has taken over the world in the last three decades, with digital markets to speculate on any event having come into

89 Gilles Deleuze. "Postscript on the Societies of Control." October 59 (1992): 3–7. http://www.jstor.org/stable/778828.

90 Eyal Weizman, *Hollow Land: Israel's Architecture of Occupation,* (Verso, 2007).

existence.[91] Financialization has permeated every aspect of human (and non-human) life. A similar logic seems to repeat itself in the military context. Whereas in the financial market, the totalizing perspective is used to model potential outcomes to anticipate and profit from shifts in the market, the military applications generate spatial models of potential attacks and targets. In the 2003 book *Power to the edge: Command... Control... in the Information Age*, by military theorists David S. Alberts and Richard E. Hayes posit that, in the age of datafied warfare, "sensemaking is much more than sharing information and identifying patterns. It goes beyond what is happening and what may happen to what can be done about it."[92] This was written in 2003; the writing is on the wall—predictive warfare has always been the goal. In finance, predictive systems are called deep reinforcement learning (DRL), and "allows systems to dynamically adapt to its current market conditions. Unlike previous models, DRL uses simulations to train algorithms."[93] In both contexts, these preemptive models are operationalized to totalize and dominate, whether that's in a financial market or a battlefield. And when targets are generated from a myriad of sensing devices, humans no longer decide between signal and noise, rather its technological systems which make these decisions, and it is politics that "separate noise from information."[94]

A WAR WITHOUT SOLDIERS

The resemblance between military control rooms and the desk setups of financial traders is no coincidence. The multi-screen setups in both contexts are meant to facilitate a totalizing view by presenting the user with as much visual information as possible. But nowadays it is no longer a person sitting in front of a bunch of screens that makes financial decisions and trades stocks, every serious firm uses trading algorithms. Also referred to as 'high frequency trading', companies use the speed, accuracy, and efficiency of computational systems to make financial decisions for them. These algorithms trade at speeds vastly beyond human temporality, sometimes buying and selling at one millionth of a second. Similar things are happening in the battlefield: humans are still present of course, but they are increasingly 'assisted by AI.' Soldiers are equipped with an AI companion, supposedly helping

91 Platforms such as Polymarket and Kalshi are good examples of this.

92 David S. Alberts and Richard E. Hayes, *Power to the Edge: Command ... Control ... in the Information Age*, (Cforty Onesr Cooperative Research, 2003).

93 "Algorithmic Trading", *Wikipedia*.

94 Hito Steyerl, *Duty Free Art: Art in the Age of Planetary Civil War*, (Verso, 2017).

them eliminate enemies and stay safe on the battlefield. But who is assisting who? Isn't the soldier assisting AI by feeding it data and being a weapon that can be tasked by the machine? The software has already decided who the enemy is, even obstructing the soldier's view to only see red or blue figures in boxes. What the figures look like to the soldiers' meat-eyes doesn't matter anymore, machine-eyes have made the decision for them. Soldiers equipped with hybrid reality goggles are perhaps the best weapons at the disposal of software that autonomously makes decisions.

The connection between finance and military technology goes deeper than we might think, though. Alberts and Hayes draw on the finance industry's responsiveness to volatile markets as an analogy to suggest how the military should operate. They state: "Agility (in this case, adaptability) did not just result in increased survival [of firms], but actually resulted in increased operating performance including sales growth, earnings growth, return on assets, and return on equity. Thus, agility seems to have outperformed optimization even on its home turf." They also say that this "means abandoning our management habits of prediction and control and developing instead the capacity to respond to change. Power to the edge is the means to develop an increased capacity to respond to change." And here we are reminded of Deleuze's theory of modulation: not rigid discipline but dynamic change, an ever-molding form of control that lets go of hard-discipline and instead embraces the dynamism of the market. This has been in the works for a while, and *Power to the edge* evidences that the military has learned from financial markets; that not only has it learned from these markets, its embraced the actual logic *of* the market. As Alberts and Hayes say: "make volatility your friend, not your enemy." Ironically, similarly to Deleuze and Guattari, Alberts and Hayes argue that the rhizomatic structure of the distributed networks is more efficient for military operability than the arborescent structure of hierarchical branch-networks. And even though the use of critical theory by the military isn't anything new, the use of machine learning and new capabilities provided by networked technologies is bringing strategic visions to fruition. A network that conducts warfare in a fluid and dynamic manner according to the logic of the algorithm.

RUBEN STOFFELEN

Trevor Paglen, *A War Without Soldiers (Corpus: Eye-Machines) Adversarially Evolved Hallucination*, 2017.

FIGHT UNFAIR

One of the most prominent uses for shipping containers beyond their intended function in transport is that of makeshift housing. Countless complexes are made out of containers, mainly in response to the demand for housing in cities. They are a cheap and modular solution, able to be scaled up and down or moved entirely. Similarly, shipping containers are used as prisons, often in response to 'illegal' refugees that enter a country. We already live in containers; they are spaces of residence and captivity. Whether it's responding to housing crises in cities gutted by decades of neoliberal policy or increases in the imprisoned population due to the prison-industrial complex, shipping containers provide a solution. In the current discursive landscape there are attempts to disarticulate the abstract logic of contemporary capitalism and financialization from the material realities that lie beneath them. Labor, extractivism, and hardware are quickly losing relevance and relegated by dematerialization, speculation, and software. But we inevitably inhabit a material reality and insofar as that material reality is structured and governed by principles which have increasingly become dematerialized, the shipping container morphology is one of the objects that bridges the material and the abstract. Not only through their modulation and ability to adapt to whatever situation the market demands of them, but also through their resilience and the ability to survive whatever the

market puts them through. Until the point when hardware is no longer necessary for software to function, financialized capital will require data centers, no matter how abstract it gets. And as long as it needs data centers, the containerized morphology provides an ideal kind of data center. One which bends materiality to its maximum amount of abstraction whilst remaining physical. *It is easier to imagine the end of the world than the end of the shipping container*—at least if we're to believe the companies providing them.

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HOW TO NOT DISSOLVE COMPLETELY

Mela Miekus is an Amsterdam-based writer and researcher with a background in art theory and curating. Her research practice centres around contemporary art and internet cultures with a focus on the politics of aesthetics and online girlhood. She holds a Master in Curating Art and Cultures from the University of Amsterdam. As of 2025/26, she is a researcher at the Institute of Network Cultures.

Ruben Stoffelen is an Amsterdam-based writer and independent researcher who holds a research master degree in Cultural Analysis from the University of Amsterdam and is working at the Institute of Network Cultures. His research ranges from networked subcultures and visual culture to infrastructure and the built environment, whilst underscoring digital culture and agency.