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Operational Images: Between Light and Data

Editorial

In the first *e-flux journal* issue of 2023, the Ukranian researcher and curator Kateryna lakovlenko points our eyes at images of forests. The first is from the site of a mass grave outside Izium, a city on the Donets River in eastern Ukraine. The bodies were gone by the time the photo was taken; instead, the photographer shows medics and the surrounding woods. Another is a nineteenth-century photograph of a forest in Tasmania picturing lush trees, which on close examination conceal colonizing British officers. A more recent Instagram photograph shows a feminist Ukrainian Army volunteer living, with others, among the trees they are protecting. A final photo was captured by an occupying Russian Federation soldier's camera moments before his death outside Izium's woods. His body remains out of view; his unambiguous vantage point of the exploded forest landscape remains.

"Like a vulture that feeds on the body of a dead animal," lakovlenko writes, "war feeds on the pain of other people." In an argument that engages the usual suspects (Sontag) and, more pressingly, Oraib Toukan's 2019 essay in this journal on what she termed "cruel images," lakovlenko insists that certain photographs—and writing about photographs—can help those acutely feeling the pain of war become agents, narrators toward their own freedom. "For me," says lakovlenko, "the lens of the camera has disappeared in my experience of seeing this war. And as a result, I can speak about my tragedies, loss, and pain without fear of being hurt. The only fear that exists is the fear of not being heard."

Jörg Heiser takes a hard look at certain acts of desperation carried out in the context of today's constant and concurrent crises. Heiser sees the awkward "aspect of apocalyptic messianism" visible in some of the more publicized, theatrical protests carried out in art contexts. He asks: "Whom or what do they actually disrupt in order to exert pressure on whom?" But Heiser does not condemn action. Indeed, he argues, "The messy, radical, pragmatic business of transforming our economic and social system has to start now."

For those of us who have managed to survive until now, how do we start this transformation? And what is the state of our bodies and minds? Franco "Bifo" Berardi tells us that the pandemic "has completed the process of the de-sexualization of desire that had been underway for a long time." This long stretch in time, Bifo remarks, began "as soon as the communication between conscious and sentient bodies in physical space was replaced by the exchange of semiotic stimuli in the absence of bodies."

In this issue, bodies include celestial entities and national corpses as much as human ones. In an essay organized by astronomical headings—Portuguese names for stars comprising the Southern Cross constellation—the artist Thotti, who is from Rio de Janeiro, points to a light "only visible at the very edge of the world." This light, which

Thotti says surely revealed the decayed body of Magellan, is "a torturous cross rather than fire or flame, this light hurts more in its distance than its encounter—already impossible without a name for summoning it."

In "We Too Were Modern," part one of a three-part essay series. Thotti confronts the strange impulse to return to a lost Edenic world that can be seen in colonial modernity, revolutionary thinking, and Jair Bolsonaro's blind pyromania, Through Bolsonaro, like many right-wing populist leaders recently, Brazil experienced "not a conservative counterrevolution but," Thotti says, "a late distorted Jacobinism, which, rather than confronting an / and a now with a lost world, instead manufactured such a lost world by convincing itself that the Terror is actually a restoration." Prior attempts may be linked, as Thotti maintains, to Robespierre and Jacques-Louis David's pamphlets urging French citizens to spruce up their homes at the height of revolutionary violence. These pamphlets, written for the 1794 Festival of the Supreme Being, consist "in one of the most naive demonstrations of nostalgia in the bosom of culture." The revolutionaries urged fellow citoyens "to beautify their homes with flowers and wreaths in a clumsy attempt to turn the blood of the guillotine into a trail back to a new garden of Eden." One pole of a national body's constant transit, Thotti says, is an object without belonging.

In his inaugural essay as a contributing editor to *e-flux* journal, Serubiri Moses reads—and illuminates with an opening toward expanded apertures—two decades of the critic David Teh's writing on video art in Southeast Asia. Teh, as Moses explains, challenges "the relevance of the 'nation' as a paradigm for thinking art." Teh writes that "in Asia at least, the frame of national modernity has done less and less to illuminate the work of contemporary artists intent on stepping beyond it in various ways," and holds that a contemporary counter-history of the modern should account for today's "supranational" contexts. Moses explains the stakes further: "This notion of the 'supranational' appears in Teh's writing as a salve or balm for the chaotic entrapment of state capture within which all history remains. But," as Moses crucially asks, "what is this all history?"

To turn again to images: what is a still, or moving, or "sensitive" image's place and its current modes of action in this "all history"—or counter-history, or any other way of telling the stories of art, death, love, survival, cosmologies, and so on—including, as lakovlenko points out, the history that is actively being created by wars and other competing realities? Beny Wagner, in these pages, also urges us to look at the material substrate of moving as it evolves. As Wagner says, "The logic of consumption has been continuously reinscribed onto the boundaries of the camera-body-screen nexus." In a text on operational images, following Harun Farocki, Jussi Parikka advises everyone who reads images as operational to look for detail, for nuance. Today we have to resist what Parikka

classifies as "the temptation to pack all sorts of abstractions—and abstract images of technical and calculational use—into one box, implying a kind of Enlightenment gone awry, a stream of violence and extraction that is merely about military power in the restricted sense of warfare." We should continue to look at "the operational violence of capitalism" and "the colonial uses and functions of measurement and their neocolonial forms," Parikka maintains. But standing against abstraction just for the sake of taking a stand is misguided, "leading us to insufficiently nuanced readings about technical images." In a landscape that includes "environmental imaging, remote sensing, AI, and platform culture," Parikka writes, "we can no longer afford to miss the more detailed high-res insights."

X

Kateryna lakovlenko

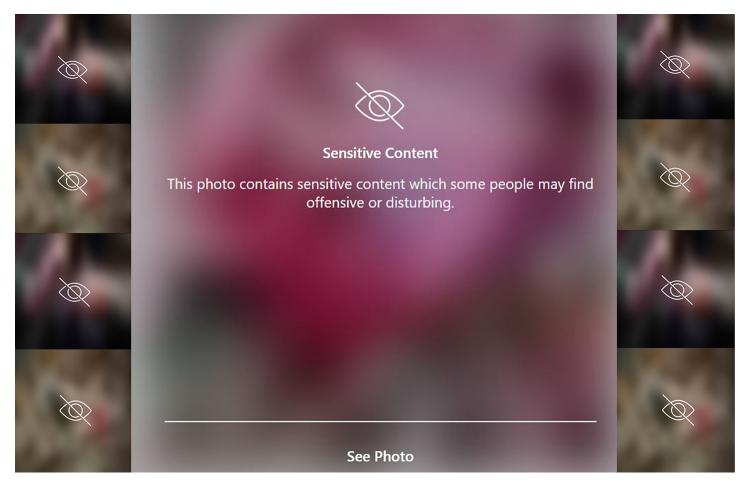
Exactly That Body: Images Against Oppression

"I tried to wash the smell of the dead people in Izium from my body with the help of Metallica songs and a liter of strong home-made liqueur. None of it works," tweeted my colleague, a Ukrainian journalist, on September 16, 2022 after reporting from the newly liberated city. His message appeared with many more like it last September. That month, Ukrainians recaptured the city of Izium after a five-month occupation by Russian forces, who left mass graves in their wake. That same day—September 16—several colleagues posted a photograph taken by Yurii Larin of a severely decomposed hand found in the largest of these burial sites. A yellow and blue rubber bracelet hung around the dead man's emaciated wrist. Almost half the people I know have the same bracelet. My sister, for example, bought one for herself and one for her daughter. For many Ukrainians, this soldier's hand became a unifying symbol for all communities experiencing the violence of war. Editors, translators, IT specialists, and many others tweeted a message that quickly spread around the globe. Each post had two photographs: one of the tweeter's own hand in a yellow and blue bracelet, next to the photograph of the persecuted soldier's hand. "This could be any of us," the most common caption said.1

The following day, my friend, a reporter from a leading Ukrainian media outlet, wrote: "Today I woke up at 3:48 and could not fall asleep again because the smell of dead bodies was everywhere. The smell was not the same as in Kyiv. People were found earlier in the Kyiv region, but bodies lay in the ground for six months in the Kharkiv region." Several months before, at the beginning of the full-scale war, she had written a text on the exhumation of mass graves in the Kyiv region—at a site very close to my home.

"I don't know how you're going to write about images from the war," a Ukrainian historian focused on public history wrote me in a private message. He had returned to Ukraine in summer 2022 after teaching in Washington, DC. He decided that his body needed to be at home. He wanted to share in the experience and feelings of war not from a distance, but rather by being present in time and space with his comrades. He wanted to be involved; he wanted to act. He was born in the Donetsk region. The war there destroyed his parents' home almost nine years ago. But in February 2022, he felt rage and strength at a scale he had never experienced before. He still dreams of launching a new educational institution after the war ends—when, given time and distance, it will become another period of history that he can finally research.

For many Ukrainians, images of the Russian war have become more than just photographs: each one is an embodiment of the particular knowledge we all carry within us now. At least I can speak for myself. These images of conflict remain horrific; they evoke various strong feelings that manifest as ants crawling on my skin, a panic attack, anger, or a desire to leave the apartment and lock up my own body until it survives the grief that the



Sensitive content on Instagram

photographs produce.² I want to mark my body "sensitive," as the photographs themselves are sometimes labeled online. I want to close my whole self off from others' sympathetic or apathetic views. But I instead perform the almost mechanical action of archiving the continuing struggle against oppression via the photographs of it that I encounter. I'm not carrying out heroic actions; instead, I'm keeping my eyes open to images of war. I want to see what oppression looks like and what images can do against it. I write about the war during the war,³ as, for example, my Bosnian and Croatian colleagues did back in the 1990s.⁴ History is being created now, and if I must be an active part of this history, I want to remember it and reflect.

Note 1: Images and Action

Digital media is created by a power structure that collects data and subordinates information according to the interests and behavior of individuals and communities. Through such mechanisms of regulation, the reigning algorithms throw up more and more images of death and tragedy, each post closely resembling the last post the user just saw, or even replicating the same photographs of cruelty over and over. This cycle retraumatizes those

directly affected by these stories and silences those who have chosen to hide disturbing news in their web browser and social media. The "mark content as sensitive" feature on search engines and social media becomes an essential tool to hide traumatic images and avoid painful memories. But social and political problems are also masked by online consumerism: war becomes part of digital trade relations, as money is collected online for weapons and as social media platforms become weaponized. Therefore, it becomes crucial to ask not only who speaks and supports the conversation, but also what is offered in terms of the content each one of us allegedly voluntarily chooses. The topic of how online feeds and online activity shape discourse in real life is a dense thicket, and one text cannot highlight all the features of the contemporary dilemmas of the war. So I have decided to focus on "sensitive" images, my memory, my body, and the war.

A vivid example of sensitive content is the image I mentioned before: the hand of a murdered soldier found in a forest in Izium with traces of torture on his corpse. Some of my colleagues asked why others were reposting the photograph of his desiccated hand, saying that it was cruel to do so. Even before the present war, I saw many such images in the media. I still remember viewing reports from the Chechen War and the 2004 Beslan school siege,



The Center for Civil Liberties announced a flash mob in support of Ukrainians. Join the flash mob of solidarity – post a photo with blue and yellow bracelets and hashtags #StandWithUkraine #IziumMassacre and show that you are against genocide and violence in the 21st century



4:35 PM · Sep 19, 2022

events that were relayed as vivid images of crimes, dispatched and broadcast to TV channels. Indeed, seeing those images felt like choking—yet in seeing them I couldn't truly experience the pain of the people they depicted. But now this pain has become mine. In describing what she calls "cruel images," artist Oraib Toukan emphasizes the ability of photographs to speak about tragic experiences, even and especially if it's

challenging for the people enduring those experience to find the proper words—or if it's simply impossible for them to speak because they are silenced or dead.⁵ A scream becomes the necessary form of address; it expresses the desperation and the strength of the traumatized person grasping for justice. And even if it cannot share their pain, at least the scream can let it out of their body. A photograph, as Toukan writes, can speak, can scream. For

me, my writing is my scream.

No one heard the scream of a Ukrainian woman named Oksana Sova last September. Instead, Oksana screamed in her house behind walls that suddenly felt like an enveloping abyss. For her, the viral photograph of a dead soldier's hand was more than a disturbing image. It was evidence that her husband had been killed, and that his body had been thrown into a mass grave along with 447 others. Sova told the *Kyiv Independent* that the bracelet her husband was wearing when he died was given to him by their children "for happiness and good luck." On April 19, 2022, Sova heard reports that a solider had gone missing in the Kharkiv region. When she saw the image online on September 16, she immediately cried and screamed, having no doubt about who it depicted.

After exhuming and examining the people buried in the mass graves of Izium, local officials said that their bodies had been subjected to acts of irrational violence. The Ukrainian news outlet Obozrevatel noted that scattered among the dead Ukrainian soldiers were civilians, older people, and children. The barbarism inflicted on them followed no precise pattern; one victim, for example, had his penis severed.⁸ The purpose of such crimes is to establish power and authority, to instill fear. Feminist theory sees significant symbolism in the body at war: the aggressor attempts to establish control by inflicting corporal torture and rape. Forced sex, as a New York Times reporter wrote during the Bosnian War, serves to "demoralize and terrorize communities, driving them from their home regions and demonstrating the power of the invading forces."9 Such acts deprive people of agency, turning them into disembodied objects.

In light of this, can we assert that protecting and sustaining the body is the highest form of resistance to oppression and tyranny? What can an image do in the face of such ongoing atrocities? "In contrast to a written account—which, depending on its complexity of thought, reference, and vocabulary, is pitched at a larger or smaller readership—a photograph has only one language and is destined potentially for all," insists Susan Sontag, 10 When images from the liberated city of Izium flooded social media feeds with the dead, violated bodies of soldiers and civilians, the cruelty on display evoked anger and strengthened Ukrainian resistance. Ukrainians who viewed and reposted cruel images and news were not exploiting the pain of others; they were experiencing their own pain. By eye-witnessing unjust violence, sharing and posting images by the oppressed becomes a form of speech and protest.

Cruel images and images of war are sometimes considered obscene. When they show up in search engines and news outlets, they are therefore often blurred or accompanied by warnings; they are marked as "sensitive." But in reality—especially in the reality of war—"sensitive" does not mean offensive. In her text on

cruel images, Toukan notes that written and spoken language operate differently than images. She explains that people sometimes use language to protect themselves, by and shouting or using swear words. I want to emphasize that war is never sensitive and empathetic. It is brutal by nature. When words do not help, body language, street language, protest language, and images can protect and defend.

"I shout at that someone who will not break their silence," writes Toukan in her essay. By analyzing brutal images of war and their ability to speak with the voices of the dead and silenced, she also emphasizes the manipulative nature of images: they can be cropped or selectively distributed to show only part of the truth.

Images—especially cruel images—evoke strong emotions, and emotions are the bread and butter of politics. Images of war are always political, especially images of genocide and crimes against humanity. What matters is what we do with the emotions they evoke, whether we see them as a destructive or a creative force. Questioning the source and authorship of these images still valuable, but it's even more critical to ask how images shape the discourse around political events.

Which images are truly "sensitive," and what does this word really mean when attached to an image? This question could generate a long discussion involving the history of photography, technology, and ethics, but in brief: the sensitivity of an image lies in how it is produced. Unlike film photography, which depends on light, digital images (especially "poor images," as Hito Steverl famously calls them) are produced without the sensitivities of light, the careful orchestration of chemical development, the physics of printing, and the logistics of material distribution. The notion of "sensitivity" is always political. Who determines our exposure to "sensitive" images? Who controls the mechanisms that distribute them? Is it tech companies, the state, or the individual who has survived the tragedy depicted in the images? How does sensitivity relate to trauma, and how does one work with traumatic experience?

When it comes to images of war, one can endlessly discuss the ethical complexities embedded within them: the conflict between documentation and aesthetics, copyright issues, the role of the image in creating discourse. The category of "sensitive," imposed on us by tech giants, is considered a tool for our collective use—but can sensitivity be collective? And if so, what kind of collectivity and imaginary community are we talking about?

I still question the significance of the community of Ukrainians that consolidated around particular images of the war in early 2022. Did this group include Ukrainians who remained in the country despite the relentless shelling? Did it include those who escaped abroad? Our imagined community used dreams and images to build

coherence among us, to create our own language for our shared struggle. ¹¹ In September 2022, I myself was not in the country. Although my body was safe in London, every morning I woke up thinking that I was still under fire in Irpin city, on the outskirts of Kyiv, where my home once stood.

Ariella Aısha Azoulay speaks to this closeness at a distance with her "civil contract of photography," in which ordinary people become part of the citizenry of photography.¹²

Chief among the ethical questions raised by images of war, though not often discussed, is the relationship between photography and freedom.¹³ With every new war, the ethics of war photography are debated again. For example, in 2008, when the New York Times publish a photo of the body of an American solider killed in Iraq, the army, and the family of the dead soldier, immediately criticized its publication. Others weighed in too; the *Times* cited Jim Looram, "a retired West Point graduate and Vietnam veteran," who "feels strongly that images of dead soldiers should never be published during a war."14 Opposition to photographing dead soldiers is related to questions of heroism, loyalty, and maintaining the strength to fight. Undoubtedly, encountering published images of dead comrades can affect soldiers' morale—and, I might add, the morale of any human being. But like a living body, the body of a deceased person is also evidence of agency and subjectivity. A body at war is more than just a corpus, muscles, and skin. A dead body manifests violence and criminal offenses: it is a witness and a document. A dead body does not cease to be a political body. The tradition of commemorating and preserving the remains of political and ideological figures becomes more important in wartime. For example, in October 2022 the remains of the eighteenth-century Russian general Grigory Potemkin were reportedly stolen from Kherson. 15 It is not clear if these were the real remains of Potemkin, or where the Russian occupiers took the bones, but the mythology around this event has become part of the Russian propaganda narrative. Furthermore, the desire of the Russian Federation to falsify the cost of the war and hide losses explains why Russian soldiers, according to *The* Guardian, burned the bodies of slain fellow soldiers at the local landfill during the nine-month occupation of Kherson. 16 Through such horrific bodily erasures. Russian officials manipulate fatality statistics, allowing them to, among other things, avoid compensating the families of dead soldiers.

Paradoxically, the image of the body of a dead enemy, decomposed in the ground after a year of brutal full-scale invasion, does not evoke emotions in me. I cannot hate or feel empathy for this dead person; to me, it seems that death is the fairest thing that could happen to this soldier. However, I'm struck by the fact that this indifference is felt

not only by me, but apparently also by the Russian soldiers who burn the bodies of their fallen comrades, knowing that the families of these comrades are waiting for them back home. By contrast, I feel pain every time my feed shows images of tortured Ukrainian civilians or soldiers. These emotions are solid and real.

I'm constantly questioning my relationship to the cruel images this war has produced. I look at them ceaselessly in search of a connection between my body and the tortured soldier's hand from Izium. I find an answer, or a resonance, in the manifesto of an Iranian feminist written in September 2022. The anonymous author talks about her participation in Iran's ongoing feminist-led protests as a bodily experience, one that began when, from her small home town, she saw photographs of demonstrations in Tehran and Kurdistan. Soon, she joined the protests and sought to turn her own body into one of these symbolic photographs of Iranian women leading the struggle for their own freedom. She writes:

The distance between myself and those images that I was desiring had decreased. I was that image; I was coming to my senses and realizing that I am in a ring of women burning headscarves as if I had always been doing that before. I was coming to my senses and realizing I was being beaten a few moments ago ... The *desire* to become *that image*, the image of resistance that the people of my town had witnessed, was clear to me.¹⁷

Here the notion of "that image" explains the power of certain images to create a sense of corporeality and commonness within an imagined community that includes different people from different backgrounds. In taking, sharing, and seeing "that image," this imagined community experiences a sense of being joined in a collective struggle for liberation. This imagined collectivity is similar to the religious ritual of the sacrament. In Christianity, sacraments are rites meant to represent the physical, visible, and literal embodiments of the presence of God. In the Eastern Orthodox tradition, sacraments are often called the "secret mystery." One key sacrament involves transubstantiation, where, in holy communion, wine and bread become the literal body and blood of Christ. In the photographic sacrament, the image—that image—becomes part of the experience of secret embodiment.

As Ukrainian poet Iryna Shuvalova writes,

the news doesn't happen to us happens to us.¹⁸

which could be rephrased to

an image of war doesn't happen to us happens to us.

Here, the sacrament occurs between the very form—the grammatical transubstantiation—of "happen" and "happens."

Like a vulture that feeds on the body of a dead animal, war feeds on the pain of other people. With the help of an image, victims and eyewitnesses can instead become narrators and agents. For me, the lens of the camera has disappeared in my experience of seeing this war. And as a result, I can speak about my tragedies, loss, and pain without fear of being hurt. The only fear that exists is the fear of not being heard. This is my pain, this is my blood, this is my body—no one can take it from me now.

When Ukrainians posted the image of the soldier's tortured hand next to pictures of their own hands, they demonstrated the lack of distance between the photograph of the soldier and themselves. Thanks to the powerful symbol present in both images—the yellow and blue bracelet—the people who posted the images could imagine themselves in the deceased person's place. The image of a tortured hand became an image of them too.

I notice this lack of distance only in so-called poor images, especially images taken hastily on a phone without retouching. In her seminal essay "In Defense of the Poor Image," Hito Steyerl writes that poor images can create "visual bonds" (Dziga Vertov's term). 19 This is perhaps the essence of the notion of "that image": when somebody identifies so much with an image that they don't just see it, but feel that they are the image.

