MEDIATING

Issue 08 The Society for the Diffusion of Useful Knowledge January 2021

Stephanie Syjuco, *Block Out the Sun*, 2019. COURTESY THE ARTIST.

mediate (v.)
1540s, "divide in two equal parts" (a sense now obsolete), from Latin *mediatus*, past participle of *mediare* "to halve," later, "be in the middle," from Latin *medius* "middle" (from PIE root ***medhyo***- "middle"); from 1640s as "**occupy a middle place or position.**" Meaning "act as a mediator, intervene for the purpose of reconciliation" is from 1610s; that of "settle by mediation, **harmonize**, **reconcile**" is from 1560s, perhaps back-formations from **mediation** or **mediator**. Related: *Mediated*; *mediates*; *mediating*.

mediate (adj.)
early 15c., "intermediate," from Medieval Latin *mediatus*, past-participle adjective from Latin *mediare* "**to be in the middle**," from *medius* "middle" (from PIE root ***medhyo***- "middle").

The Society for the Diffusion of Useful Knowledge is a serial broadsheet publication produced by the Blackwood Gallery, University of Toronto Mississauga. Initiated in conjunction with *The Work of Wind: Air, Land, Sea* in 2018–19 to expand perspectives on environmental violence through artistic practices, cultural inquiry, and political mobilization, the SDUK is becoming a signature triannual Blackwood publishing initiative in 2021.

As an organization addressing the challenges of the 21st century through artistic-led research, the Blackwood's ambition is to convene, enable, and amplify the transdisciplinary thinking necessary for understanding our current multi-scalar historical moment and co-creating the literacies, skills, and sensibilities required to adapt to the various socio-technical transformations of our contemporary society. Such a commitment requires a lithe methodology that is rooted in the arts, inspired and informed by emergent methods of curatorial research, and shaped by transdisciplinary engagements with collaborators from a host of other disciplines and partners working outside the university, whether in industry, business, government, or civil society. This methodology is necessary for contemporary research-based practices because the so-called "wicked problems" that challenge the stability of contemporary societies can no longer be addressed from a single disciplinary perspective.

THE SOCIETY FOR THE DIFFUSION OF USEFUL KNOWLEDGE (SDUK)

The Society for the Diffusion of Useful Knowledge (SDUK) composes and circulates an ecology of knowledge based on the relationship and antagonism of "useful" ideas. The name of this innovative platform is borrowed from a non-profit society founded in London in 1826, focused on publishing inexpensive texts such as the widely read *Penny Magazine* and *The Library of Useful Knowledge*, and aimed at spreading important world knowledge to anyone seeking to self-educate. Both continuing and troubling the origins of the society, the Blackwood's SDUK platform asks: what constitutes useful knowledge? For whom? And who decides?

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Please note: the Blackwood Gallery and offices are closed throughout winter 2021 due to the COVID-19 pandemic. During this time, staff are reachable by email only.

Block Out the Sun

Stephanie Syjuco

Archives, museums, and collections subjectively frame historical narratives based on the objects they choose to collect and display. Photographs of the 1904 World's Fair (sourced by Syjuco from local archives of St. Louis, Missouri) depict Filipino "natives" in a faux village created to commemorate colonial conquest in the Philippines. Over 1200 Filipinos were imported to the United States for the Fair, and were impelled to perform staged dances and rituals. *The Philippine Exposition* was a so-called "living exhibit," but is more aptly described by Syjuco as a "human zoo." Colonial hegemony and white supremacy were rationalized at the fair as "American progress" in the guise of ethnographic education and entertainment.

In *Block Out the Sun*, Syjuco uses her hands to redact the faces of the Filipino individuals that were put on display—a direct physical intervention that employs the artist's body as a temporary shield and a marker of defiance (see cover and p. 34). While the images are relevant as a pedagogical record, they serve as symbols of racist stereotypes and manifest Orientalist principles. *Block Out the Sun* generates a counter-narrative by acknowledging the photographs remain in historical records, but thwarting the viewer's ability to simply consume the faces of the people put on display.

How to Read this Broadsheet

This eighth SDUK broadsheet takes **MEDIATING** as its theme, in parallel with the Blackwood's virtual program *Running with Concepts: The Mediatic Edition*, to consider sites and practices of mediation in culture, technology, and media. Following SDUK07: TILTING (an urgent 2-part issue in response to the first wave of COVID-19), the series returns in 2021—albeit in a form that continues to be shaped by the effects of the pandemic—and launches simultaneously on the Blackwood website.

For those who wonder, **how are mediated circumstances changing our ways of relating and predicting?**, excerpts from Tommy Pico's book-length poem *Junk* (p. 18) offer a riotous convergence of land, love, and queer sexuality against the ever-looming backdrops of climate change, fascism, and settler colonialism. Reckoning with futurity in his continued engagement with economics, D.T. Cochrane critiques economic forecasting's failure to model for uncertainty (p. 30).

With tech companies holding monopolies on internet infrastructures, some readers may wonder: **What forms of technology critique and dissent are needed?** A panel discussion with Meredith Broussard, Beth Coleman, and Shalini Kantayya reflects on the biases amplified in artificial intelligence and facial recognition technologies (p. 7); while Taeyoon Choi warns against repeating the inaccessible, racially-homogenous, and male-dominated norms of tech companies within the emergence of the distributed web (p. 4). Mike Pepi's *Elements of Technology