Such images are taken not by detached witnesses, but by those who experience violence directly. These images then become stories told by the participants themselves. Photography becomes action. Hannah Arendt saw action as the center of all other human capabilities. Action is "the most dangerous of all human abilities and possibilities," but also the one that brings us closer to freedom:

Action insofar as it is free is neither under the guidance of the intellect nor under the dictate of the will although it needs both for the execution of any particular goal but springs from something altogether different which (following Montesquieu's famous analysis of forms of government) I shall call a principle.²⁰

Photography became an act, an essential part of the

grassroots activism of those who try to take power into their own hands.

The so-called poor image does not offer objectivity; it is subjective, opinionated, and emotional. It does not distance itself from tyrannical reality. It is the direct result of oppression, but it also expresses the desire to replace autocracy with presence, justice, and subjectivity. This will to freedom is exercised with each repost, and is embedded in users' bodies like a virus. Each repost, with its own array of independent comments, is an act of refusal—a refusal to depersonalize the photo's author by emphasizing collective experience and knowledge. Such images occupy digital space in the same way just that people occupy the streets and squares of their cities, manifesting their presence and corporeality. In this way, the human body acquires freedom within digital space. And when there is a risk of losing this freedom, this corporeality mutates, increases, spreads, and reproduces. Photography by the oppressed is an action that manifests freedom.

When I began drafting this section in the fall of 2022, after the image of the soldier's hand popped up in my social media feed, I found myself thinking that the representation of my own body on social media had been reduced to a minimum. I have no answer as to why, but it raises an interesting question: how, especially in wartime, do we make our personal bodies feel like they're part of the collective body? I also found myself thinking about how experiencing trauma makes people feel abandoned and desolate, even in the presence of loved ones who express empathy and care. How do tragic images affect and transform these feelings of loneliness and alienation?

Since then I've seen how the representation of war changes, how some images change others, how one tragedy replaces another, how people live in a constant state of fear, anxiety, and danger, trying to preserve their sanity and still demand justice. The feelings and attitudes that were prominent at the beginning of the war are transforming. I consider it necessary to record these changes in order to look at them after the war. Sifting through these notes at a later date will afford the opportunity to analyze images, ethics, and actions.

Note 2: Images and Ghosts

Usually, September comes with milky morning fog and the first cold wind. In September 2022, the faces of the exhumers who worked in the Izium city forest became colder than any morning. Most images that flooded my news feed did not show bare dead bodies; most of the bodies were in blue or white plastic bags. Medics in these images wore similar white and blue hazmat suits. Both ghosts and angels wore clothes made of polyethylene. Significantly, in a photographic diorama called *Izium Forest* by Ukrainian artist Yana Kononova, there are no dead bodies. However, the gloom and eeriness becomes

even more acute when you look at the faces of the medics—those who saw death. Kononova depicts these medics almost as an extension of the forest growth around them. In her black-and-white images, people look like ghosts in a foggy wood. They look into and out of the camera as if it did not exist.

images, keep their stories silent, the images themselves speak.

Another example of forest imagery is a photograph in which the body of a soldier disappears. After the liberation of Kherson, this image appeared online; it shows the body of a dead Russian soldier left to gather dust on the side of



"This is the last thing the occupier saw" by Unknown Russian soldier. / Max Stlel Facebook

Kononova's images make me think of another image of trees from over a century ago. The image is called Fern Tree Gully, Hobart Town, Tasmania and was taken by an unknown photographer 1887. It is in the collection of the Art Gallery of New South Wales. I stumbled upon this image around the same time I saw Kononova's work for the first time. At first glance, the image shows a dense tropical forest with scattered trees. But if you look closer, you can discern the small, nearly invisible bodies of colonizers hidden among the massive trees and branches. like soldiers camouflaged in the forest.²¹ A similar image was posted to Instagram a few months ago by a friend of mine, a female Ukrainian Jewish intellectual who joined the Ukrainian Army.²² Despite their superficial similarity, however, these photos have very different meanings. The first shows colonizers who view the forest as nothing more than a resource for capitalist extraction. The second speaks of protection, showing people defending the forest and land. Some of these people were eco-activists before they became soldiers. Although the woods, in both

the road. He lay there for so long that he almost became part of the land. The horror of this image is not connected to a person's death, but to people's attitudes toward each other-to what these soldiers give their life for, their desires, their work, their bodies. I already mentioned that I do not sympathize with images of fallen enemies—even less so after the Security Service of Ukraine published online conversations between Russian soldiers and their mothers and wives. I was struck not only by the lack of empathy for civilians in their conversations, but by the high-minded tone and their understanding that murder, theft, and the personal enrichment of the occupier are an integral part of the war. Their military actions—stealing, raping, and murdering—are deliberate and exhibit colonial thinking. Perhaps there are so-called good soldiers "just doing their job." But here I'm reminded of the story of my friend who returned home to Irpin city and found her apartment door broken and her personal belongings scattered. On the kitchen table was a note: "I am sorry." Not much was stolen from her—only a sleeping bag. Most

of her things, including intimate garments, were scattered around the apartment. Knowing that someone has touched your personal belongings is very personal and can feel like a violent insult to your body, or even a form of sexual harassment.

Jarrod Hore, an environmental historian focused on images of settler-colonial landscapes, shows the link between colonialism and photographs of the natural environment: "Visions of nature allowed for a different kind of investment in the colonial earth. They paid off in feelings of belonging even for those who never turned a sod." 23 The image of the dead Russian soldier who became the soil of Kherson was not published by any media outlet. The body disappeared from the news, and from life.

The colonial photographs Hore discusses, which were usually taken at a long distance, were supposed to illustrate the accessibility of nature and of its so-called empty places. The photographs thus hint that these voids should be filled in the future. Hore writes: "Romanticism, through photography, influenced how environments were envisioned and histories of dispossession were remembered. The high wilderness imagery of settler photography came to support a fantasy of spatial control, delivering reproducible, enduring symbols of the natural world." These photographs were not about depicting a romantic landscape, but about power, authority, and control. Photography has become a weapon of imperialism, with a special place occupied by landscape photography. Images of forests are an essential part of the long history of colonization. In her essay "Tree Thinking," anthropologist Shannon Mattern reveals the tyrannical relationship between colonizers and the environment. She quotes Zack Parisa, cofounder and CEO of the Natural Capital Exchange, who says, "You can't manage what you can't measure," asserting his desire to grasp as much space as possible with his eyes.²⁴

For Mattern, "trees are thus associated with wood tools and colonial intrusion. So many momentous decisions have been made under the shelter of trees: trees have witnessed and even seeded the germination, hybridization, invasion, and, on occasion, destruction of peoples and nations."25 Today, the large-scale measurement of tress and forests is done with the help of drone and satellite images—the same technologies used to target troops.²⁶ The territory that falls under the lens of a drone camera can span a colossal amount of space. The production of imagery and knowledge from the air thus becomes strategically important. Nathan K. Hensley writes that "drones are at once a symptom and a realization of the empire's end. But they are also a regime of figuration, a way of seeing, and, therefore, a modality of thought."27 Teju Cole observes that drone photography "conceals what it reveals. We see people, but they remain hidden."28

Two other remarkable images from the forest outside Izium circulated on social media. They were taken by a Russian soldier moments before his death. The two shots were published by a deputy of the local city council with the words, "This is the last thing the occupier saw." But what did the occupier see? The photos document an explosion. The horizon is covered in the photos, and the focus is shifted from trees to pieces of wood, dust, and particles flying away from the explosive. The photographs illustrate settler-colonial thinking. The forest where torture was carried out remains in the background; the first thing we can see in these images is the desire for conquest and domination. Did this occupier want to kill, or did he feel ashamed of his crimes? It is already becoming unimportant. We see his gaze set on destruction.

Even though the area covered by the photographer's lens in these two pictures is much smaller than if the photos were taken by a drone, the images still convey a desire to possess and control. In this case, the desire lies in the presence of an oppressor and the corporeality of photography. Even if the body of the soldier completely disappears into the ground, like the other Russian soldier's body, the images from his phone remain evidence of his active role in the war. Drone photography does not provide such critical evidence. Drones shows a map that can be zoomed in and out of. Furthermore, when a drone transmits thermal images, it does not mark soldiers and civilians with different colors; it sees all bodies as target. But even in a highly technological war, violence is not only depersonalized terror from the air. The horror lies precisely in the fact that crimes against humanity are perpetrated not by machines, but by people.

Even though these two photographs do not depict a person, they capture his presence through the discomfort of the cluttered horizon and the particles flying into the camera. You can imagine this debris striking the soldier's body, getting into his face and eyes. Looking at and thinking about this photograph becomes a bodily experience. One can imagine that the person who took this picture was falling. These two images, made in the moment of a soldier's fall, convey the imperialistic and colonial nature of the photographer and his desire to document and control the forest. This action does not manifest freedom or the desire for it, but rather the desire to control. These are images of a crime taken by the perpetrator himself in the moment of offense.

Note 3: Ennobling Images

The peculiarity of the Russian war in Ukraine is not that the number of photographs is constantly increasing, or even that they are reproduced next to entertainment content. Rather, the peculiarity of modern war lies in who tells the story. While some journalists have declared that they report on the war from a "nonnational and nonideological position," the reality is that there is no neutral, "outside view" on the war, since one's view is



"This is the last thing the occupier saw" by Unknown Russian soldier. / Max Stlel Facebook

always determined by the context of imperialism and colonial thinking. In his speech at the conference "Decolonising Western Coverage of Ukraine" in London, African-American journalist Terrell Jermaine Starr discussed the Western gaze of many journalists reporting on the war.²⁹ He noted that the reporting of Western journalists is rooted in their experience in Western metropolises, making them largely ignorant of the Ukrainian context of the war. In addition, the home countries of these journalists might be implicated in the war, even if they aren't formal participants; they might provide a haven for political criminals or their money, for example. So what matters is who tells the story and whose story gets told, even in photographs.

Last fall, I asked e-flux readers to participate in an experiment by sending me screenshots of their search results. I was curious to compare my experience of the war with others who were looking at through the eyes of media corporations. What does the Russian war in Ukraine look like from the outside? What stories are told, and by whom? But I made a mistake. I asked readers to search "war in Ukraine" in English when I really should have asked them to do this in their own language, and to use not just Google Chrome but Safari, Firefox, and even Yandex. As it turned out, the English-language search results were almost identical. It did not matter if the screenshot came from the US or Spain, the results were from the same large media corporations like the *New York Times*, ABC, *The Guardian*, and Bloomberg.



Izium Forest by Yana Kononova, 2022

I stand by Sontag's point that photography can give people a language that cannot be found in any dictionary. However, traditional media corporations still try to control the discourse around images and political events; they pretend to create an objective picture of reality by consuming the war and duplicating images from the frontline. By contrast, my personal feed, which includes various media sources, chats, and platforms, presents a very different view of the war than the English-language search results, showing pictures of what a Ukrainian soldier in Russian captivity called "the rattle of shackles, the creaking of the gallows in the gloom of the morning; and cries of those tortured in cellars, in prisons and in exile."

The Russian war in Ukraine has already been called the most documented war in history, but what images will remain with us when the war is over? What images will we, as eyewitnesses and readers, remember after all is said, done, destroyed, and created? This raises questions about visuality and what mechanisms of power are used to subdue the imagination.

Google image search results about the war show mostly professional images taken by photojournalists for their agencies. There are no poor images. There are no drone visuals, thermal imaging, or phone images of horrors. This presents a very different picture of the war than the one I will remember. Media corporations represent the war diplomatically. The photographs are made professionally and with a symbolic distance from the subject. Interestingly, these photographers include not only Western journalists but also local Ukrainian photographers who retrained themselves when their home suddenly became a warzone. One, for example, is a former wedding photographer.³¹

Among these professional images are:

- -An image of Irpin residents escaping the city across a destroyed bridge during heavy shelling. The picture was taken on March 5, 2022 by Aris Messinis for AFP and Getty images. Published in *Foreign Policy*.³²
- -An image of two Ukrainian soldiers from the back; one helps another walk. The image was taken in Kharkiv Oblast on September 12 by Kostiantyn Liberov for AP. Published by ABC News.³³
- -An image of Russian-backed soldiers and military vehicles in Mariupol. Taken by Alexander Ermochenko for Reuters. Published in the *New York Times*.³⁴
- -An image from the liberated city of Hostomil depicting a Ukrainian soldier standing atop an armored personnel carrier waving the national flag. Taken by Alexey Furman for Getty Images.³⁵

- –An image of a Ukrainian soldier in Kyiv looking for unexploded shells after fighting with Russian troops. Taken on February 26 by Sergei Supinsky for AFP and Getty Images. Published by *Vox*.³⁶
- -An image of the funeral of Ukrainian soldiers Viktor Dudar, forty-four, and Ivan Koverznev, twenty-four, in Lviv. Taken in March by Claire Harbage for NPR. Published by NPR on August 24, five months later.³⁷
- –An image of a mechanic in Zaporizhzhia taking his tools from an auto-body shop after it was destroyed by a missile strike. Taken by Nicole Tung for the *New York Times*.³⁸
- –An image of a Ukrainian solider, Dasha, twenty-two, checking the news on her iPhone after a military sweep on the outskirts of Kyiv. Taken by Rodrigo Abd for the Associated Press. Published by CBC News on April 6.³⁹

The searches that yielded these image were mostly done in mid-October 2022. There were no images from the tragedies of Bucha and Mariupol, or from other similar catastrophes—all critical events for Ukrainian society that flooded my feed and provoked lots of discussion on the ethics of images of tragedy.

Among the professional images is a photograph capturing the evacuation of residents in Irpin city. I will focus on it in detail. The photograph was taken by a photographer and editor of Greek origin, Aris Messinis, on March 5, 2022. The day before, I escaped Irpin on the same bridge shown in the image.

Interestingly, when I was having the same experience, I didn't take any pictures. In the moment I thought to myself that I should commit to remembering the experience, and I still do, but to remember it I did not take any pictures of the bridge. For Aris Messinis, it is a different experience. He was an observer. I was an eyewitness and participant, part of the crowd he photographed.

In Messinis's picture, Ukrainian soldiers help a little girl in a pink jacket cross a damaged bridge. In the background are dozens of people about to cross the bridge; hundreds more do not fit into the frame. So what is this image about? War primarily affects vulnerable groups, destroying homes and lives and inflicting trauma. But this photograph is also about the relationship between the army and the public—about power structures that, during the war, took on more authority and responsibility.

Interestingly, all the faces of the people captured in this image are turned away from the viewer. Soldiers stand half-turned or with their backs to the camera; the child looks down, focused on crossing the damaged bridge. For me, this photo is also about attention and caution. Looking at it, I want to silently offer my hand in help. This is not about sympathy but about readiness to take action.

Sontag uses the word "spectator" in her essay, emphasizing the "ennobling duty" of those who tell the people's war stories through their camera lens. Sontag notes that we often remember exact photographs from wars. For myself, however, I've come to realize that I no longer consume such images; I no longer look at them with a detached gaze. Alienation and neutrality are the privileges of those who have the security of a safe distance.

My reaction to the image of the fleeing girl is shaped by sharing the same experience. I recognize that another person might see the image very differently. They might see the girl's pink jacket as representing childhood innocence or feminine fragility. But there are other ways to interpret it. Pink is also about the history of feminist activism and the struggle for rights.

I looks at other screenshots sent by e-flux readers and notice a pattern: in one image, a female soldier reads the news on her pink iPhone; in another, an elderly woman leaves her house wearing a dirty pink jacket. The color pink (or any other bright color) in these kinds of images is supposed to convey the individuality of the person depicted, so that those consuming these images can identify with the victims. The pink is a bright spot in dark circumstances.

I'm not looking at these bright spots; I'm curious about something else. None of these people look straight into the camera. Their faces are turned away. Crossing the river over the destroyed bridge, people are not looking into each others' eyes; fleeing from shelling, they try to concentrate on simple and mechanical things. Why does the photographer, for his part, avoid the people's eyes? Perhaps because doing so would mean being involved, losing the distance and possibility to stand aside.

Images produce bodily effects and wield the power of persuasion. They reveal invisible and hidden violence; they show the suffering associated with loss and trauma as something very physical. While photography can convey such feelings, it can also build distance between those suffering and those viewing images of suffering, who may not want that closeness. After all, being close hurts. But all of these bodies, suffering or not, are a part of one collective body at war, with all its legs, breasts, and broken hands wearing a yellow and blue bracelet.

In November 2022, the day after I finished drafting this text, my feed exploded with a reposted and shared image. This time it showed a young boy from Kherson looking straight into the camera. His mature and rather aggressive look, which seems to resist everything, was documented by the Hungarian photographer Hajdú D. Andras and posted on his Instagram.⁴⁰ Some saw similarities between this image and a famous shot from *Come and See*, Elem Klimov's Soviet-era film about the German occupation of Belarus during WWII. I do not want to speculate on the

common horrors these two boys witnessed. Let's leave that discussion to the historians. Despite everything, we have to face this horror, even when reflected in the eyes of a child.

Note 4: Epilogue

Even if it seems impossible, remember not the photographs—remember me.

X

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Jörg Heiser The Noah Complex

Hurling soup at museum paintings and blocking motorway exits by supergluing one's hand to the road—these are protest forms that emerged in 2022. And they seem almost soberly realistic, or at least realistically desperate. from the perspective of that common notion that has emerged since Brexit and Trump's presidency, the Covid pandemic, deadly floods in Pakistan and freak blizzards in North America, and the Russian invasion of Ukraine: that reality is shattered, replaced by a strange, disturbing, brutal, at-times-farcical nightmare lurching towards some gigantic dystopian climax we can all well imagine, pastiched from the many dystopian fictions we've consumed. As if to give the whole thing a tingly spiritual twist, the climate activists hurling the soup and supergluing their hands are members of groups called "Extinction Rebellion" and "Last Generation" (Letzte Generation), lending themselves and their cause an unmistakable aura of apocalyptic messianism.

If anything is shattered it is not reality but, quite the contrary, the illusion of a reality that "we" lived with for so long. Or rather, this very "we" was part of the illusion. In this privileged "we" bubble, a certain cozy pre-1989 Cold War era hadn't ended—the cozy part being the place where many were well-off and could build a life in Western urban centers, in default minimum middle-class conditions. This "we" may have continued to think that wars and floods and supply shortages and nutty dictators were something far removed, happening in those "developing" countries. Even when things moved close enough to home—from the Yugoslav Wars of the 1990s, to 9/11, to the so-called "refugee crisis" of 2015—"we" managed to still somehow see these events as irritating divergences from the path towards normalcy. Only ignorance and amnesia could have prevented us from seeing that all parts of the world have been hell at one time or another, in wars and genocides, in floods, droughts, and pandemics; that politics have been awash in fake news and authoritarian propaganda before; or that climate change has been observed for a long time (scientists discovered the greenhouse effect in the nineteenth century and it has only become more clear since the early 1970s).

That said, this longtime ignorance and amnesia have been ruptured by accelerated circumstances, especially in regard to climate change. This is why the protests of Extinction Rebellion and Letzte Generation are completely justified and sound in terms of their general rationale—that in the face of climate-related tipping points and domino effects that could destroy the way of life of a large part of humanity, measures to radically reduce carbon emissions have to be taken as decisively and as soon as possible. But in the way these protests are enacted, they also feel partly misguided—whom or what do they actually disrupt in order to exert pressure on whom? While they do feel justifiably desperate, that desperation—present in the theatricality and possible self-harm of the actions, but also in the statements made

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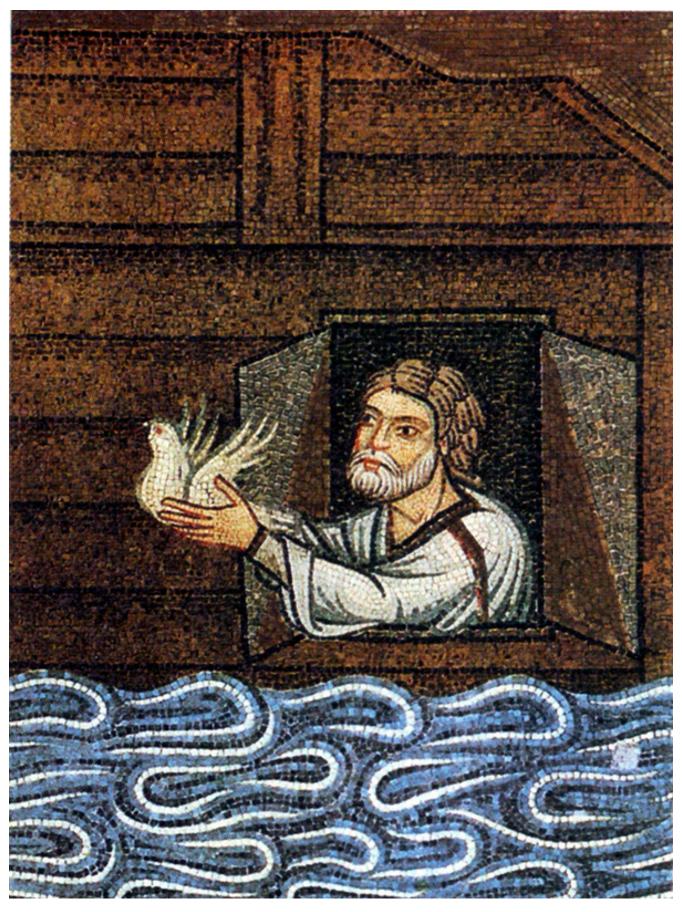
A town near the coast of Sumatra lies in ruin after the 2004 Indian Ocean earthquake and tsunami. License: Public domain.

by individual members—links directly to that awkward sense of messianism. This aspect of apocalyptic messianism has reminded me of two other phenomena, one current and one historical.

The first concerns the curious phenomenon of geek billionaire preppers. Media theorist Douglas Rushkoff's 2022 book Survival of the Richest starts with a first-hand experience that is so unbelievable that it must be true (also because cyberpunk veteran Rushkoff is a generally reliable source). After five tech-investing entrepreneurs summon him to a remote desert luxury spa and pay him a handsome fee, he learns that they wish to consult him not regarding predictions about, or ways to prevent, the coming societal collapse—what they call "The Event"—but how to effectively escape it, as in how and where to build the best and most effective doomsday bunkers. Rushkoff, stunned, provides an initial explanation: these guys are hellbent on making as much money as fast as they can so that they will have an escape plan for a disaster caused exactly by their very own money-making. "It's as if they want to build a car that goes fast enough to

escape from its own exhaust," he writes. The ultimate expression of this fantasy was the 2021 circle jerk of Jeff Bezos, Elon Musk, and Richard Branson shooting themselves and their rockets into space, at the height of a global pandemic.

Climate activists from groups like Extinction Rebellion and Letzte Generation do not seem to see these tech billionaires as their nemeses. Most of them don't seem to even properly consider them as targets in the first place (maybe the possibility is psychologically repressed because it would bring up questions of class and wealth?). Perhaps their actions—which have generated a lot of media coverage—should focus not so much on convincing the general public that climate catastrophe is looming by addressing random motorists with calls for cheap public transportation, but rather on directly confronting the rich and powerful with the impossibility of escaping the effects of their deeds—which is what many other activists have aggressively and sometimes successfully done in recent years, from Nan Goldin confronting the Sackler family to Oxfam's recent detailed



A twelveth-century Venetian mosaic depicts Noah sending a dove to find land. License: Public domain.

report on wealth inequality, titled, like Rushkoff's book, "Survival of the Richest." And there have been, more recently, in November 2022, a number of actions where some activists have actually come around to confronting the rich—namely the users of private jets at Amsterdam's Schiphol Airport and at London Luton Airport. But so far, this has not developed into a continuous pattern.

The second, historical phenomenon I was reminded of is strictly speaking not historical because it is not complete. It leads back to a time, at the height of the Cold War in the late 1950s and early 1960s, when doomsday scenarios didn't feel so much like the result of a messy cluster of causes and catastrophes but of a stalemate between two central parties, each with one finger on the red button: the threat of global nuclear war. In many of his essays from



The anti-nuclear power movement's Smiling Sun logo says: "Nuclear Power? No Thanks."

that time, Günther Anders—the Jewish-German philosopher who went into exile in Paris in 1933 with his then-wife Hannah Arendt, then to the US, before moving to Austria in 1950 and joining the postwar antinuclear movement—wrote of a "preempted future as past," and of humankind's need to overcome its "blindness to apocalypse." In his short story "Die beweinte Zukunft" (The Future Mourned), written in 1961, Anders adapts the biblical tale of Noah's Ark. In Anders's version, Noah initially wants to build a fleet of a hundred arks, but frustratedly tears up the construction plans as he realizes that he has failed to convince anyone that the flood is actually coming. Boldly, he decides to put on a sackcloth and publicly demonstrate that he is mourning—considered a grave sacrilege if no one close to him has actually died. As a crowd gathers around him, questioning him about his loss, he eventually tells them that he is mourning all of their future deaths, as no one will survive the flood to mourn them. This time, his public theatrical act does have an effect on at least some of his listeners, and as he goes back home, some of them join him to build at least one ark.

Written a year before the Cuban Missile Crisis (the confrontation that arguably brought the world closest to nuclear war), Anders's piece was not only biblical in its reference but also in its evocation of the necessity to prophesize, and to attract attention in order to convince. Its main point was to establish the idea that nuclear war would indeed mean the total annihilation of humanity, and that ignoring this threat amounted to what he called *Apokalypseblindheit*— blindness to apocalypse. With films like Adam McKay's *Don't Look Up* (2021), this notion that people refuse to look in the direction of what is on the horizon has become the stuff of general public consumption.

However, thinking of the billionaire preppers, today's issue is not so much that there is a "blindness" to apocalypse—even the richest are preparing for this eventuality—but rather ethical and political resistance to thinking of any possibility of working towards global change that would prevent total annihilation in the first place, or at least downgrade it to a severe catastrophe. A subset of new climate activists, understandably frustrated by the general public's unresponsiveness to predictions of destruction, seems to have resorted thus far to mild shock tactics. These do not appear to be geared towards prompting concerted action, but rather towards prompting media attention and controversy—which has resulted mainly in collective headshaking, a sentiment that is difficult to describe as the first step towards political mobilization. What it does do is distract from the grassroots, often long-term struggles of those who are actually mobilized already (from Fridays for Future, to activists focusing on climate change litigation, to Indigenous groups fighting corporate and political exploitation in the Amazon region).4

These phenomena boil down to what could provisionally

be called the Noah complex. Like Noah, the acting subject seeks to resist the coming doom; but like Noah, the subject's question is whether they feel obligated more to the public/the collective, or to a higher purpose. In what way is this subject, in the end, thus obligated only to itself? Before attempting to answer these bigger-picture questions, it's necessary to have a closer look at some of the details.

A regular event on a regular Monday morning in Berlin, January 2023: the city autobahn exit leading towards the district of Wedding is blocked because climate activists of Letzte Generation have superglued themselves to the road surface. Less than half an hour later, Berlin's traffic information center tweets that the blockade has been resolved and the exit can be used again. The event—much like hundreds of similar events that have taken place recently in Berlin and other parts of Germany and Austria—largely follows the example established by the group Insulate Britain (the curious name referring to their single demand for all UK social housing to be heating-insulated by 2025, and all homes by 2030). The choreography of Insulate Britain, which started actions on London's M25 motorway in September 2021, has become the routine choreography of the protestors of Letzte Generation as well: first, they stand in front of cars, holding up horizontal orange banners with the group's logo—a black heart in a red circle—and slogans such as "What if the government doesn't have a handle on this" or "Last generation before the tipping points." Drivers shout insults at them, or sometimes drag them from the street, while the protestors remain passively nonviolent and return to their place. Then the protestors themselves call the police, letting them know they are enacting a blockade; before the police arrive, the protesters sit down and superglue one hand to the ground; the police get there and use vegetable oil to dissolve the glue. Usually the activists receive a fine, and in some cases are detained, before they return to participate in the next protest.

"Climate Activists Occupy Greenpeace UK
Headquarters—Wait, That Can't Be Right," reads a
headline from October 2018, when in fact it was right:
members of a new group called Extinction Rebellion had
started a sit-in at the London office of Greenpeace, the
veteran environmental organization founded in 1971,
accusing them of not being radical enough in the face of
accelerating global warming.⁵ Apart from crackpot
climate-change deniers, no one would really deny that
these activists are correct in their basic assumptions
about climate collapse. However, there is a whole
spectrum of assessment regarding the ethical justification
of their forms of civil disobedience, and how politically and
strategically productive—or counterproductive—they are.

The word *Klimaterroristen* ("climate terrorists") was rightly declared the *Unwort* (misnomer) of 2022 by a jury at Germany's Marburg University, which gives the award annually to a defamatory or euphemistic term used in



Women Strike for Peace during the Cuban Missile Crisis. License: Public domain.

public debates. When the number of traffic blockades increased in spring 2022, right-wing populists in the German parliament and press were quick to compare Letzte Generation to the Red Army Faction—which meant equating them with terrorists who, from the 1970s to the early 1990s, committed thirty-three murders as well as numerous hostage-takings, bank robberies, and bomb attacks. Obviously, this extreme exaggeration is aimed at generating cheap populist outrage on behalf of annoyed motorists.

Regardless of what Letzte Generation activists are accused of, so far all of their actions have in fact abided strictly by the definition of civil disobedience neatly formulated by John Rawls in 1971: "a public, nonviolent, conscientious yet political act contrary to law usually done with the aim of bringing about a change in the law or policies of the government." In fact it is impressive to see, in footage available on social media, the restraint and minimal resistance with which the demonstrators have so far reacted to assaulting passers-by trying to drag them away, or to aggressive drivers who have tried to push them aside by driving slowly into them (thankfully, nothing worse than this has happened yet, but it remains to be seen whether drivers might become more aggressive and violent).

Meanwhile, the people who are generally sympathetic with the demonstrators' motivations are divided over whether the precise demands, methods, and the chosen context and target of the protests are the right ones. Those fully in support seem to assume that any kind of disruption of everyday life is good as long as it generates media attention for the cause—even if the protests mainly affect suburban motorists, or works of art in public museums.

I belong to the group that disagrees. My impulse is to say: fair enough, I respect nonviolent civil disobedience in the face of aggression, and the willingness to risk your health and well-being—but why these specific aims, and in these places, against these specific people? For the actual political demands voiced by Letzte Generation are surprisingly pedestrian. The demands seem as easy to remember as they are comparatively easy to achieve: for example, a hundred-kilometer speed limit on German autobahns. This is obviously a good idea, since the one thing that has kept this limit from finally being introduced (Germany being the only country in Europe with no universal motorway speed limit) is the liberal democrats of the Free Democratic Party (FDP), who are part of the governing coalition. In the midst of coalition negotiations in late 2021, FDP leader Christian Lindner was famously in regular phone contact with the head of Porsche (an incident later described as #Porschegate), and the party has unashamedly acted as the political arm of the German car industry. It seems absurd that the protests do not direct their nonviolent disruption against the FDP and that very car industry, but rather against the Green Party (which is seen as responsible for climate-related issues)

and lower-middle-class drivers.

Letzte Generation's second major demand is for the permanent reestablishment of the "nine-euro ticket." a monthly transit ticket that was temporarily issued in Germany over the summer of 2022 in the wake of the energy crisis caused by the Russian war against Ukraine. The ticket was valid for local transport and regional rail all across the country. This demand seems rather maximalist in the face of a plan announced by the federal and state governments of Germany to permanently establish a forty-nine-euro ticket starting in May 2023. This would allow everyone in a nation of eighty million to travel around the country for what still seems like a modest price, amounting to a pretty radical change in transport policy. This is not to deny that forty euros, for low-income families, is still a substantial difference, but will this demand be the decisive wake-up call that prevents climate catastrophe? Rhetorical question, obviously.

One gets the impression that the members of Letzte Generation are, again, mainly disappointed in the co-governing Green Party and want to shame them for making compromises, by whatever means. It's anyone's right to take that position of course, but especially combined with theatrical acts of civil disobedience, it seems at best naive in terms of addressing the overall global issue. Is the best way to effect real change to shame those who have taken hard-won baby steps toward that change? One curious thing about Letzte Generation's public statements is that, while they clearly want to pressure the Green Party, they keep addressing chancellor Olaf Scholz and "our government." The strategy seems to be to keep the message simple, but it is actually counterproductive if the intention is to activate civil society, which would require addressing the role of international capitalism in all of this. It sounds a bit pubescent, if not oedipal: our parents are the ones to blame for all the things that have gone wrong. While many elsewhere, led by Greta Thunberg-like rhetoric, address the powerful in a broader sense, Letzte Generation thus far have mostly confined themselves to addressing their specific national government and its leader.

What's more, the "our" of Letzte Generation, the "we" that makes these demands, is strikingly and almost universally white, nonmigrant, and middle class. (Related groups in the UK, Italy, and Spain seem to fare a bit better in this regard.) This is disturbing since the first lesson in any kind of contemporary progressive politics is that one should listen to, and intricately collaborate with, those who are most impacted by the issue at hand, in this case climate-damaging, accelerating, extractive, capitalist exploitation, which impacts both the working-class migrants down the street doing shitty service jobs, and communities in other parts of the world that are being hit hardest by climate change. Neither seem to be included in Letzte Generation's membership or political orientation.

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xPoint is an abandoned military facility turned survivalist community at the base of the Black Hills in Fall River County, South Dakota. Photo: Vivos.

Wealthy, isolated members of the (usually) second-to-last generation are not the focus of these activists either. Unless they are donors: the US-based grantmaking foundation Climate Emergency Fund, like other groups in other countries, substantially co-funds the activities and livelihoods of Letzte Generation activists, via an intermediary German foundation.⁷ Aileen Getty, heir of a fossil-fuel fortune, proudly and publicly identifies herself as a major donor to the Climate Emergency Fund. She published an opinion piece in the Guardian in October 2022 with the headline "I Fund Climate Activism-and I Applaud the Van Gogh Protest." She writes: "My support of climate activism is a values statement that disruptive activism is the fastest route to transformative change."8 She does not go on to explain the causal chain from "value statement" to disruption to rapid global transformation. Nor does she explain how the tomato-soup-on-Sunflowers action, while purposefully targeting a painting protected by glass so that no actual damage was inflicted, will have such an amazing effect. One gets the impression that for rich donors, the main gratification is relief from guilt (a contemporary form of buying indulgences from the medieval church to absolve one's sins). But they also enjoy the sugar high of proxy performative heroism, which is especially sweet since it demands nothing of them except a bit of their money, and it supports their fantasy that "disruption," as in the business lingo they speak, is the magic spell—a spell that wards off grassroots collectivity, democratic processes,

unions, and community alliances.

Looking at the long list of art-related protest actions, they focus largely on famous works in big public museums such as the National Gallery in London, the Gemäldegalerie in Berlin, and the Vatican Museums in Rome. There are, as far as I can tell, only two exceptions, where the targets were artworks in private museums owned by billionaires. On October 23, 2022, two activists threw potato soup at Claude Monet's Les Meules (Grainstacks, 1890) in Potsdam's Museum Barberini; the museum, along with the multimillion-dollar painting, are owned by the software entrepreneur Hasso Plattner. On November 18, 2022 in Paris, two activists from the French group Dernière Rénovation poured orange paint over Charles Ray's Horse and Rider (2014), a life-sized stainless-steel equestrian sculpture displayed outdoors, in front of the entrance to the Bourse de Commerce, the museum housing the private collection of François Pinault, whose net worth is estimated at close to \$40 billion. Curiously, in both cases, the activists mentioned the general urgency of acting on climate change—but said nothing about the superrich owners of these places and artworks, nor about how the accumulation of their wealth contributed to climate change, making them partly responsible for it.9

My point is not to say that the billionaire owners of tech and luxury companies should be the only ones held



In 1967, Benno Ohnesorg was shot outside the Berlin Opera during a protest over the state visit of Mohammad Reza Pahlavi. License: Public domain.

responsible for climate change. But why have they been exempt from the types of protest actions described above? What have they done to deserve a pass? My guess is that it's a result not of cowardice (let's not piss off these powerful people, who could be potential donors), but naivety: these actions focus on theatrical "disruption" to draw attention to an issue or demand, while not even attempting any serious societal or economic analysis (Marxist or otherwise) to address, for example, the dramatic under-taxing of the uber-rich.

Or maybe it's not naivety but a form of freaked-out desperation—in the sense that addressing the intricate connection between fossil industries and the greenwashed "cleanliness" of digital capitalism, or between both and our corrupt political leaders, is simply too complicated to unravel, too complicated to convey to a wider public, and therefore futile to discuss. The purpose of these actions is then to testify, on record, to yourself and to others in a dystopian future, that you at least tried to warn people and raise awareness. Told you so. At least I tried.

Luckily, the groups that have thus far focused mostly on

"disruptive" actions are realizing the limitations of this tactic. In a New Year's Eve announcement entitled "We Quit," Extinction Rebellion UK stated that in 2023 they will "temporarily shift away from public disruption" and instead "prioritise attendance over arrest and relationships over roadblocks"—in other words, switch to classic mass mobilization and street demonstrations. ¹⁰ One could interpret this as a mere PR move, but it seems to be more than that: a justified acknowledgement that one doesn't have to reinvent the wheel of protest to effect change. Maybe relationships (of the robust and sustainable political kind) are more important than roadblocks.

Even if I regard the actions of Letzte Generation as naive and misguided, I cannot ignore the determination of these activists and their willingness to make sacrifices, while billionaires either ignore the impacts of climate change around the world, or pay it lip service by donating a few dollars. Even their prepping plans seem stupid—as Rushkoff reminds them, in a dystopian collapse scenario their remote luxury hideouts would eventually fall into the hands of their own highly trained guards, because you can't enforce or buy loyalty in an apocalyptic situation. Disrupting their own disruptive thinking, their own

privileged, not-so splendid isolation—what Rushkoff calls "the Mindset," a tech-fetishizing, winners-and-losers worldview yearning for an endgame—is the one thing they're unable to countenance.

There is a film clip of Günther Anders reading from his short story "The Future Mourned" in 1987.¹¹ In his introductory remarks he says that the story would never have been written if he hadn't been invited by a certain Gudrun Ensslin to contribute to a book called *Against* Death: Voices of German Writers against the Atom Bomb, published in 1964.¹² Ensslin, who was the coeditor of the book, later became one of the leaders of the Red Army Faction and died in Stammheim prison in 1977. But in the early 1960s she was still a top student in Tübingen, the daughter of a vicar. This is not to say that right-wing pundits who denounce the new activists as "climate terrorists" are right (that would be an absurd historical parallel). It is rather to note that any political determination in the face of looming catastrophe leads to forked paths; in Ensslin's case, her militancy was largely determined by the police murder of Benno Ohnesorg, a student, during a 1967 demonstration in Berlin. But the militancy that she, as part of the Red Army Faction, practiced and advocated was as isolated as it could be from what it rhetorically referred to—the guerilla wars of national liberation in South America, Africa, and Asia. "Six against sixty million," as German writer Heinrich Böll once put it. For today's new activists, the lesson of this moral and political failure is to take the path of nonviolent civil resistance.

Anders's story—a Biblical allegory about nuclear war—can also be read as an allegory about climate change, even if the catastrophe in this case is not a single event but a messy cluster of separate-seeming but intricately connected biospheric disturbances. In Anders's story, Noah demonstrates the importance of collective action and collective mourning, rather than solitary escape, in the face of apocalyptic destruction. That is what I call the Noah complex: the yearning to overcome the split between fantasies of a clean escape and the messy building of social coalitions. We simply can't afford to wait for the awakening of a universal sense of human collectivity. But we also can't let these isolated escape fantasies go unchecked. The messy, radical, pragmatic business of transforming our economic and social system has to start now.

X

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Awkwardness and Enthusiasm at Bundeskunsthalle in Bonn, Germany, which travelled to Hamburg Deichtorhallen (Germany) and soon opens in Graz (Austria).

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6 John Rawls, *A Theory of Justice* (Harvard University Press, 1971), 364.

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11 See https://vimeo.com/3735972

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Guattari and Autonomia

In 1974, I was in compulsory military service, living in an Italian army barracks. But military life was not my cup of tea and I was looking for a way out. A friend suggested I read a French philosopher. And so, I began to read Félix Guattari.

I started with his *Psychoanalysis* and *Transversality* and drew inspiration for choregraphing a fit of madness. The colonel of the psychiatric clinic deemed I was indeed crazy and they sent me home. From that moment on, I considered Guattari a friend whose work can suggest paths of escape from any type of barracks, physical or otherwise.

I continued those studies throughout the seventies, when a movement comprised of students and young workers called Autonomia emerged from universities, factories, and occupations. This movement was expressed through many different types of action and organization, including countercultural and aesthetics projects. In 1975, I published the first issue of *A/traverso*, a journal that sought to translate "schizoanalytic" concepts into the language of Autonomia. Then, in 1976, with a group of friends, I launched the first free Italian radio station, Radio Alice. Eventually the police closed the radio station, accusing us of organizing the riots that followed the assassination of Francesco Lorusso, a militant from the extra-parliamentary group Lotta Continua.²

To define itself, the 1977 Bologna movement chose the slogan "desiring autonomy." Sometimes the expression "we, the transversalists" was used. The reference to post-structuralism was explicit in public declarations, in leaflets, in the watchwords of the spring 1977 demonstrations, in the face of state violence and mass repression.

We had read Anti-Oedipus but hadn't understood much of it. However, one word had hit us hard: "desire." We had clearly understood that the driving force of the process of subjectivation is desire. In other words, we proposed: let's stop thinking in terms of "subject," let's forget Hegel (or spit on him, as Carla Lonzi's 1970 essay is titled).3 In other words, subjectivity is not something ready-made that we have to simply organize. We came to see that there are no subjects, but rather flows of desire traversing organisms that are at the same time biological, social, and sexual—and conscious of course. But consciousness is not something pure and indeterminate. Consciousness does not exist without the incessant work of the unconscious, of that laboratory which is not a theater where one plays out a tragedy already written, but a tragedy traversed by flows of desire that one writes and rewrites nonstop.

Moreover, the concept of desire should not be reduced to an always positive tension: desire is key for explaining the waves of social solidarity and those of aggressiveness, the

Hyper-Semiotization and De-Sexualization of Desire: On Félix Guattari

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The Swimming Hole, Thomas Eakins, 1884-85, Oil on canvas,

explosions of rage and the hardening of identity. Both revolutionary libertarian movements and repressive reactions to them are rooted in fluctuations of desire.

Finally, desire is not a happy good boy. On the contrary, it can curl up, it can withdraw into itself and finally produce effects of violence, destruction, barbarism. Desire is the factor of intensity in the relationship with the other. Intensity can go in different directions, even contradictory ways indeed.

Guattari coined the expression *retournelles* (refrains) in order to define the semiotic concatenations capable of being in a harmonic relationship with the wider environment. The refrain is a vibration whose intensity can be linked with this or that system of signs and nervous stimulations. Desire is the perception of a refrain that we produce to capture the lines of stimulation coming from the other (a body, a word, an image, a situation) to then relate to these lines. Similarly, the wasp and the orchid, two entities having little to do with each other, can

nevertheless network, enjoy each other, and produce beneficial effects for each other. Desire is not a natural fact, but an intensity that changes according to anthropological, technological, and social conditions.

Toward a Reconfiguration of Desire

We must reconsider desire in our age that is defined by neoliberal and digital acceleration. We must also reconsider desire in the context of contemporary identitarian reactionary movements.

Neoliberal economics has accelerated the pace of labor exploitation, especially cognitive labor; connective digital technology has accelerated the circulation of information and consequently intensified the rhythm of semiotic stimulation which is, at the same time, nervous stimulation. This double acceleration is the origin and the cause of the increase in labor productivity which has in turn allowed an unprecedented increase in the accumulation of capital. But it is also the cause of the



Lotta Continua (English: Continuous Struggle) was a far-left militant organization in Italy active during the historical period of social turmoil and political violence in the country known as the "Years of Lead." License: Public domain.

hyper-exploitation of the human organism, especially the brain. Today we have the task of determining the effects that this hyper-exploitation has produced on the psychic balance and on the sensitivity of human beings—as individuals, but above all as a collective.

We must reflect on the mutation of desire following the trauma of the pandemic. The virus may be less visible, the infection may be somewhat under control, but the trauma doesn't go away overnight; it continues to do its job, which manifests in part as a kind of mass phobic sensitization to the body of the other, their skin, their lips.

During the last two decades, several studies have shown that sexuality is changing in a profound way, and the recent viral shock has only reinforced this trend, which has its roots in a techno-anthropological transformation that dates back thirty years at least. For example, in the 2017 book *iGen*, Jean Twenge analyzes the relationship between connective technology and the change in the psychological and affective behavior of generations who have been formed in a techno-cognitive environment.⁴ Following such studies, I have taken to defining the human beings born since the beginning of the century as

the generation that has learned more words from a machine than from the singular voice of a human being.

In my opinion, this definition is useful for understanding the depth of the changes underway. Freud introduced the notion that access to language is not understandable without considering the affective dimension. We should also remember what Giorgio Agamben argues in the book *Language and Death*: the voice is the meeting point between flesh and meaning, body and signification. Moreover, the Italian feminist philosopher Luisa Muraro affirms that the apprehension of the meaning of words is linked with affective confidence in the mother.⁵

I believe a word means what it means because my mother told me so. More generally, I believe that the world is meaningful because my mother told me that words signify the world. The psychic foundation of the attribution of meaning is based on this primordial act of affective sharing, of cognitive co-evolution supported by the singular vibration of a voice, a body, a sensitivity.

What happens, then, when the singular voice of the mother (or anyone else) is replaced by a machine? The



meaning of the world is replaced by the functionality of signs that allow us to produce operational results from the reception and interpretation of signs devoid of affective depth and, therefore, of any intimate assurance. The concept of precariousness here takes on its full psychological and cognitive meaning as a weakening and dis-erotization of the relationship to the world. In question here is eroticism as the fleshy intensity of experience, and desire in its (non-exhaustive) relationship with eroticism.

Desire and sexuality

Typically, we associate desire with the flesh, with sexuality, a body approaching another body. But we must emphasize that the sphere of desire cannot be reduced to its sexual dimension, even if this implication is inscribed in history, in anthropology, and in psychoanalysis. Desire is not identified only with sexuality, and moreover one can conceive of a sexuality without desire.

In the concept (and in the reality) of desire there is something more than sex, as the Freudian concept of "sublimation" shows us, which concerns the indirect sexual investments of desire itself.

The pandemic has completed the process of the de-sexualization of desire that had been underway for a

long time, as soon as the communication between conscious and sentient bodies in physical space was replaced by the exchange of semiotic stimuli in the absence of bodies. If this dematerialization of the communicative exchange has not erased desire, it has nonetheless moved it into a purely semiotic (or rather: hyper-semiotic) dimension. Desire then evolved in a de-sexualized, or post-sexualized, direction, which now manifests as a condition of isolation that the pandemic has normalized and almost institutionalized. The theory and practice of psychology, psychoanalysis, and also the practice of politics are to be questioned, because the underlying subjectivity has been upset and transformed in an irreversible way.

The Italian psychoanalyst Luigi Zoja published a book on the exhaustion (and the tendential disappearance) of desire; indeed, the title is II declino del desiderio (The decline of desire).6 The book is full of very interesting data on the dramatic reduction in the frequency of sexual contact between people today, as well as the time dedicated to bodily contact in general. But the central hypothesis of the book, the disappearance of desire, seems questionable to me. In my opinion, it is not desire in itself that is destined to disappear, but rather the sexualized expression of desire. The phenomenology of contemporary affectivity is increasingly characterized by a dramatic reduction in contact, pleasure, and the psychic relaxation that touch makes possible. This is coterminous with a loss of sensual trust, a loss of that feeling of deep complicity that makes social life tolerable: the pleasure of the skin that recognizes the other through sensual touch, the sweet enjoyment of the intimacy of the gaze.

The Perversion of Desire and Contemporary Aggressiveness

The de-sexualization of desire indeed risks transforming desire into a hell of loneliness and suffering just waiting to be able to express itself in one way or another. The senseless violence which explodes more and more often in the form of armed and murderous attacks on innocents—the killing sprees which have multiplied everywhere since Columbine in 1999 and for which the United States is the main theater—is only the tip of the iceberg of a phenomenon that at the political level is upsetting the history of the world. How can one explain the election of someone like Donald Trump or Jair Bolsonaro by half the North American or Brazilian people, if not as a manifestation of desperation and self-contempt? The election of a person who openly expresses racist or even criminal remarks has deep analogies (at the psychological level, but also at the political level) with the killings that can only be explained by a suicidal desire.

What we call "fascism" today must be explained in terms that are not only political. Politics is only the spectacular





Kurt Wimmer, Equilibrium, 2002. Film still. In an oppressive future where all forms of feeling are illegal, a man in charge of enforcing the law rises to overthrow the system and state.

terrain on which these movements manifest. While sharing a rhetoric that is very close to historical fascism, contemporary right-wing movements do not have any rational content.

social activist.

Only the discourse of humiliation, loneliness, and despair can account for this worldwide phenomenon.

The members of the generation defined, with ironic bitterness, as the last one (Z), those human beings who have learned more words from a machine than from the singular voice of a human, have grown up in an environment that is increasingly unlivable and pathogenic, either at a physical level (pollution) or at a psychic level. The communication of this generation unfolds almost exclusively in a techno-immersive environment, the consistency of which is purely semiotic. Extinction looms as an experience of techno-immersive simulation. Media production is increasingly saturated with signs of this despair. These signs act as signals of unease, but also as factors that help to spread pathology. I am thinking of films like *Joker, Parasite*, and shows like *Squid Game*, as well as a thousand other similar products.

The viral trauma of the Covid pandemic only multiplied the effect of the hyper-semiotization of the environment, but the technological and cultural conditions of the phenomenon were already there.

A mutation is reinventing desire: it is expressed less and less in a sexual form, but rather in a semiotic form. Desire has not ceased to be the driving force in the process of collective subjectivation; but the process of subjectivation takes the shape of anxiety, self-mutilation, or sometimes of aggression because desire is perverted into purely phantasmatic forms.

The de-sexualization of desire, the traces of which are everywhere, translates at the social level as a de-historicization of the motivations for collective action. We are witnessing a massive phenomenon of disengagement: majority abstention from traditional politics, desertion from procreation, the abandonment of work. This phenomenon must be the object of a theoretical analysis (diagnosis) and must lead to the creation of strategies for psycho-political collective action (therapy).

This is an edited transcription of my contribution to the congress dedicated to Felix Guattari that took place in Paris in October 2022, the thirtieth anniversary of the death of the author of Chaosmose.

X

Franco Berardi, aka "Bifo," founder of the famous Radio Alice in Bologna and an important figure in the Italian Autonomia movement, is a writer, media theorist, and

- 1 See Steve Wright, Storming
 Heaven: Class Composition and
 Struggle in Italian Autonomist
 Marxism (Pluto, 2017); and
 Autonomia: Post-Political Politics
 (Semiotext(e), 2007) https://libco
 m.org/article/autonomia-post-pol
 itical-politics.
- 2 See the film *Lavorare con lentezza* (Working Slowly, 2004) for a dramatization of these events and the radio station. See also https://www.youtube.com/watch?v=-Snoy_qBT5M (in Italian).
- 3
 "Sputtiamo su Hegel" (1970),
 available in English here https://
 my-blackout.com/2020/11/18/ca
 rla-lonzi-lets-spit-on-hegel/. See
 also Alexander Galloway, "Let's
 Spit on Hegel," August 27, 2020 h
 ttp://cultureandcommunication.o
 rg/galloway/lets-spit-on-hegel.
- 4 iGen: Why Today's Super-Connected Kids Are Growing Up Less Rebellious, More Tolerant, Less Happy—and Completely Unprepared for Adulthood—and What That Means for the Rest of Us (Atria, 2017).
- 5 L'ordine simbolico della madre (Editori Riuniti, 2006).
- 6 (Einaudi, 2022).

Everything passes over the earth.

-José de Alencar, Iracema

Ah, with me the world will change. I don't like the world as it is.

-Carolina Maria de Jesus, Diary of Bitita

(Note: The name of each section in this text corresponds to the name in Portuguese of the five stars that compose the Crux or Southern Cross constellation.)

1. Magellan

There is a light hovering over the end of the world, only visible at the very edge of the world. A torturous cross rather than fire or flame, this light hurts more in its distance than its encounter—already impossible without a name for summoning it. This light is conjured within the blindness of the night's currents, a night that dresses the castaways of Iberian galleons as stars. This light is not a guide, though at the end of the world, it was prone to misuse, whether as astrolabe or compass. This light, no doubt, revealed the poisoned, lost, and putrefying body of the Portuguese captain Ferdinand Magellan, swallowed by a sea of natives on the island of Mactan. Venetian scholar and explorer Antonio Pigafetta, in his account of the captain's death, for a rare moment changed his tone from that of Magellan's proto-scientific scrivener performing an autopsy of the world's first circumnavigation (in which he participated), opting instead for the epic:

Recognizing the captain, so many turned upon him that they knocked his helmet off his head twice, but he always stood firm like a good knight along with some others. We fought thus for more than one hour, refusing to retreat farther; an Indian hurled a bamboo spear into the captain's face. The latter immediately killed him with his lance, which he left in the Indian's body. Then, trying to lay hand on sword, he could draw it out only halfway, because he had been wounded in the arm with a bamboo spear. When the natives saw that, they all hurled themselves upon him. One of them wounded him on the left leg with a large terciado, which resembles a scimitar, only being larger; that caused the captain to fall face downward. Immediately they rushed upon him with iron and bamboo spears and with their cutlasses, until they killed our mirror, our light, our comfort, and our true guide.1

There is a theophagic slant in Pigafetta's account of the captain's body being overtaken and dismantled by a sea of Indigenous people; those who the captain failed to convert

We Too Were
Modern, Part I: Of
Brazilian Autophagic
Flowers and
Navigators



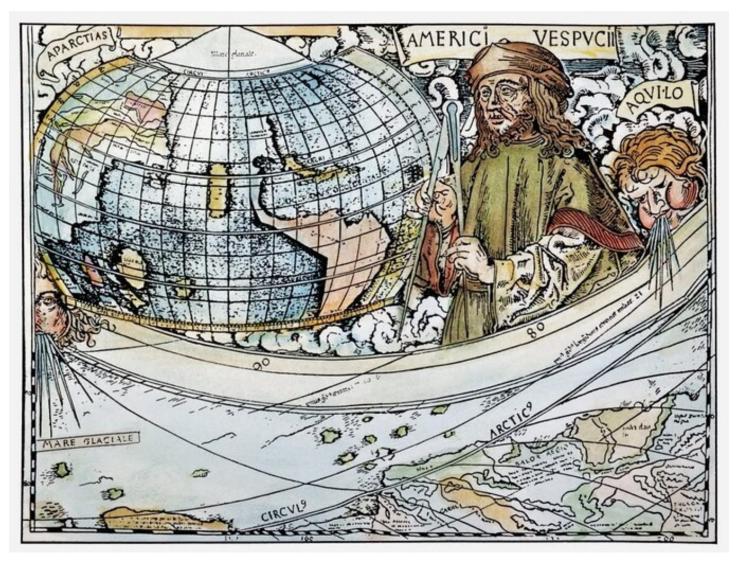
Joaquim do Rego Monteiro, South America, 1927, oil on canvas.

to communion with Christ now commune through his wounds. Although this is not the end of the voyage— Pigafetta's account continues up to the return of the ship *Vitória* to Spain—the death of Captain Magellan marks the endpoint of a truer circumnavigation than the one that only sought routes for the spice trade. It closes the circle of the encounter of the European Christian man with the pagan man of the New World. It unveils Man, no longer hidden behind masks of hospitality, grimaces of complacency, or the lurking prospect of the redemptive encounter, but under the final sign of what governs the flesh of every human—death.

Perhaps, there, in the night, swallowed by the crowd of Indigenous people and imminent death, Magellan encountered the futility of words like "conversion," "salvation," and "navigation" which took him to the edge of the world. Despite these solemn and severe words and his

own designs, he would remain among those for whom the Iberian nations of Portugal and Spain do not exist. Perhaps there, in the night, he tenderly thought of an escape to where, months ago, he and his crew had encountered "abundant provisions of birds, of potatoes, of a kind of fruit that resembles the pine nut of the pine, but it is extremely sweet and has a distinct flavor"; the land where they carried out "excellent negotiations: for a hook or a knife they would give us five or six chickens; two geese for a comb; for a small mirror or a pair of scissors, we had enough fish for ten people." A land inhabited by people Pigafetta described as "non-Christian, but neither an idolater." Here, in the ruptured womb of the modern era, we find one of the first definitions of Brazilians, who "do not worship anything: the natural instinct is their only law."²

Centuries after having carved laws and incisions under the corpses of the natives, it is by thinking again, like Pigafetta,



Martin Waldseemuller, detail from Map Of The World And Account Of Vespucci's Voyage, 1507. The Italian cartographer Amerigo Vespucci (1454–1512) demonstrated that the "New World" was a distinct continent (and not part of Asia).

of the relationship between nature and law that Brazilian poet and philosopher Antonio Cícero understands the development of natural law as a central and unequivocal part of the modern. However, when "natural law consists of purely rational law," natural law is no longer related to instincts, and shows what is rotten in the realm of modernity.3 Nature is already outside of man—an island without beginning or end, only concerned with the exceptional status of the human and his reason. A certain symmetry is established between the inaccessibility of the self and the inaccessibility of the cosmos, and in this equality the divorce between the two is signed, since there is no clockmaking God nor shaman speaking to trees who can act as interlocutor between them. An unavoidable distance is created between such a subject and object, self and world; modernity is thus inaugurated in what Bruno Latour calls the purification process that delimits "two entirely distinct ontological zones, that of human beings on the one hand; that of nonhumans, on the other."4 However, for Cícero, modernity before such a split presents a new modality of time. It is the now: "Modernity is nowness, the now itself, the now as the essence of the now, the essence of this instant, which is what we seek." In this conception, the modern is linked to an instant that is always lost, which leads to the question of what constitutes the "essence of the instant": what initiates the now, and consequently establishes modernity? Cícero responds that "it will necessarily always be this instant whenever I'm able to find myself. I am something that cannot be given without this instant also being given. I am a sufficient condition for this moment to take place ... the moment I refer to as this is me. I am also a necessary condition for it to happen." In other words, Cícero concludes that "modernity is I."

Cícero admits that, in the genealogy of the modern, such intertwining between the self and the now, the self as sustaining the instant, has a clear origin in the Cartesian

cogito. For Cícero. I think therefore I am inaugurates modernity, because it establishes as necessary and fixed the self that thinks in the now. The only thing that survives in the original Cartesian negation is precisely this I. As the basis of modernity, the cogito can be described as unveiling being as a total negation of the world, which can be condensed as follows: "The world is posited by me as the totality of what I am not in my essence."7 In other words, I separate myself from the world. The self in this instant, in the *now* in which it necessarily thinks and finds itself, is apart from the world. In the now, there is nothing but the self and the thinking, the island that moves, year after year, away from the mainland towards itself, to discover its center precisely in the distance it drifts from the origin—the origin that forgets. This distance, the beginning of the split in the *now* without forgetting or rest, between self and the world, is what, in the end, we can call genuinely modern.

Separated from the world, the subject needs new translations reflecting its new marital status as a divorcé. Natural instinct, the law of nature, is rewritten as logos capable of leading back to a perfect beginning from which the mind would be mimicry and derivation. The subject seeks to reinvent the world that transcends the subject and moves it away from itself. Only the subject and its thought become natural; everything else is contingent. Everything else is idolatry. But the translation is always incomplete. The noble savage sees himself revived in the smoke of industry; the pamphlets of Robespierre and Jacques-Louis David's Festival of the Supreme Being, at the height of the Terror of the Revolution, asked the French, in one of the most naive demonstrations of nostalgia in the bosom of culture, to beautify their homes with flowers and wreaths in a clumsy attempt to turn the blood of the guillotine into a trail back to a new garden of Eden. If reason becomes natural in such a bricolage, it also becomes more tropical, and the self on its island cannot resist the work of landscaping a lost world.

Centuries after the Festival of the Supreme Being, the thirty-eighth president of Brazil, Jair Messias Bolsonaro, allowed us to say that landscaping the island of the self is no longer possible. It is curious that one of the various adjectives and nicknames for the former army captain was "the enemy of modernity." Many saw in Bolsonaro and the convulsive theses of his guru—far-right conspiracy theorist, former astrologer, and self-proclaimed philosopher Olavo de Carvalho—an obscurantism of the old regime, a shameless attack on the foundations of modernity using a fascism of old buzzwords. From this perspective, Bolsonaro and what he embodied would be a specter, a memory of the Leviathan that came to haunt the now, to be witch the thinking self on its floating island of freedom. Bewitched by the spirit of the past that removes it from the *now*, the thinking self can only throw itself into the sea and condemn its marvelous creation because there is no way back. The *now* knows no ties to any past. However, it is even more curious that Bolsonaro's favorite

adversary was what his supporters called globalism. In the words of Carvalho:

Globalism is a revolutionary process, there is no denying it. And it is the most vast and ambitious process of all. It encompasses the radical mutation not only of power structures, but of society, education, morals, and even the most intimate reactions of the human soul. It is a complete civilizational project and its demand for power is the highest and most voracious that has ever been seen ... an instrument for destroying national sovereignty and building on its ruins an omnipotent universal Leviathan.⁸

The biblical demon in this fragment is not a fluke or accident. For Carvalho, globalism's perverse international elite and values attack and bewitch the self and its island with grim fantasies of global warming or historical reparations. Though notions of reality and fantasy seem absurd for someone who declared that Pepsi Cola is made with aborted fetuses, Carvalho never wanted to be recognized as the astrologer of the early 1980s, but as Richmond, Virginia's philosopher, supported by his numerous students and shelves—of books with complicated titles.

Above all, Olavo de Carvalho wanted to say, as many Brazilians began to say, that he was right (literally "with reason" in Portuguese). What he proposed—and to some extent carried out through Bolsonaro—was not a conservative counterrevolution but a late distorted Jacobinism, which, rather than confronting an / and a now with a lost world, instead manufactured such a lost world by convincing itself that the Terror is actually a restoration. There is no doubt that Bolsonaro did everything to appropriate the basements of the military regime, the tortures of Estado Novo populism, the deepest and darkest wounds of slavery, and an entire authoritarian and bloody legacy concealed by the tropical sun. But in the end, he is the captain who doesn't know how to shoot. anointed by a digital militia of bots and sustained not by his truculence or virility, but by the passivity with which he surrendered the government to the Brazilian political establishment.

He had to content himself with saying that the constitution was *he* while he built his Versailles under a fragile jet ski on the decaying coast of São Paulo, where he ordered the burning of the Amazon without really knowing why. He understands, even if in secret, that nothing or no one constitutes anything anymore. Bolsonaro and Carvalho are the ends and the beginning of the split, its eternal return; they "continue to believe in the promises of the sciences, or in those of emancipation," as true and credulous moderns. Still, they manufacture both because they have become owners of a world that they simultaneously invent

and flee, accusing it of wanting to absorb them. That is the true meaning of globalism—Bolsonaro and Carvalho fear the world to which they belong, the world that calls to them from the shadows of the trees they burn.

The disaster under Bolsonaro was incalculable, overwhelming—inconceivable precisely as burlesque, as a carnival that came to life and rebelled against the limits of Ash Wednesday, supernaturally, unintentionally. But in this disaster that befell the Western world and its supposedly solid foundations on shipwrecked islands, there is nothing supernatural, ghostly, or unintentional. The self on the island didn't drown because it was bewitched, since the self could no longer believe in spells. Yet it could enchant itself with its own reflection and sound, as if they belonged to this self's own world, promising an escape from loneliness, from the bottomless *now* with no end or beginning, just waiting for annihilation by tide and wind.

Such solitude, supernatural and phantasmagoric, goes back to the moment when schools teach that Brazil, that name without a country, was invented. It goes back to the now in which Portuguese and natives met on the edge of the world to exchange pau brasil (Brazil wood, the country's first commodity, from a tree that produced the color red in Europe) for mirrors anchored by unfathomable waiting and mutism. And in the twisted mirror image of themselves, the Indigenous people, between the ghosts of captains and scars of desire, in the encounter with themselves, could not hear Marx saying centuries after that there, in their image, was "a definite social relation between men, that assumes, in their eyes, the fantastic form of a relation between things."10 Things exchanged, stripped, disenchanted, but above all worn out and irreparable—things like everything. While the Portuguese took the red from the tree and the embers that gave it its name, instead of burning and merging the self and the world they limited both to silence in the infinite blindness of fire.

2. Mimosa

It doesn't take a theologian or an apostle to claim that there are no mimosa plants in the Garden of Eden. God would not allow, between nudity and transparency, the plant that invented mimicry and whose only essence is the betrayal of appearances. In Brazil, it's not uncommon to see children marveling at how the plant closes with a touch of their finger, hiding itself in the gesture and pantomime in which it appears indecipherable. In their wonder, these children make one think that the mimosa would close even with God's touch. Not even He could decipher where the illusion begins and ends at the base of creation, that in hiddenness and self-concealment hints at the basis of what one could call autophagy.

Mimosas grow under the fences that separate the Positivist Church of Brazil and Benjamin Constant Street in

the Glória neighborhood near downtown Rio de Janeiro. Graffiti is everywhere, darkening and protecting one of the many abandoned buildings in downtown Rio. Everything seems to have been turned upside down on the dirty façade of the Positivist Church of Brazil, where one cannot speak of blasphemy only because God was never there. The Positivist Church of Brazil, a civic-religious organization founded on the tenets of Auguste Comte's positivism, was a temple of Humanity that perished for humanity's sake. It was men who erased the names of the disciplines of mathematics, astronomy, biology, and sociology from their tiles. It was men who allowed pigeons to make innumerable nests inside until the roof collapsed. But even if the image on its façade of Clotilde de Vaux, who inspired Comte's Religion of Humanity, can no longer be seen, Comte's famous motto engraved in stone just below still glows above time and street: Love as a principle, the order as a foundation, and progress as a goal.

Comte's words always reverberate, even in silence, because they are a reminder of the abbreviation, or rather the mutilation, at the origin of the only verbal marks fluttering on the flag of the Federative Republic of Brazil: order and progress. Brazil's relationship with Comte's positivism is indeed one of abbreviation and mutilation, and it remains obscured in the historical footnote that Brazilian historiography has reduced it to. It is forgotten that positivism gave Brazil a mimosa capable of hiding and renewing its dearest split.

In its conception, positivism understands that in astronomy, it is gravity that maintains the balance between celestial bodies, and society needs a similar force to achieve order and progress. If such a force were once made up of the theological and supernatural dogmas that legitimized the social order, they were torn apart by what Comte calls a metaphysical spirit that is nothing but the destructive Enlightenment—and Comte witnessed the Terror of the French Revolution. Such a metaphysical, destructive Enlightenment that "continued to seek new solutions to theological problems, rather than putting aside all impossible pursuits under the realization of their futility" runs contrary to the "true positive spirit which consists in substituting the study of the invariable laws of phenomena for their causes, whether approximate or primary; in a word, studying the how rather than the why."11

For Comte, the "how" of order and human progress is given and sustained only from feeling or social affection, because, as he states eloquently in the epigraph of his works, "We get tired of thinking, and even of acting, but we never get tired of loving." The order of the old regime based on the supernatural, or even the order of Enlightenment reason, cannot be sustained precisely because they cannot sew a genuinely positive social bond. This social bond that Comte calls love can dissolve the notion of individuality and the boundaries between self



Laurel, or δ άφνη (daphne), from the Naples Dioscorides, a late sixth- or early seventh-century manuscript closely related to the Vienna Dioscorides. The author loves this manuscript for all the synonyms it records. Image: Biblioteca Nazionale, Naples.



Interior of the Templo da Humanidade, Rio de Janeiro, Brazil.

and other, abolish the separation that threatens order, and

definitively integrate everyone into a new and undeniable God with the humble name Humanity. This God of social reality is necessary insofar as it preserves and saves the past, gives meaning to the future, and rescues the self from its island—or at least puts it in perspective amidst Humanity's vastness.

Comte's project is, above all, an attempt to live after the death of the Father, after the death of the law and of the world established by a supernatural order of Good dogma—necessary, greater, and above suspicion. Comte wants to avoid fratricidal Terror through the attraction of feeling, affection, and love. But in any psychoanalytic model, the only affection children share is necessarily for the mother. It is not for nothing that Comte invests so much in the feminine, and his entire project of the religion of Humanity derives from his later platonic love for the widow Clotilde de Vaux, who is always dressed as a secular Virgin Mary. He admits that "the movement cannot have strength until women give it their cordial support because they are the best representatives of the fundamental principle of Positivism, the victory of social affections over individual ones."13 It is as if Comte



Steps to the Templo da Humanidade, Rio de Janeiro, Brazil.



Entrance to the Templo da Humanidade, Rio de Janeiro, Brazil.

imagined Humanity as a new transnational and transhistorical mother capable of, through her reciprocal affection, ordering her children in her orbit and remanufacturing time, us, and the world.

In this sense, Brazil is already the end of positivism, even before its elaboration. As Italian-Brazilian writer, psychoanalyst, and dramaturg Contardo Calligaris suggested, Brazil has always been a gigantic mother without paternal interdiction, without her general law or promise, a mother of pure love and affection, yet unable to find children between settler and colonizer, where affection is permanently confused with exploitation. An exploration that has always been gloomy since the colonizer, the first traveler, the exiled conqueror who came to Brazil to discover precisely a maternal body that he could make his own, a lawless body with which he achieves the fortune and pleasure he could not obtain under his father's tutelage. Yet "the colonizer is sad because, anyway, even if the body between his hands isn't forbidden and he finds pleasure in it, he'll always know that it's not guite the body he wanted. The body he wanted to give an orgasm was the body he left, the interdicted maternal body."14

The colonizer cannot be a father. He cannot be the law because he refused to be a son; he declined the law. The settler, the second traveler, cannot be a father or a law either; he cannot serve as a national identity since he comes precisely to receive a new homeland, an identity, and is not interested in maternal affection because he is looking for a name—a paternal name. For Calligaris, again, "what differentiates the settler from the colonizer seems to be the search for a name. He doesn't come to give America orgasms, but he comes to America to make a name for himself. He is looking here, in another language, for a new father who interdicts, and suddenly recognizes him."15 Amidst the lack of a father who can recognize the settler and stop the melancholy and the colonizer's exploitation, there remains a violated and impotent motherland: Clotilde de Vaux, erased on the facade of the temple of Humanity.

The dichotomy that supposedly founds Brazil is born from the colonizer who seeks to continue exploring, enslaving, and enjoying under a maternal body that he always rejects and the settler who demands from this same body the birth of a father and a law that recognizes him, an impossible birth. An impossibility between the slogans of "change Brazil" and "give me more orgasms, Brazil." This dichotomy is just a shadow of the dichotomy of the modern itself, an effect of the fact that, for the settler or the colonizer, Brazil does not exist; it is outside them. Brazil is already born from a now where one wants to either enjoy or earn a name, but it can never be more than this now—a moment that can only remain a promise because it is always about to occur. Without past or future, it is extinguished, and must begin in thought and desire outside time.

In such a temporality that is necessarily an interval, an indecision, a *now*, the nation transits between an object without belonging—on the sidelines like its flora to be explored in the distance—and the symphony of electric saws that prophesy the infinite orgasm and the subject



Eduardo de Sá, detail featuring a portrait of de Vaux in Altar to Humanity, 1900. Chapel of Humanity, Paris. License: CC BY 2.0.

that merely extends the settler: always remodeled, ordered, moralized, transformed into an impossible messianic father who grants recognition and name. It is through the imaginary (but rooted and credulous) distance between these spheres and personas that the colonizer and the settler coexist as a divided and fractured sign of Brazil. The invisible and hybrid zone between them, as in Latour's analysis, proliferates, multiplies, and survives. The zombified Brazil walks through the centuries wanting to give orgasms and yet simultaneously change.

Continued in ""

Χ

Thotti is an artist from Rio de Janeiro, currently based in New York and producing independent films.

1 Antonio Pigafetta, *The First Voyage Around the World,* 1519–1522: An Account of Magellan's Expedition, ed. Theodore J. Cachey (University of Toronto Press, 2007), 57–58.

Pigafetta, *The First Voyage*, 8.

3 Antonio Cícero, O Mundo Desde O Fim: Sobre o Conceito De Modernidade (Francisco Alves, 1995), 123. My translation.

Bruno Latour, We Have Never Been Modern, trans. Catherine Porter (Harvard University Press, 1993), 10–11.

5 Cícero, *O Mundo Desde O Fim*, 16.

6 Cícero, O Mundo Desde O Fim, 20.

7 Cícero, O Mundo Desde O Fim, 43

8
Olavo de Carvalho, *O mínimo Que você Precisa Saber Para Não Ser Um Idiota* (The least you need to know not to be an idiot), ed. Felipe Moura Brasil (Editora Record, 2014), 149–50.

9 Latour, *We Have Never Been Modern* , 9.

10
Karl Marx, Capital, vol. 1,
marxists.org https://www.marxist
s.org/archive/marx/works/1867c1/ch01.htm.

Auguste Comte, General View of Positivism (Lulu.com, 2020), 47.

Comte, General View of Positivism, 13.

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14 Contardo Calligaris, Hello Brasil!: Notas De Um Psicanalista Europeu Viajando Ao Brasil (Escuta, 2000), 18.

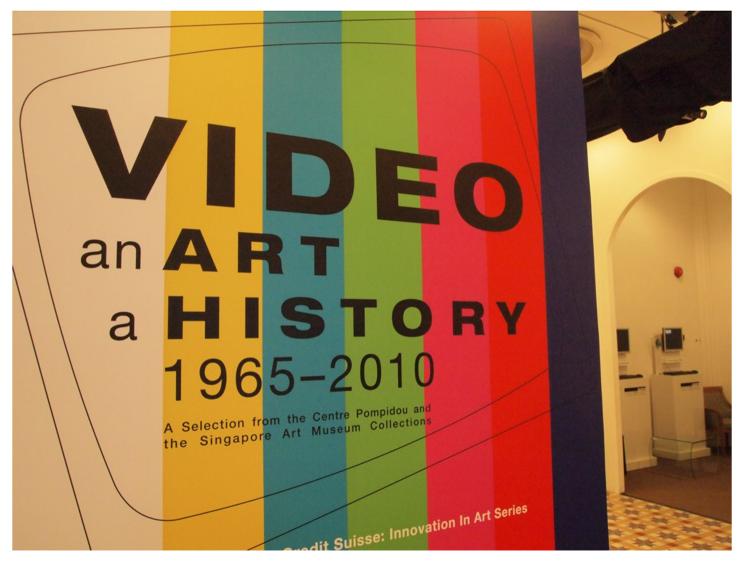
15 Calligaris, *Hello Brasil!*, 20. Serubiri Moses

Luck, Statecraft, and Withdrawal: Video Criticism in Southeast Asia

In 2011, the critic David Teh described the state of video art in Southeast Asia as "embryonic." 1 This judgement, clearly signaling the potential and imminence of development, was expressed in the catalogue for the exhibition "Video, an Art, a History 1965-2010," organized by the Singapore Art Museum in partnership with the Centre Pompidou in Paris.² According to the curators, the exhibition sought to bring together divergent timelines of video art in a comparative and transnational survey. To accomplish this goal, an expansive range of work from both collections was assembled, including pieces by Valie Export, Araya Rasdjarmrearnsook, Apichatpong Weerasethakul, Trinh T. Minh-ha, Dan Graham, and The Propeller Group. As Teh's comment demonstrates, it was a watershed moment for the Singapore museum and for the cultural sector of Southeast Asia in general. In his essay (revised in 2012 and 2017, expressing the development he pointed towards perhaps), Teh was optimistic about the shape of things to come.³ Writing from 2023, however, can it be argued that Southeast Asian video has outgrown that "embryonic" stage, arriving at a point where it can and must be viewed in equal terms with art produced in the West? This raises the further question of how to situate and historicize video art criticism in Southeast Asia, especially when an exhibition like "Video, an Art, a History" could only present an art historical survey of video art in the region through its comparison to art from the West. Is such a comparison beneficial or necessary? Could this show reveal the specificities of the "local" even under such comparative circumstances? Looking more deeply into Teh's writing and the works he surveys allows for a different view into counter-historical and antagonistic tactics in art production. It becomes evident that in disavowing that form of comparative analysis, Teh wrestles with the "nation" only to advocate the somewhat contested idea of "Southeast Asia" as a framework in itself for theorizing art.

1. Courting Censorship?

In a review of the first Singapore Biennale in 2006, Filipino critic Eileen Legaspi Ramirez argued that video artists in the region likely faced "censorship" from authorities. Writing in the online journal Ctrl+P, Ramirez indeed revealed that for this reason, the organizers of the exhibition were averse to "staging critically charged work."4 After citing the press conference in which the organizing institution claimed that "political art in Southeast Asia [was] passé," suggesting that such art was not welcome in the space, Ramirez pointed to video artist Brian Gothong Tan's "cheeky video installation, We Live in a Dangerous World," which dramatizes state capture. Tan's installation included three video monitors and an ensemble of human-like sculptures appearing like a family on one side of a small proscenium; on the other side was a group of imposing, cloaked, zombie-like sculptures. Ramirez's report on the 2006 Biennale resonates with another point by Teh: "For artists, however, the state's stranglehold had long cheapened the moving image's epistemological



Exhibition: "Video, An Art, A History 1965-2010: A Selection from the Centre Pompidou and Singapore Art Museum Collections," 2011.

value; and they now seem disinclined to restore it, even where that grip has been relaxed." He argues that the exception to this rule was Indonesia, where, "since the fall of Suharto in 1998 (reformasi), video art's development has been inseparable from a wider flourishing of DIY culture, activist media collectives, and community video initiatives." Here, Teh was referring to ruangrupa, one of a number of collectives in Southeast Asia who practiced tactics that he would later describe as "withdrawal," "avoidance," and "evasion." Using this set of terms, interchangeably at times, Teh describes the video art of Southeast Asian artists who incorporate national or regional identity in their work, and yet simultaneously expose the violent mechanisms that undergird or inform state capture.

2. History

For the most part, Teh's criticism and art-historical analysis have been devoted to this idea of the "avoidance"

of state capture, by which he means the delicate balance that Southeast Asian artists strike in both embracing their local and regional identities, and simultaneously exposing what Teh calls the "long shadow of authoritarianism" in the Southeast Asian art context.⁶ In his book *Thai Art:* Currencies of the Contemporary (2017), for example, he examines the work of artists like Arin Rungjang and Apichatpong Weerasethakul, which reveals "the precarious ways in which Thai art has been allied with either national or international contexts," according to Clare Veale, while also pursuing "the possibility of understanding Thai art as simultaneously within and beyond the nation." Teh demonstrates that video artists like Apichatpong were influenced by aesthetics and art movements outside of Thailand, including from the West, though they still hold the nation as a frame of reference.8

Challenging the relevance of the "nation" as a paradigm for thinking art, Teh writes that "in Asia at least, the frame of national modernity has done less and less to illuminate the work of contemporary artists intent on stepping



Araya Rasdjarmrearnsook, Two Planets: Manet's Luncheon on the Grass and the Thai Villagers, 2008, 16 min. Video still.

beyond it in various ways ... Our task," he continues, "therefore remains twofold: at once a counterhistory of the modern, and a history of the contemporary as such, in its new, supranational contexts." This notion of the "supranational" appears in Teh's writing as a salve or balm for the chaotic entrapment of state capture within which all history remains. But what is this all history?

In order to pursue his critique, Teh looks to older histories of the Southeast Asian region in order to cultivate a broader understanding of art that encompasses histories that predate the modern European and Asian nation-state forms. For example, Teh looks to Zomia, a shorthand for large portions of mainland Southeast Asia, which was studied by anthropologist James C. Scott. ¹⁰ Scott argues that Zomia was economically and culturally outpaced by



Arin Rungjang, Golden Teardrop, 2013. Singapore Art Museum.

nation-states like the Republic of Singapore in the mid-twentieth century. In a 2017 essay citing Scott, Teh responds that "far from being luckless roadkill on the highways of national modernity, we might rather see the Zomians as partisans of a much older and ongoing struggle against all kinds of oppressive regulation, authors, by virtue of their cultures at least, of sophisticated programs of resistance to forces of economic and cultural simplification." 11 Thus, Teh raises the question of Zomia's continued timeline, and how that timeline relates or acts to contest others, particularly the linear time of the modern nation-state.

Scott uses the term "escape agriculture" to describe the nomadic mixed culture of farming that upland Zomians practiced, after their escape from the lowlands. He positions Zomians as seeking refuge in highland areas in a way that recalls the upward settlement of Maroons in Haiti and Jamaica, and their fugitive tactics. However, I am interested in Teh's formulation "luckless roadkill on the highways to modernity" as a way to critique Scott. Teh's critique proposes that Zomia continues to exist, regardless of the (post)colonial maps of the region, while Scott summarily argues that just as the monoculture that came

to define state capitalist industry during modern times took hold, the Zomians and their nomadic, diverse culture were killed off.¹² This latter view appears more radical in its decisive destruction of Zomia with the advent of the modern nation-state. Its apocalyptic and eschatological premise confirms the violent conditions that birthed modernity. In this latter regard, I am reminded of the similarly anarchist position of Martinican psychoanalyst Frantz Fanon, who argued in his book *The Wretched of the Earth* for violence as a means of liberation from colonial rule.¹³

Zomia has also been taken up by other curators and critics as an example through which to think about the histories of colonization, enclosure, and state formation, if not exactly on those terms. For example, The Forest Curriculum, a curatorial collective made up of Abidjan Toto and Pujita Guha that works through radical pedagogy, took up Zomia as its major focal point. The collective proposes a "critique of the Anthropocene" through a championing of the farming cultures of Zomia.

3. What Kind of Cosmopolitanism?

Writing on the work of Apichatpong and Pratchaya Phinthong, who are both from Isaan, the northeast region of Thailand, Teh aims to recover what he refers to as a "cosmopolitan" modernity. This alternate cosmopolitanism, apart from Western bourgeois systems, developed over centuries and was in contact with Siam and Khmer. According to Teh, this alternate vision of multiethnic and cross-cultural diffusion was the result of the region serving as a land for resettled and displaced people. Thus, though he calls Isaan "cosmopolitan," a term that signifies Western modernity to a degree, I would argue that modernity is temporally out of step with Isaan's longue durée. In short, through the example of the people of Isaan, Teh inverts Scott's version of a violent modernity, writing that

they have a long history of resisting political domination (and military conscription) by central Siamese bureaucracy, and economic domination by Sino-Thai agri-business and all that comes with it (debt and dispossession, privatization of genetic resources, reliance on costly and toxic pesticides—all the iniquities of big-time monoculture).¹⁵

Teh views Isaan ultimately through the lenses of "evasion," "withdrawal," and "avoidance" of state capture; that is, the same terms he uses to describe certain critical art practices, though in this case applied to the people of Isaan to describe their "cosmopolitanist" acts of resisting political domination. Another picture emerges from the artist Apichatpong, who says that this region speaks a common language. His films, which have drawn from communities in Khon Kaen, the place of his birth and one of the four major cities of Isaan, distill a local that projects a view of unification rather than fragmentation.

Elsewhere, the scene of migrant labor haunts the neat cosmopolitan frame that Teh conjures in his positive modernity coexisting with Zomia. After detailing the migrant agrarian workers in Isaan who feature in Pratchaya's Give More Than You Take (2010), Teh refers to the roaming of these workers in the Nordic countries as chimerical. He also writes: "Despite extortion by unscrupulous brokers, they remove themselves from a poverty trap with clear ethno-national dimensions."16 This labor perspective undermines the cosmopolitan frame in which Teh situates the Isaan workers. These nomadic Zomians, who once fled the lowlands for the uplands, and have now fled Southeast Asia for Europe, face the machinations of European statecraft and its maneuvers against the "freedom to roam." One begins to wonder about their survival in the face of the radically globalized labor market that we encounter in Pratchaya's video art.



Pratchaya Phinthong, Give More Than You Take, 2010.

4. State Iconography

In an interview, Teh suggests that artists in Southeast Asia like Rungjang and Apichatpong, and more recently Korakrit Arunanondchai, put forward a potent criticality (of the nation, of Western modernity) in their work.¹⁷ According to Teh, these artists expand the possibilities of art production, and expand infinitely the horizon of history in Thailand in ways that can effectively push back against the state machinery and its ventriloguism of the Bangkok Art Biennale. Once again, they exist both within and without this structure. Arguably, this attention to the artist as a critical thinker comes from Teh's work as a curator in the mid-2000s in Thailand. (He curated the 2006 exhibition "Platform" at the Queen's Gallery in Bangkok, which included Rungjang, among other artists. Teh later worked as an art dealer, selling work by Rungjang and other Thai artists.) This curatorial knowledge has shaped his criticism and art-historical writing. His intellectual formation was influenced by thinkers like Jacques Derrida, Georges Bataille, Jean Baudrillard, Martin Heidegger, and Walter Benjamin, 18 Thus, his most potent engagement has been the critique of the political structure of the nation-state as it appears within the work of artists. 19 Teh is generous in noting his influence from artists and their thinking, particularly in their attempts at recovering aspects of precolonial Southeast Asia and in their deconstruction of the modern nation-state (such as Thailand) via the foregrounding an alternative possible geography and/or imaginary.

Theorizing the video art of Singaporean artist Ho Tzu Nyen, Teh names allegory and narrative as a function of evasion, withdrawal, and avoidance. This is in line with his political aim to deconstruct the modern nation-state and its ideology. In several works by Ho, such as *The Cloud of Unknowing*, the artist actively draws from the "historical" partially by titling the video installation after an obscure



Korakrit Arunanondchai, Songs for Dying, 2021, video. Photograph by Daniel Vincent Hansen. Courtesy of the artist.

liturgical text from the fourteenth century. Writing on *The Cloud*, curator June Yap notes, "Ho's art confronts foundational myths and historical geopolitics, and deconstructs the idea of modernization via Western influence or beneficence, by presenting viewers with a paradox." This deconstruction of modernity is what appeals most to Teh, who writes that "even at its most mythical, oneiric or philosophical, Ho's work can be situated somewhere, but that somewhere is never a discrete, politically grounded site like a country." 21

One of Ho's mythical works focuses on tigers, specifically in the context of the *Critical Dictionary of Southeast Asia* (2012–present), a multimedia artwork. In it he forms an etymology for the term "T for Tiger." His interest in Southeast Asia intersects with an interest in history. In this work, which became the basis for the exhibition "2 or 3 Tigers" at HKW in Berlin, he borrowed from "animist cosmologies that informed Southeast Asia." More specifically, he deconstructed the idea of the modern city-state of Singapore by using iconographic narratives of the tiger that complicate the intersection(s) of Malaysian and Singaporean history. Stating that the tiger is thought of by Malays as an ancestor, Ho unsettles the mythical "lion" at the heart of Singapore:

Lions may be alien to the ecology of the lion city, but tigers were known to infest this little island and its surrounds. A creature much feared by the local inhabitants of the Malayan region, seldom was the tiger hailed by its proper name, *harimau*. Instead, locals referred to this terrible beast by a host of more colloquial substitute nouns, such as *arimau*, *rimau*, and *rimo*. These were terms that the anthropologist Peter Boomgaard described as being loose enough to encompass the sense of "big cat-like animals" such as leopards, which—like the tigers with which they were often confused, and unlike lions—were indigenous to this part of the world.²³

5. Unknown Images

In light of these deconstructive readings, pace Derrida, we can consider Teh's 2019 *Artforum* essay "Return to Sender," which takes a very critical view of Thailand's institutions of display, as expressed and exemplified by the Bangkok Art Biennale, while also praising the role of video artists in putting forward a "critical" view.²⁴ Teh's essay



Ho Tzu Nyen, The Cloud of Unknowing, 2011. Film still.

praises the work of artists like Korakrit Arunanondchai, particularly with regard to Ghost 2561, a performance and video series founded by the artist. Here we encounter Teh's theorization of Southeast Asian video art when he describes the "hauntological" as one of the definitive elements of Korakrit's practice. Elsewhere, the hauntological is immanent in Apichatpong. For Teh, the figure of the ghost complicates ideas of the self; in the works of the artists he discusses, the ghost doubles to enact a subjective consciousness that challenges linear temporality. At the same time, Teh argues viscerally against the purely formalist view of cinema studies that dare not venture into the content of works such as Apichatpong's 2010 film *Uncle Boonmee Who Can Recall His Past Lives*.²⁵

Korakrit's 2022 exhibition at Canal Projects in New York City referred to "poetics of radical consciousness, collectivity, and memory" that "emerge at the liminal space between living and dying." His four spirit houses accompanying the installation reflect "portals" of communication with the living and dying. Similarly, Apichatpong's *Uncle Boonmee* is based on the 1983 book *A Man Who Can Recall His Past Lives* by Buddhist

monk Phra Sripariyattiweti, which raised a concern about the distinction between human and nonhuman, or between male and female, in the context of reincarnation.

Apichatpong is thus interested in the unconscious, and the dream, where we do not fully know or understand but have some idea of experience. If some would argue that Uncle Boonmee is purely focused on Eastern Buddhist thought and philosophy, I would point out the similarity of the artist's approach to the work of nineteenth-century philosopher William James, who actively participated in seances, and whose radical empiricism and psychology took spiritual experience seriously. Following this latter example, both Korakrit and Apichatpong provide equally lucid but ultimately illegible and unknown images. Dreams are complex because they are not literal. Thus, both artists engage in an active interpretation of these dreams and visions—or to use James's term, they engage in a "stream of consciousness." As Teh wrote in 2011, drawing from French surrealism to explain Apichatpong's experiments with consciousness,

For all the dreaminess of his films, the unconscious



Apichatpong Weerasethakul, Uncle Boonmee Who Can Recall His Past Lives, 2010. Film still.

that Apichatpong taps—or that taps him—is as much collective as it is individual. This could suggest an affinity with the less strident politics found at the margins of the movement. His approach is perhaps better described as post-Surrealist, like that drift after 1930 towards a new sociology, that "vague orientation" described by Georges Bataille, born of "detachment from a society that was disintegrating because of individualism." 27

6. Global Economy

I have attempted in this text to articulate the central aims of Teh's video criticism: to unsettle geographies in favor of historical and mythical imaginaries, to highlight the hauntological as an approach to memory and analysis, and to foreground narratives and allegories that unmake or destabilize the myths at the core of the founding of nation-states in Southeast Asia. These are concrete aims. When placed in view of the nascent history of video art in the region, they provide clues about the progress of the field, and at the same time, reflect how the field's birth (thinking back to Teh's "embryonic" comment) and expansion is entangled with the geopolitical and global economic forces of the region. If anything, the work of

video artists in Southeast Asia shows us how much is yet to be overcome with regard to oppressive forces of global capitalism and state capture. What Ramirez wrote in her 2006 review of the Singapore Art Biennial sadly remains true: there is still a risk of "censorship." If indeed the museum's position has changed towards "staging critically charged work," it could always lead to what Stefano Harney and Fred Moten articulate as the absorption of the critique by the institution, with its strategies of professionalization and enclosure—in short, recuperation in addition to censorship.²⁸ What Teh shows us is that video artists are willing to perform their own evasions and withdrawals, and that these actions point towards alternate timelines, forms of contesting the vestiges of colonial expansion, and local counter-histories. Whether or not these aesthetic actions lead to any tangible political transformation is a question for a different day.

Χ

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2023) and the lead curator of an upcoming mid-career retrospective of Taryn Simon.

"Recalibrating Media: Three Theses on Video and Media Art in Southeast Asia," in Video, an Art, a History 1965–2010: A Selection from the Centre Pompidou and Singapore Art Museum Collections, exh. cat. (Singapore Art Museum, 2011).

The curators described the show as "a pilot exhibition bringing together two institutional collections: one that began in France in 1976 with works from 1965 till today, the other since 2008 in Singapore; one turned towards major international trends, the other steered towards Asian works—more specifically those from the currently very prolific region of Southeast Asia."

The revised versions were published as "SEA STATE: Notes on Video Art in Singapore," in Moving On Asia 2004-2013, ed. Yeran Jang and Kim Jihye (Alternative Space LOOP, 2012); and "Insular Visions: Notes on Video Art in Singapore," The Japan Foundation Asia Center Art Studies, vol. 3 (2017).

"The Singapore Art Biennale: Keeping Faith," Ctrl+P, no. 4 (December 2006).

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"Insular Visions."

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Teh, "Itinerant Cinema: The Social Surrealism of Apichatpong Weerasethakul," Third Text 25, no. 5 (September 2011).

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der Kulturen der Welt, 2017).

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"Under One or Several Flags," Afterall, no. 51 (Summer 2021).

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Ho Tzu Nyen, "Every Cat in History is I," in 2 or 3 Tigers.

See https://www.artforum.com/p rint/201902/david-teh-on-art-in-t

"Itinerant Cinema."

26 From the press release https://w ww.canalprojects.org/media/site /69366ea0fe-1672237738/cp_gal lery_booklet_01_final_all.pdf.

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53

"Fugitive Reflex."

.com/757021475.

hailand-78386.

The great trouble in human life is that looking and eating are two different operations.

—Simone Weil, Forms of the Implicit Love of God,

—Simone Weil, *Forms of the Implicit Love of God* 1951

1. Eater and Eaten

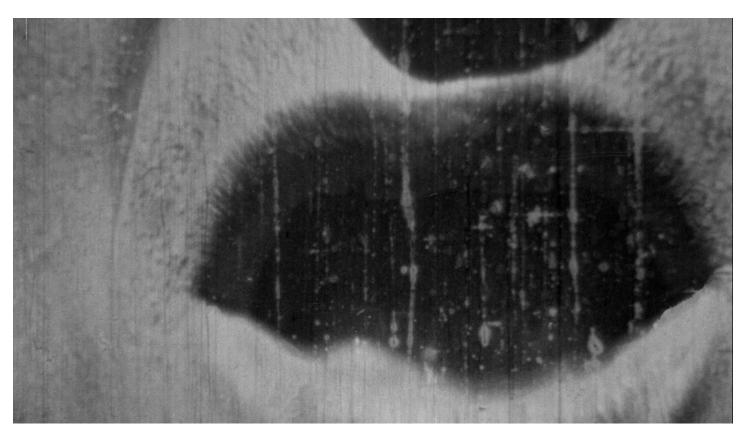
"In some aspects," wrote Gaston Bachelard in 1938, " reality is initially a food." 1 Bachelard wrote this in the context of his reflections on some of the more colorful stories about digestion that proliferated in the prescientific European mind, particularly during the long transition from alchemy to chemistry. Eighteenth-century alchemists, he explained, perceived God as the greatest alchemist of all. The human stomach was said to be one of God's greatest inventions, an oven for his earthly chemistry lab. The human ability to understand and manipulate individual chemical elements would always pale in comparison to the alchemy of digestion, which was designed with celestial complexity.² In this model, digestion takes on expansive metaphysical dimensions that appear far removed from how we might conceive of digestion today. But digestion theories are fundamental representations of how one conceives of the threshold where the body meets the world. As such, any understanding of how the body digests is always in some way metaphysical, a product of models for how the body is more broadly situated in the world within a given cosmology.

Digestion has a well-charted history in Western science. Throughout the second half of the nineteenth century, the renowned French physiologist Claude Bernard sought to produce an experimental framework that would prove objectively what happened when one organism ate another. He was eager to distinguish himself from many of his contemporaries in chemistry and physiology, whose mechanistic models of life likened animal bodies to machines, which received inputs of matter that they burned to produce energy. Bernard outlined a much more dynamic model of the body's material constitution, one that showed that the parts not only processed inputs, but were themselves constantly changing. The body doesn't simply break down the stuff it takes in, it builds new things out of them.

In sociologist Hannah Landecker's ongoing mapping of the history of the modern concept of metabolism as it emerged from industrial modernity to today, she shows how influential Bernard's work was not only for the science of nutrition and physiology, but for far-reaching notions of autonomy and freedom. For the living organism to be "free," according to Bernard, it had to possess mechanisms that allowed it a greater degree of agency than, say, a plant. Organisms clearly require constant inputs from their environment, but Bernard's work showed that animals have highly organized internal processes that

Beny Wagner

Eat the Camera, Feed the Screen



James Williamson, The Big Swallow, 1901. Film still.

regulate these inputs, turning them into the stuff of their own bodies. This was the *milieu intérieur*, the concept for which Bernard is perhaps best known. His idea that the animal had, in Landecker's words, the "ability to turn the environment into itself through nutrition," was conceived by Bernard as the very condition for the animal's freedom.³

Crucial to this model of nutrition is the perceived certainty that once food enters the internal environment, it loses the properties that defined it in the external environment. Bernard noted that a dog eating mutton, for example, doesn't store the mutton's fat, but rather makes its own fat by breaking down the mutton fat cells and turning them into dog fat. The conversion of the world into the self in this model is the basis upon which the eating organism increases its freedom to move through the world. Landecker refers to this idea as the logic of "eater and eaten," where animals convert those below them in the food chain into themselves in a biologically ordained hierarchy. This logic of total conversion has been so central to an understanding of being in industrial and postindustrial modernity, both scientific and metaphysical, that its origins and implications are scarcely questioned. That this logic was a historical construction only became apparent when contrasted with empirical evidence strong enough to destabilize it.

Moving between historical models and the edge of contemporary science, Landecker brilliantly charts this

destabilization. She describes an article published in 2011 by a group of molecular biologists in China who discovered genetic material from rice in a mouse's liver. This foreign genetic material participated in the regulation of the mouse's own genes. Everything that the nineteenthand twentieth-century logic of conversion in the food chain taught us would deny this possibility. Gene regulation was meant to belong to that part of the self that could not be affected by nutrition, i.e., the dissolution of other organisms' identities into the self. Yet here, an identifiable piece of a foreign organism changed the host's own identity, long after the foreign organism should have been broken down into an identity-less mass.

New models of life that focus on the interrelations between organisms have emerged in recent decades, encapsulated, for example, in evolutionary biologist Lynn Margulis's concept of the "holobiont," which proposes that organisms evolve symbiotically together with their endocellular and extracellular microbiome. As science and culture adapt to such radically altered perspectives on life conceived as distributed among incalculable organisms, the historical specificity of the logic of the total conversion of the eaten into the eater's body is obvious. From this vantage point, it is hard to ignore that the logic of food-chain conversion is also a model of empire, a model in which the eater absorbs all environmental differences into its own homogenizing self.

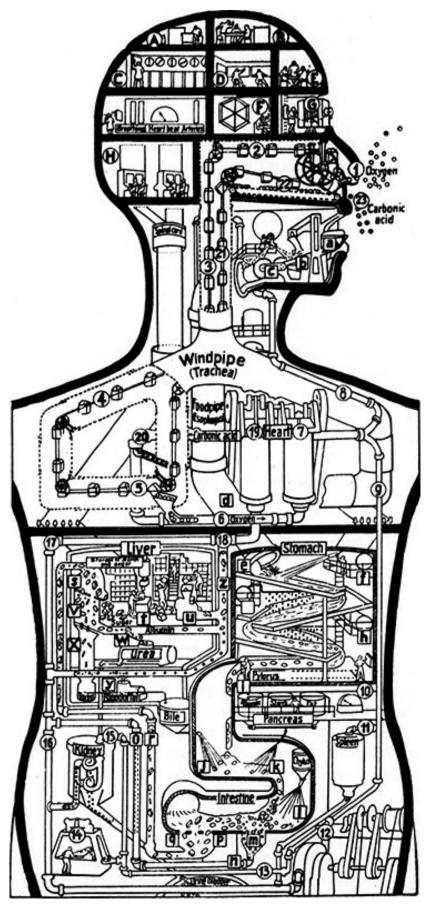
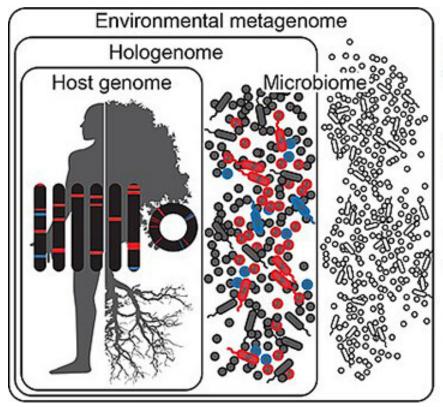


Image from Arthur and Fritz Kahn Collection 1889–1932, pg. 118.



Host and symbiont genes that alone and/or together affect a holobiont phenotype

Coevolved host and symbiont genes that affect a holobiont phenotype

Host genes and symbionts
that do not affect
a holobiont phenotype

Environmental microbes
that are not part of
the holobiont

The holobiont phenotype. License: CC BY-SA 4.0.

"Life is death," writes Landecker of Bernard's vision of conversion. "This only appears paradoxical: it is not problematic to be composed of dead others, because they have ceased to be themselves in any meaningful way: they 'disappear as a definite chemical material' and become the reserves, always identical." In this way a European model of autonomous being emerged, nested in the mechanical objectivity of science and disseminated as common sense, where eating the world and dissolving its defining features into oneself is the fundamental material condition for freedom. The model of total conversion turned digestion—the living organism's perpetual renegotiation with its environment—into consumption, an untethered force that belongs to no specific being or body.

2. The Perpetual Big Swallow

My interest in the history of metabolism started from a practice that might seem far from such matters: moving images. As an artist filmmaker, I have always been perplexed by the ways that moving images are simultaneously continuous with and separate from the open-ended worlds they record and the profilmic worlds they present to the spectator. Moving images act on and reconfigure the boundary between the body and the world. The history of moving images offers glimpses towards how those boundaries have perpetually changed. Metabolism describes the material exchange that takes

place between organism and environment. As I learned more about the historicity of the concept of metabolism, how metabolism itself is constantly changing, I began to conceive of metabolism not simply as some neutral underlying condition of life—as most common definitions would have it-but as a changing model of change, a historical map or index of how change changes. Definitions of metabolism have served to ground notions of the human body as, for example, a tightly bound biological individual distinct from its environment; a leaky vessel teeming with other life-forms; or an information-processing regulatory zone. This polyvalent historicity is at the core of metabolism's relevance to the evolution of moving-image media from their proto-cinematic emergence in the late nineteenth century to their current digitally compressed and networked forms.

The imagined boundaries between camera and world, body and screen that prevailed around 1900 are clearly not the same as the way that boundaries between digitally networked devices, the body, and the environment are conceived today. Moving images don't simply represent movement. They are models of movement, themselves constantly changing, which shape how we comprehend movement at a specific moment in time. Can moving images in this sense be considered a kind of metabolism? Is it possible to think of cinema's function at the boundary of the body as part of the broader complex of human and ecological metabolism?

Since cinema's beginning in the late nineteenth century. both filmmakers and writers have turned to biological terms to explain how the cinema constantly exceeds its own material boundaries. Films have been likened to membranes,7 to multicellular organisms,8 to bacteria,9 to skin.¹⁰ To approach moving images through the history of metabolism is to focus not only on the ways that moving images complicate where we draw the line between the body and its environment, life and death, machines and organisms, but crucially how those boundaries are historically contingent and therefore prone to perpetual reconfigurations. The cinema as a system is morphogenetic, meaning it creates new forms according its own structure. The structure continues evolving over time as new technologies, concepts, and formal codes are integrated into it. Film theorist Terry Ramsaye summoned this morphogenetic structure when he wrote in 1926 that cinema was "like a tree, clearly an organism, following organic law in its development."11 To liken cinema to a tree is to insist that cinema is part of the world it records; cinema therefore participates in the world's development and change. The organicism of the tree metaphor aside, Ramsaye, like many others, felt the need to explain how the larger system of the cinema constantly exceeds the utilitarianism of the machines that make images come to life.

Cinema might take on certain characteristics of life, but life is rarely as innocent as a tree. An anonymous author writing for the German film magazine Lichtbild-Bühne in 1910 asserted, with a mix of reverie and paranoia typical of the time, that "the cinematograph is increasingly broadening its domain of living material. It is as if it wished to swallow the whole of humankind in a violent deluge."12 Here cinematographic images, from their very beginning, are imbued with extra-human agencies that appear to have lives of their own: "The cinematograph is increasingly broadening its domain of living material." The machine acts independently of the use humans intend for it. And this agency is of a specific kind—an agency of consumption: "It is as if it wished to swallow the whole of humankind." Once motivated by its own wishes, the cinematograph no longer belongs to humankind as an extension of its own needs. There is no ambiguity about what the machine's consumption-driven agency means: it is a "violent deluge." It threatens to dissolve humankind into its own structure.

In 1901, James Williamson produced a fifty-nine-second film called *The Big Swallow*. In it, a man dressed in a three-piece suit appears annoyed at being filmed by the cameraperson—and annoyed at the viewer. After waving his cane several times to no avail, he approaches the camera directly, gesticulating wildly. Before we know it, his body and then face fill the screen completely. As his mouth opens and the dark recess of his body's interior widens, the screen is absorbed by a chasm whose reach, for all we know, extends infinitely in space and time. For a brief moment, the viewer is absorbed into this thick

nowhere. But almost immediately, a figure—the cameraperson—holding a tripod camera appears, filmed from behind. In quick succession, first the camera and then the figure stumble forwards into the void. The oversized lips we now recognize reemerge at the edges of the frame and the mouth recedes, to reveal the protagonist chewing voraciously and smacking his lips.

The Big Swallow is credited with inventing the trope that is now called the "eat-the-camera" effect. This effect became ubiquitous in the subsequent history of moving images. But Williams's (possibly) first formalization of the effect is revealing of the new boundaries that cinematographic motion was just beginning to structure between the camera, body, and screen. The synopsis entry for the film in the BFI catalog celebrates it as "one of the seminal images of early British (and world) cinema." Yet towards the end of the entry, the author, somewhat oddly, offers a piece of editorial advice one hundred years too

The film might have been still more effective if Williamson had omitted the second and third shots altogether, since they detract from the logical purity of the first, ending on a completely blank screen as the swallowed camera is no longer able to function as a surrogate for the audience's point of view.¹³

The author is judging the film against the principles of continuity editing, a standardized set of techniques that structure narrative film in relation to linear time. Continuity editing only emerged gradually around 1910, several years after *The Big Swallow* was made.¹⁴

The absence of continuity is indeed confusing. The issue is that we are presented with multiple incommensurate camera positions, which, when edited together, produce an impossible sequence, something that could never be perceived as "real." Yet this is exactly what demonstrates the importance of this film to the early cinematic reconfiguration of the boundaries between the human body, the machine, and the environment. What Williams's film acknowledges is that once something is broken down into a series of parts, the logic of their reconstitution is a matter of choice. We can choose to keep them arranged in the sequential order in which they were registered (this is how cinematography was conceived), but that is always a decision, even if the decision is given over to the recording technology's automation, which reinforces the hetero-temporality it was designed to inscribe into the world. In other words, continuity editing and the realism it appears to achieve is not the advanced, unmediated. faithful-to-nature truth it claims to represent, but rather a concerted effort to remake the world according to a predetermined structure.



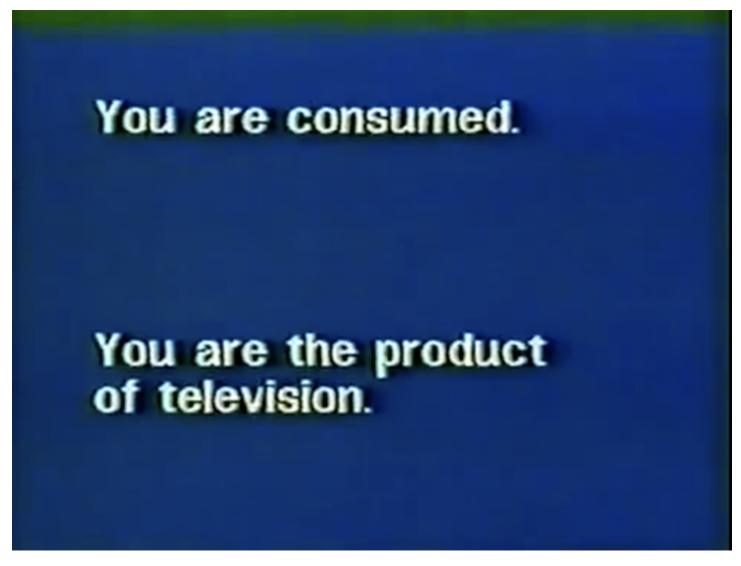
James Williamson, The Big Swallow, 1901. Film still.

The eat-the-camera effect reveals the extreme fragility of the longstanding metaphor that equates the camera lens with the human eye. Continuity shooting and editing are designed to bolster this metaphor, by allowing the viewer to suspend disbelief to the extent that their body can at least momentarily feel like it is becoming one with the on-screen world. Having been trained to understand the camera's eye, transposed to the screen, as a proxy for the viewer's own, the viewer tends to experience the image of the camera being swallowed as the fleeting feeling of their own body being swallowed. When continuity is broken, as it is in Williams's film, the viewer is forced again to confront the profound absence of a cohesive hetero-temporality governing the extent of possible experience.

In the many transformations that have driven the evolution of moving-image media on the level of their material substrate—from the celluloid filmstrip, to electromagnetic transmission, to digital compression—the logic of consumption has been continuously reinscribed onto the boundaries of the camera-body-screen nexus. In each reiteration the human viewer is repositioned as food to be served up to the screen. This is the premise of Richard Serra and Carlota Fay Schoolman's 1973 video *Television Delivers People*. The artists bought seven minutes of airtime on a public broadcaster to directly address

viewers with a message intentionally communicated via the most reduced means possible: scrolling text on screen. This mode of address suggests that viewers, hypnotized by the seductive surface of the television screen, fail to perceive what is really going on; they willingly forfeit their free will to corporate overlords and state propaganda. The sobering text on screen is designed to make it clear that, contrary to its status as a commodity, television is not a product made for human consumption, but rather the opposite. As the artists wrote in the message: "Mass media means that a medium can deliver masses of people ... It is the consumer who is consumed." The video is ultimately about agency. To lose agency, they tell us—in the paranoid tone we recognize from the anonymous author who worried that humankind would be swallowed by the cinematograph—is to become food, to become less than human, to be reduced to matter for some greater sovereign being to consume.

A similar logic of consumption drives Grace Jones's 2008 track "Corporate Cannibal" and its mesmerizing video. In it, Jones's digital likeness is shown to be completely fluid, malleable into any conceivable shape. A body part erupts from an undulating graphic line, stretches beyond recognition, snaps back and replicates itself, all pulsing along to a hypnotic rhythm.¹⁵ As Jones stretches the boundaries of her body, she satirically inhabits the



Richard Serra and Carlota Fay Schoolman, Television Delivers People, 1973, 7 min. Film still.

"corporate cannibal" who, sutured to the screen, turns its spectators into food:

Pleased to meet you Pleased to have you on my plate Your meat is sweet to me Your destiny, your fate You're my life support Your life is my sport ...

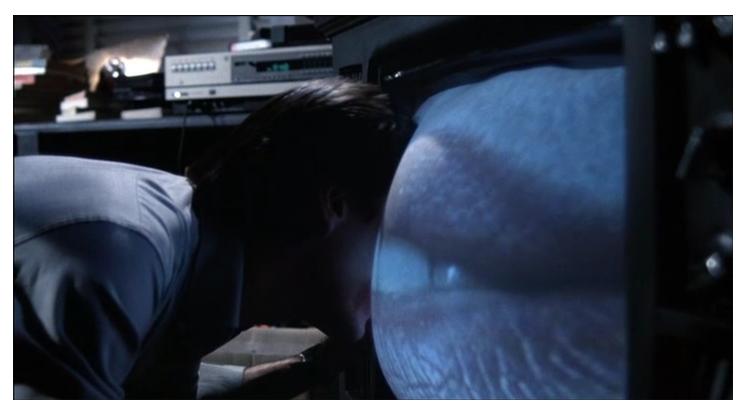
I'm a man, a man-eating machine ...

Corporate cannibal, digital criminal Corporate cannibal, eat you like an animal

Here again, the message is that to become food is to lose all agency, although in Jones's rendition, the paranoia of

consumption takes on a kind of pastiche. The restlessness of Jones's malleability is particular to digital media and their rapid proliferation. Again, the moving image threatens to "swallow the whole of humankind in a violent deluge," in the words of the anonymous author; but here the digitally rendered human form has become one with the digital liquidity of media and corporate finance, stretched nearly beyond recognition.

In David Cronenberg's *Videodrome* (1983), the protagonist Max Renn, a TV station president played by James Wood, finds out about a plot to replace the real everyday world with a televisual world known as the Videodrome. In a famous scene, Max encounters the enigmatic TV presenter Brian O'Blivion who, speaking directly to Max, says: "Television is reality, and reality is less than television." If the presenter's statement is true, then for Max to enter "reality" he must enter the television, his own flesh subsumed by the machine's material constitution. A moment later, the broadcast cuts to



David Cronenberg, Videodrome, 1983. Film still.

O'Blivion's daughter Bianca, played by Debbie Harry. "Come to me," she implores Max as the shot zooms in on her face. "Don't make me wait." As her open mouth fills the screen, Max delivers himself to be consumed by the screen. This scene brilliantly captures the dizzying slippages inherent to negotiating agency on the human-machine interface. The moving image is never content to remain bound to the machine that animates it because it is so good at mediating the human body (and many other organic processes and beings). The tremendous power of moving images lies in how they distill and amplify affect towards the dissolution of the boundary between the body and the machine.

In The Matrix (1999), the critical moment of Neo's awakening from the simulation into "reality" comes when a 3D-rendered silver fluid coats his body, ultimately entering his mouth. The camera invades Neo's mouth along with the fluid, which plunges down his throat on its way to reconstituting his body. Viewers are absorbed into the screen, whose digital graphics literalize the transformation of their bodies as digital subjects, traversing a digital threshold to be reborn in a new era. 16 All these examples of the eat-the-camera effect show how every new medium fundamentally reconfigures the threshold of body and world according to the logic of its operations. The Big Swallow swallows viewers into a world remade by the logic of the cinematographic interval. Videodrome digests its protagonist, and thereby the viewer, into a centralized network that transmits via

electromagnetic waves. *The Matrix* metabolizes the viewer into a world broken down into its molecular parts and reconstituted by the pixel and the digital compression codec.

The modern concept of metabolism was forged during the industrial expansion of Europe's imperial reach, and was conceived as a model of total conversion wherein food is dissolved completely upon entering the hegemonic eater's maw. When we view the concept of metabolism not as a stable definition of organic change, but as a historically specific model of agency grounded in consumption, then we encounter this agency, over and over again, as the extra-human agency driving cinema's morphogenesis. We viewers are told again and again that the moving image wants to consume us, to rob us of our agency, to dispossess both our physical bodies and what makes us human. This message arrives in the form of an open mouth filling the screen. Bernard's historically particular notion of a freedom derived from consumption took for granted that the human individual was positioned at the top of the food chain. In the cinematically reconstituted world, consumption reigns supreme but humans are no longer sovereign. Instead, the human is positioned as stuff, always identical, to be consumed by the extra-human screen, to become indistinguishable from the cinema's own body.



Lana and Lilly Wachowski, The Matrix, 1999. Film still.

3. Metabolizing Moving Images

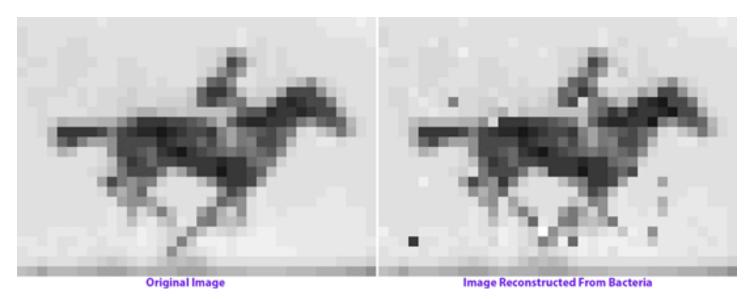
In 2017, a group of scientists working at the intersection of molecular biology and neuroscience published an article in *Nature* detailing the results of an experiment that used the CRISPR-Cas system to encode a moving image into the DNA of living bacteria.¹⁷ The images they chose to encode were none other than Eadweard Muybridge's iconic 1879 sequence of photographic stills capturing a horse in full gallop—images credited with establishing some of the technical conditions for cinematographic motion. The decision to use Muybridge's stills as the first animation to be encoded in a cell's genome was a nod towards the intertwined histories of moving image and biological motion. George Church, one of the researchers involved in the experiment, explains that its aim was to collect biological information over time: "A horse galloping is biological information over time, and is one of the first examples of recording any kind of motion, especially biological motion."18

"DNA is an excellent medium for archiving data," write the authors of the *Nature* article. ¹⁹ Muybridge's horse images are by no means the first data to be stored and retrieved from DNA. Over the past two decades, multiple projects have delivered data into living cells. ²⁰ The idea that DNA could be used as a storage device dates back to the very discovery of the double helix by Francis Crick and James Watson, when the physicist Richard E. Feynman imagined the vast data storage that would be opened up if information could be encoded into genetic sequences. ²¹ But this possibility couldn't be realized until computation became powerful enough to sequence and edit genes in a concrete and targeted way. For just over a decade now, the CRISPR-Cas system has made it possible to locate a specific sequence of DNA within a cell and replace it with

something else. Essentially any data that can be expressed in binary code can be converted into the A, G, C, and T nucleobases that make up DNA's double helix.

For the Muybridge animation, the five individual frames were broken down into their pixel values, each of which was then encoded into the nucleotides of DNA across approximately one hundred different genetic strands. These strands were fed to living bacteria, which incorporated the strands into their own genome. Once the strands become part of the living bacteria's genome, they continue to be inscribed in the cell's DNA every time it replicates. The researchers were also interested in using the bacteria's own temporality to reproduce the animation's chronology. Accordingly, they fed the bacteria the information contained within each still over a period of five days. Not only did the five individual images in the animation come out intact (with around 90 percent efficiency); they also came out in sequential order because the molecular recording system retained information about when the strands were fed to the cells.

The article in *Nature* is a step-by-step breakdown of how the data was delivered to the CRISPR-Cas system, written in technical terms that are difficult to grasp without specialist knowledge. Still, the story became quite popular and was reported in most major Western media outlets, each of which put a slightly different spin on the story. In one case, an author mused on how long it will be until we can store all of *Game of Thrones* in our skin.²² The researchers calculated that a single gram of DNA can store one billion terabytes, a number that has been extrapolated into an abstract, scalable figure representing an almost limitless storage horizon.²³ Yet Seth Shipman, the lead researcher on the experiment, is clear that his aim in developing this process is not to create a giant



Seth Shipman worked in collaboration with George Church, using CRISPR to enable the chronological recording of digital information, showcasing the DNA's potential as a storage device.

database or to store TV shows in people's skin. It is rather to create systems that will allow a cell to record data from its surroundings over time on its own. "We want to turn cells into historians," Shipman told the online journal *Alphr*.²⁴ Trained as a neuroscientist, Shipman's concern is our limited ability to study the brain. The available methods for studying neurological activity inevitably disrupt the cognitive processes being observed, thus making any observation extremely partial. If a cell could be inserted into the brain as a "molecular recorder," in Shipman's words, it would be possible to collect data about neurological activity in the brain without interfering with the very processes one wishes to study.

Can we speak about this kind of data as "imagery"? The images in the reconstructed GIF of the horse, encoded in the DNA of living bacteria, are only images at the point of the translation of data to pixels to screens to human eyes. In this sense, the images themselves are not necessary to the experiment's function. They are visual demonstrations, made to illustrate scientific and technological processes that may otherwise be too complex for the nonspecialist to comprehend. And yet in many ways they function as all other digital images do, atomized into bits of data and then reconstituted, via digital compression, for the eye. What makes such an experiment even thinkable is the dramatic transformation of moving images through digitization, driving a post-cinematic media environment that, in Thomas Elsaesser's words, is "no longer grounded in the eye, in vision, or in visuality."25

The experiment is meaningful because it illuminates a cross section of the ever-diminishing gap between how living things are observed and manipulated, and how images are produced and transmitted. In her illuminating work on the evolving relationship between images and scientific models of "life," Deborah Levitt writes that life

and images "can be properly seen only when viewed in relation with the other." This coevolutionary relation is what she calls "the mediology of life and the life of media." Reconfigured through computation, images become data at the same time as organisms do.

The new metabolism that has emerged in recent decades, which Landecker has dubbed "post-industrial metabolism," reflects the current social and technological conditions in which it operates:

Both a conceptual domain and a set of experimental practices, this new metabolism is a regulatory zone, not a factory system; it is understood to be constituted by a dynamic web of cellular signals, built by and responding to environmental information—food molecules or food's pollutants. Its disorders are regulatory crises.²⁷

This operational reconstitution of organic change as data, both conceptually and experimentally, is what allows a living cell to become a morphogenetic storage device for a sequence of pixels that together make a moving image.

If cinematic conventions, since the very beginning, have been trying to swallow viewers—that is, to penetrate through the barrier of the screen on the one hand, and the body on the other—how does one interpret a new physical reality where sub-perceptual components of images (pixels) can now be physically incorporated into the sub-perceptual components of living organisms (nucleobases)? The issue is not whether we will start watching movies stored in our skin. At stake is how this emergent physical reality begins to trickle through the

stories we tell about who we are as humans and our position in the world among other living things. These stories create forms, images, relations, and thought structures that operate on the physical world, changing both what it is and what it can be.

A robust and rapidly growing scientific framework demonstrates that organisms do not simply disappear into the organisms they are eaten by. Long after one organism has been digested by another, components of the eaten organism participate in the tasks of regulating vital functions in its host's body. Against this new backdrop, the logic that sees the eater and the eaten as becoming contiguous through hierarchical consumption is shown to be historically particular, a cultural construct forged at the height of European colonial and industrial expansion, which obscured as much as it revealed about the science of digestion. With a newly reconfigured model of organisms as holobionts comes a radically new kind of image, an image that lives and reproduces as data that can be metabolized and incorporated into living organisms. This image can become an active part of a bacteria's identity while retaining its own distinct identity as a pixel linked to other pixels. Even if these images will not determine the future of viewership, they tell us very clearly that it is no longer meaningful to draw hard lines between the organic and the technological, the dead and the living, the eater and the eaten. Instead, we shift to understanding self and world as constantly mutating relations of collaborative agencies.

Despite these new physical models of life-forms and images, cultural narratives steeped in the paranoia of consumption remain firmly embedded in discourses around the separations between humans, machines, and environment. Fears that the new extra-human systems we have produced such as DALL-E2 and GPT3 will dispossess human beings of the cultural forms—literature and art—that supposedly most distinguish us, not only from other life-forms but from machines, bear a striking resemblance to the paranoia triggered by the cinematograph a century ago. What is this paranoia if not the fear of losing an abstracted notion of agency? This fear takes for granted the myth that agency has always been autonomous. What changes when the myth of consumption-driven freedom is replaced by an acknowledgement that beings coproduce one another, in some ways that can be measured, and many more that cannot? What if we reconsider our fears of being swallowed by the machines that dispossess us of our agency, as a byproduct of the scientific concepts and cultural narratives that have historically denied the agency of the innumerable life-forms already inside us, all of which coproduce the broader agency that we call ours? What images and stories will emerge through the acknowledgement that agency is only ever borrowed from the multiplicities of planetary and cosmic agencies through which life emerges?

Χ

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Jussi Parikka

Operational Images: Between Light and Data

The following is an edited excerpt from Jussi Parikka's forthcoming book, Operational Images: From the Visual to the Invisual (University of Minnesota Press, summer 2023). The book takes up Harun Farocki's well-known concept of "operational images" and, moving across art, design, architecture, and visual cultures, offers a guide to understanding contemporary practices of imaging and data, from visual arts to the invisual operations of Al and machine vision.

Capturing Light

Around 1889, Harvard College expanded its influence far outside Cambridge, Massachusetts. Having joined the College Observatory (first as a student, later as a professor of astronomy), Solon Irving Bailey was sent much farther south, to Arequipa in Peru, to establish a new field station. This operation was to switch hemispheres and find a spot elevated enough for ideal observation of the light traveling from distant celestial objects. Astronomic photography had a long history already by the 1890s, but this need for a new observatory emphasized the additional demand for what we would now call scientific infrastructure. After New Year's Day in 1889, a boat trip from San Francisco took Bailey and his family to Arequipa, "attracted by reports of the clear sky and slight rainfall on the high plateau of Peru, where also the whole southern sky is visible."1 While the rhetorical emphasis on a clean, crisp observation place puts all of the weather conditions easily outside of history and into the physical sphere, important for astronomy as a science of the observation of laws (out there) and not things (here), during the difficult trip to find the perfect spot Bailey observed and (in passing) noted the colonial legacy of the region: "I should place the population of the valley near Chosica in the days of the Incas at six thousand. Today there are perhaps five hundred. This well illustrates how Peru has changed since she fell into the hands of the Spanish conquerors."² Such awareness in his thoughts and diary did not, however, prevent the expedition from (re)naming the place they came to in a softer but still imperial manner: Mount Harvard. The eponymous name was entirely in tune with the aims of Edward Pickering, the long-standing and renowned director of the Harvard College Observatory, to establish posts in the north and the south, "so the entire sky would be available for Harvard's research."3

Besides a number of adventurous anecdotes from that trip, the relation with a media technological context is especially interesting. Two themes concerning light intersected during the years Bailey spent in Peru, both of which were essential to the scientific work, while producing an aesthetic quality to the geographical placement. The sunlit high-altitude plains—causing occasional mountain sickness for the party looking for a suitable observation spot—provided ideal landscapes,



Harun Farocki, Serious Games III, 2009. Two channel video, 20 min. Courtesy of the Harun Farocki estate.

while the photometric (measurement of the brightness of light) and photographic techniques provided technologies for the capture of slowly shifting objects in the night sky. Not that such exact spots of observation were known in advance; some of Bailey's memoirs from the trip read as a persistent search for those spots where measurements can be made, leading him to echo earlier advice about the exploratory spirit: "Of the clearness and steadiness of the atmosphere in these different places, there is no certain knowledge, and your only way is to investigate it for yourselves."4 The investigation aimed to take pictures to send back to the college in Cambridge. Besides telescopes, the comparative analysis of photographic evidence became a key technique that needed a reliable data supply. It was, in some ways, a case of what Michelle Henning has called "the unfettered image": fixed as image, but migratory and journeying as an object.⁵ Here, what migrated were the comparative observations of the vast space outside the planetary sphere.

As per the Harvard Observatory's aim, to be able to observe the night sky from both the Northern and Southern Hemispheres gave a particular advantage to astronomers. Moreover, with the help of the photographic media, Southern data was relatively easily transported back to Cambridge for comparative, computational analysis. In Pickering's words, "For many purposes the photographs take the place of the stars themselves, and discoveries are verified and errors corrected by daylight with a magnifying glass instead of at night with a telescope."

The photographs from Bailey's field station were sent north. This part of the logistical story has become more well-known in recent years, particularly the (female) computer pioneers of data analysis and astronomy, including Annie Jump Cannon and her work on star classifications⁷ and Henrietta Swan Leavitt, among others.

Leavitt, later awarded the title "Curator of Astronomical Photographs" (held earlier by Williamina Fleming), left lasting contributions to the field (even if here the focus is only on parts that relate to the media technological operations that serve as infrastructure and instruments of astronomy as a science). Leavitt's research impacted astronomy by demonstrating important traits about the periodicity of brightness, an essential element in measuring distances across the vastness of outer space. In addition, the Peruvian night sky had been photographed and recorded on glass plates that Leavitt stacked on top of each other for comparative data analysis and to produce insights into the shifts of moving stars, which in our case illuminates a key theme: early in its first official century, photography was already a measurement device that not only took pictures of people and things but offered a way to analyze the world, including the extraterrestrial.

As such, the point about technical images and measurement has already been articulated; for example. Kelley Wilder gives a good overview of some of the practices of astronomical imaging before and after the Harvard period in question and opens up important points more generally, too. Besides photographs where "the ability to measure appears to be a useful but unintended byproduct,"8 there were various intentional practices, mostly scientific, where this cultural technique was central. In astronomy, this included the Venus transit plates of 1874 and institutionalized work such as Carte de Ciel of the 1880s, "one of the most influential photographic observation projects in astronomy."9 Beyond astronomy, Raman spectroscopy and photogrammetry were "methods that bent photographic observation to mathematization," with surveying as a technique that was, as Wilder outlines, "heavily dependent on the idea of measurable photographs."10 Here, the commentary on measurement serves to illuminate the expanded scope of operational images to be discussed below.



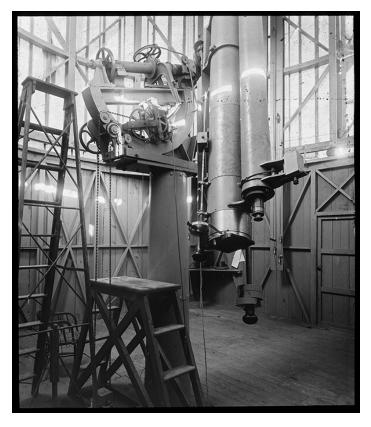
Arequipa station of Harvard university, Peru. License: Public domain.

In aptly contrasting ways, the title of Leavitt's 1908 paper, "1777 Variables in the Magellanic Clouds," rings poetic, while the opening sentence nails the argument about images as infrastructures of analysis and comparison in a pithy, informative fashion: "In the spring of 1904, a comparison of two photographs of the Small Magellanic Cloud, taken with the 24-inch Bruce Telescope, led to the discovery of a number of faint variable stars." Where Bailey had engaged with the landscapes of Peru, its altitudes and terrains, the shipment to Cambridge provided the other side of this landscape; in Leavitt's reading, the Magellanic clouds—or, more precisely, their photographic recording—provided a dynamic, periodic landscape of light to be interpreted. Leavitt writes about light that she has been observing on those records:

The variables appear to fall into three or four distinct groups. The majority of the light curves have a striking resemblance, in form, to those of cluster variables. As a rule, they are faint during the greater part of the time, the maxima being very brief, while the increase of light usually does not occupy more than one-sight to one-tenth of the entire period.¹²

Surely, Leavitt and others would have cursed Tesla's Spacelink satellite program that hinders the subtle balance and periodicity of the sky with its mass flooding of orbit. However, around the 1890s and 1900s, the night sky was still stable and observable through the gridded transparency of the glass plates that opened up possibilities of comparative analysis.

While the sky had been pictured, read, observed, interpreted, and calculated for millennia, as John Durham Peters argues in his media theoretical insight into astronomical star-gazing, the scientific analysis of movement and light became particularly interesting



Harvard College Observatory, Arequipa, Peru. Source: Harvard Library.

toward the fin de siècle. 13 The employment of both media of visual technologies (photography and spectral analysis) and the possibilities to harness the planet's spherical shape—Northern and Southern Hemispheres into a binocular view of sorts—as part of the astronomic observation unit from Peru to Massachusetts provided the backbone for broader infrastructures of knowledge. The intersections of media and the sciences (in this case, astronomy) have impacted the transformation of photography as it became "digital" and was integrated into data analysis and planetary infrastructure. Even the shape of the planet measured in geodesic triangulation can be considered part of the story of the extended planetary image.

As already mentioned, this link to scientific uses of photography, including in astronomy, should not be particularly surprising considering that perhaps the most famous words in the early history of photography (or, more specifically, the daguerreotype) were uttered by an astronomer, François Arago, in an 1839 address. This talk was given to convince the French Academies of Art and Science of the benefits of the new technique, which was why the talk aimed to make sure it was seen as a scientific one and therefore included specific attention paid to the various uses of measurement: beyond people or things, landscapes or scenes, this was a medium to measure photometrically the brightness of transmitted light and thus also provide an insight into what lies beyond this

particular planet and how that can be easily recorded on a plate. Thus, the instrument became a central part of an experimental apparatus that unfolded a whole visualization process in developing an image.¹⁴

As pointed out by Wilder, the nineteenth-century history of photography was filled with astronomical works and interests: William de Wivelselie Abney, E. E. Barnard, William Crookes, L. J. M. Daguerre, John Draper, Paul and Prosper Henry, Jules Janssen, Hermann Krone, Adolphe Neyt, Warren de la Rue, Lewis Morris Rutherford, Hermann Wilhelm Vogel, and John Adams Whipple are among a list of practitioners relevant to both sides of this technical expertise. Wilder argues that "much of their work revolved around adapting emulsions and photographic instruments to astronomical observation, and they produced everything from spectra of starlight, to photometric readings, to iconic images of the heavens."15 While much of the focus in earlier research has been on the apparatuses and their relation to both histories of technology and, in some cases, scientific discourses of validity and reliability, 16 adding an emphasis on Leavitt opens a particularly interesting avenue of consideration not only for the history of photography but also for the theoretical topic at hand, operational images.

The Operational Image

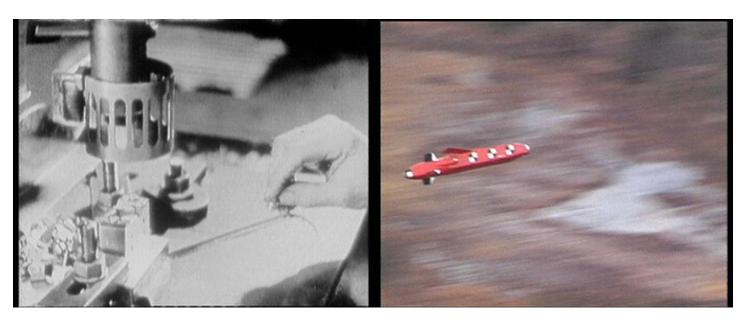
Coined by the renowned German filmmaker, artist, and writer Harun Farocki (1944–2014), the term "operational images" appeared in the early 2000s in his video installation trilogy *Eye/Machine I-III* (2001–3), which investigates autonomous weapon systems, machine vision in industrial and other applications, and the broader move from representations to the primacy of operations.¹⁷ Farocki's film installation series presents this shift as a particular kind of image that emerges in those institutional practices, although it also articulates the shift through the various histories and spaces that condition both the emergence of such images and their industrial base: these include military test facilities, archives, laboratories, and factories.

This institutional line of references is common in many of Farocki's films that investigate how contemporary images are intimately tied with modern forms of industrial production, departing from a history of images focused only on visual culture to embrace histories of chemistry, violence, labor, exploitation, and data. Already in *Images of the World and the Inscription of War* (1989), Farocki mapped a similar terrain of investigation, exploring how to read landscapes, aerial imagery, targeting systems, and also other forms of modeling, simulation, and aesthetic techniques as they operate in the world in the fundamentally material sense.

Farocki's work with images about images sets a scene and opens up an artistic, epistemic, and research-focused agenda. *Eye/Machine III* (2003) is one such example,



Large Magellanic Cloud taken on December 18, 1900 from Arequipa, Peru.



Harun Farocki, Eye/Machine I-III, 2001-2003.

where operational images are articulated across a set of cases: factory scenes of data and measurement for infrared aircraft detection systems, the laser scanning of built structures, and the engineering of robotic navigation systems that sense the space around them. Images produced in these situations are drawn from machine-vision systems of perception, embodied and embedded in autonomous or remote systems, working through an artificial environmental relation where the image is a crucial part of movement and guidance. 18 Operational images are, in Farocki's words, "pictures that are part of an operation," implying the primacy of action and function instead of a picture to be seen and interpreted for meaning.¹⁹ Perception is tightly coupled with action, immediate or delayed. This coupling systematically operationalizes terrains and targets. Hence guidance systems, movement, tracking, measurement, and precision are some of the contexts that take precedence in such images that are often, in terms of visual history, "inconsequential," as Farocki bluntly puts it.²⁰ The notion of the "operational image" is also a condensation of an aesthetic program that relates to what images are seen, which ones are archived, and which ones of the multitude of images are merely used and erased:

Images that appear so inconsequential that they are not stored—the tapes are erased and are used again. Generally the images are stored and archived only in exceptional cases, but exceptional cases one is sure to encounter. Such images challenge the artist who is interested in a meaning that is not authorial and intentional, an artist interested in a sort of beauty that is not calculated. The US military command has surpassed us all in the art of showing something that comes close to the "unconscious visible." ²¹

While military contexts of machine vision have taken up most of the commentary and attention when it comes to Farocki's notion and its articulation in moving images and photography, it is clear that the breadth of examples tells a larger story than one merely about genealogies of *military* vision systems. This is not to dismiss such a key trait. Farocki's examples—from a 1942 instructional film showing the operations of a V-1 guided missile, to the 1990s military systems that became a key topic for art and media theory from Jean Baudrillard to Paul Virilio—are persistently apt in the context of contemporary drone warfare and in the media archaeology of military vision. Even Farocki himself reads "the US military command" as part of a new aesthetic operationality of visibility.

Furthermore, operational images concern not only perception and sensing turned into images but also operations. The history of the centrality of "operations" can be traced to the field of operational (or operations) research (OR) as developed by the US and British militaries starting in the 1930s but especially during the war years of the 1940s: quantifiable analysis of military operations for purposes of optimization. The field then developed into the Cold War's "speculative fabrications of systems analysis," such as those produced by the RAND corporation in the United States.22 These are institutional-level "machine learning systems" that aim to formalize, train, and model based on available quantitative data. Learning itself becomes a formalized operation. For OR pioneers and controversial practitioners such as Herman Kahn, the successes of operations research in World War II proved the greater effectiveness of mathematics over time-honored tactics. Systems analysis was unquestionably superior, in his view, despite the common belief that "experience" has been a better guide

than "theory" in this kind of work.23

Of course, an opposition of theory vs. experience was a bit of a simplification considering that one pioneer of operational research, Patrick Blackett (later Baron Blackett, and later also featured in Thomas Pynchon's *Gravity's Rainbow*), defined the pillars of OR as based on "observation, experiment and reasoning." A broader understanding of the scientific method had been rolled out and integrated into how space, strategy, tactics (including the evaluation of the success of tactics), and logistics were to unfold based on data.

Nonetheless, to keep with Kahn's exaggeration in spirit and style, perhaps OR did more for "theory" than French 1960s structuralism and poststructuralism.²⁵ Perhaps not, and it is definitely not the sort of theory we usually practice or *want* to practice in the humanities, but one point was made clear: experience is secondary, formalizable design and planning are primary. To program the battlefield, you program people first, while later on you have programmable machines such as the ones that produce and analyze operational images as we know them now.

To deal with large-scale systems, logistics, and abstractions, one had to fine-tune a different mindset: "In decisions regarding weapons systems development such as choosing between long-range bombers with big fuel tanks or short-range bombers with refueling capacities, 'no one can ... answer by instinct, by feeling his pulse, by drawing on experience," as RAND economist Charlie Hitch put it.²⁶ In short, the centrality of complex calculations (e.g., logistics), the massive amount of data to be processed, decisions to be taken, and the multiple scales of abstraction were not commensurable with the cognitive capacities of humans in the traditional sense of even trained officers. The necessity to be able to rationalize, theorize, model, and potentially automate decision-making in the context of complexity persisted from the war to the postwar period—for example, in management theory, making it a part of systems thinking where any decision was part of a meshwork of other decisions, by other actors, in a recursive loop.²⁷ Cultural techniques of quantification connected to modelling were one particular route offered in this history of what "operations" came to mean on and off the battlefield. Numbers count landscapes and what moves through them; they count routes and their optimal relations; they count possibilities and potentials, and numbers are the backbone of both images and industrialization. Data is not infallible and simply "objective," as critical data studies has shown over and again,²⁸ but it can be effective whether it is correct or not. Rolling out data-driven decisions, systems, and operations is also an intervention in landscapes, social relations, values (financial and others), and more. These historical development are the implicit conditions of emergence for what Farocki called the "soft montage" of archive and inconsequential images.²⁹ One peculiar context for such images is thus the over seventy-year history of military-driven operations research and subsequent management theory and some 150-year history of photographic-driven data analysis. In some ways, this all condenses into "an industrialisation of vision" or even "industrialisation of thought," as Farocki himself characterized his interest in cinema and perception, directly echoing Virilio's work on the "veritable market in synthetic perception." The contemporary versions of this "industrialisation of thought" relate to questions of artificial intelligence and machine vision, but also to the genealogy of the concept of operations as it pertains to images, institutions, spaces, and nonhuman visuality.

The industrialization of vision has often been linked to the industrialization of destruction, a theme that connects Farocki to the theorization of war and visuality in the 1980s (and later).33 Much of this resonates with contemporary analyses of the Russian invasion of Ukraine and the role of images: "The operation of the image is defined by certain infrastructures," writes Lesia Kulchynska in her take on the weaponization of visuality, drawing also on Anna Engelhardt's research.34 As technical processes of abstraction, images that are primarily for targeting and destruction feature as part of a genealogy of rationalized violence that human bodies are subjected to. As such, Farocki's take on operational images could be seen as a crystallization of much critical theory, thematically visible in his works that focus on the Holocaust, the Vietnam War (napalm in Inextinguishable Fire, 1969), the Gulf War, and the prison-surveillance-capitalist complex.35 But there needs to be nuance in how this concept of the operational image is read and used, avoiding the temptation to pack all sorts of abstractions—and abstract images of technical and calculational use—into one box, implying a kind of Enlightenment gone awry, a stream of violence and extraction that is merely about military power in the restricted sense of warfare. This is not to ignore the operational violence of capitalism or the colonial uses and functions of measurement and their neocolonial forms; but to take a position against abstraction on principle would be a mistake, leading us to insufficiently nuanced readings about technical images. We have plenty of those already, and in the context of environmental imaging, remote sensing, Al and platform culture, and many other crucial topics, we can no longer afford to miss the more detailed high-res insights.

In other words, I propose a shift from military operations to the other, closely aligned uses of force that define the current landscape of operations: "Operations Other than War." This is not a nonmilitary form of power, but one that builds on particular logistical capacities and systemic, technological potentials of power primed for the contemporary planetary situation, from environmental issues to humanitarian assistance to the enforcement of exclusion zones to the handling of pandemics. In some ways this approach relates to the twentieth-century lineage of operations research, but it also becomes a way

to tap into the contemporary logistical wiring of bodies and territories. In Rosi Braidotti and Matthew Fuller's words, the

conflict is played out, triggered, and modulated through means that include *finance*, *smug gling*, *culture*, *drugs*, *media and fabrication*, *technologies*, *resources*, *psychological operations*, *networks*, *international law*, *ecologies*, *economic aid*, *and urban terror*. War becomes postdisciplinary, multiscalar, creative, and highly mediatic and technological, deploying specialized multiskilled teams and techniques.³⁶

In other words, war and conflict become part of the extended repertoire of media techniques of confusion, doubt, and misinformation, often paired with the deployment of "ruses, proxies, ambiguous agency, hyperbole, the operationalization of 'mistakes' and unattributable forces." Hence, we can ask: what format of operational images speak to this state of war and violence?

We might not (always) be at war, but we are (always) mobilized and operationalized. This could also be referred to as the perceptual and operational fine-tuning of the "nonbattle," a term first introduced by Virilio and developed by Brian Massumi. Operations and actions are embedded in a broader field of intensities and potentials, possibilities, and the modeling of futures. "In the nonbattle, the relation between action and waiting has been inverted. Waiting no longer stretches between actions. Action breaks into waiting."38 The operational is nested here in the significance of knowing how soft power can work effectively. Massumi continues: "Soft power is how you act militarily in waiting, when you are not yet tangibly acting ... In the condition of nonbattle, when you have nothing on which to act tangibly, there is still one thing you can do: act on that condition. Act to change the conditions in which you wait."39

Operations that act on the conditions of existence and on the conditions of further operations sound like a version of Virilio that Massumi restages. They also sound like a proposal that could come from the direction of Foucault's analysis of architectures and diagrams. One could also consider images as tableaus of information⁴⁰ (in reference to Gilles Deleuze's terms) that cut across and rearrange traditional scales of experience, space, and meaning, such as the abstract images that rearrange today's technological cities. Indeed, the Farocki in question here is somewhat less the critic of Enlightenment reason (in the lineage of Theodor Adorno and Max Horkheimer) and more the media archaeologist mapping what is visible, what is sayable, and importantly, what is countable. This line of argument shifts Farocki from a thematic analysis of

modern rational images to a *method* of mapping archaeologies and genealogies of images as they become working material for critical thought. This material, though, is thoroughly conditioned by a recursive loop between industrial production and images in and out of war. Raymond Bellour calls this, rather aptly with a Foucault-inspired undertone, the "photo-diagram"—another phrasing of the methodological positions at play in operational images. Bellour's note on Farocki's material is fruitful for our purposes:

The photographs as well as the actual film recordings are equally ordered pieces of evidence of a reasoned assessment of the nature of the visible as defined on the basis of the very invisibilities that form it, leading to so many machinic and asubjective regulations, normativities and constraints.⁴¹

Operational images have been discussed in film studies by, for example, Volker Pantenburg, Thomas Elsaesser, Pasi Väliaho, and Erika Balsom, and in contemporary art discourse by Trevor Paglen, Hito Steyerl, and Lawrence Lek, among others. Many recent cinematic examples develop related insights and themes, such as All Light, Everywhere (2021) by Theo Anthony, the work of Geocinema, and the work of Beny Wagner and Sasha Litvintseva. Many others could be named, too. The Harun Farocki Institute in Berlin is institutionally significant in that it navigates among cinema, art, and discursive work as a "platform for researching [Farocki's] visual and discursive practice and supporting new projects that engage with the past, present, and the future of image cultures."42 Farocki's name stands at the intersection of multiple genealogies, practices, and concepts that are not reducible to a story of an auteur. I do not claim that previous writing about him has done this either; Elsaesser already identified many of Farocki's works as "contributions to media archaeology, as well as an essential part of the prehistory of digital images" where questions of interface, simulation, and, indeed, operation become central hinges for an appreciation of particular kinds of genealogies of which the digital is only one technical term. As Elsaesser puts it.

These changes we tend to associate with the digital turn, but operational images just remind us that moving as well as still images have many histories, not all of which pass through the cinema or belong to art history. Digital images may merely have made these parallel histories more palpably present, but operational images, as Farocki clearly saw, have always been part of the visual culture that surrounds us.⁴³

Two intersecting, closely related points sum up this argument: On the one hand, "operational images" can be seen as a term that speaks to techniques of measurement, analysis, and synthesis through techniques of images but in particular institutional situations and uses. Operational images organize the world, but they also organize our sense and skills in terms of how we are trained to approach such images, from the photogrammetric mapping of landscapes to pattern recognition, from astronomy datasets to Mars Rover imaging practices. On the other hand, the term relates to practices (and labor) of testing, administering, and planning also reflected in the sites of filming where Farocki himself worked. These range from schools to offices to management-training centers and army field exercises, to paraphrase Elsaesser. To also quote his summary: "To operational images correspond operating instructions for life."44 As instructions for life, operational images also imply a broader use of the term "algorithmic" as the training of bodies, the setting of institutional routines, and the rehearsing of automation in ways that tie machines to laboring human bodies. Imaging practices become operational in how they tie bodies into collective routines.

What characterizes Farocki's films as investigating the "education image" (to quote Antje Ehmann and Kodwo Eshun) is exactly this quality of attending to "scenes that dramatize narratives of learning" and to material spaces, signs, and images that define learning ("work desks, typewriters, books, diagrams, and equations that constitute the scenographies of learning").45 But after learning becomes about machine learning and training refers to the training set, we also have to adjust the scope of these cultural techniques. The work of labeling images in practices of supervised machine learning is one scene of the training of both neural networks and the people involved in sustaining those networks.⁴⁶ The discourse of the photographic, but also the discourses of "education" and work, thus become restaged in ways that do not merely resemble the factory or the earlier use of the industrial scene, but as globally distributed across logistics platforms, such as Amazon Mechanical Turk.⁴⁷ Not that one image replaces the other, but the educational image, navigational image, instructive image, and operational image take place at moments and sites of transition, exchange, and transformation. The electronic switch—and its relation to the circuit and circuit board, the techniques of control and optimization—defines the way both twentieth- and twenty-first-century operations and (technical) images become the historical site of connection.

In other words, societal operations are part of the broader framework of discussion of this particular aspect of visual culture, even if this at first seems in exact contrast to Farocki's own somewhat fragmented description of operational images: "Images without a social goal, not for edification, not for reflection." Farocki should not be taken to mean here that operational images are devoid of

politics in relation to a variety of societal institutions. While such images are not interesting to look at as images, they are linked to a long chain of institutional, epistemological, and other uses that trigger a different aesthetics, one that speaks to questions of what is now, perhaps, called the nonhuman image⁴⁹ and the nonrepresentational image as they circulate across institutional sites and uses, from education to training and the algorithmics of the everyday.

In summary: Operations and operationality are key concepts for contemporary visual and media theory even as they encompass more than just the visual, the visible, and the lens-based. The operational image is irreducible to being merely about digital images, big data, or artificial intelligence (machine/deep learning). These technologies are far from irrelevant, but they should be placed into a historical dialogue with questions of data, sensing, and spatial uses of images. The approach to operational images should be transdisciplinary, linking discussions in media theory, art studies, architecture, and critical infrastructure with visual culture studies. Shared concepts bind together different disciplines. Concepts, too, operate.

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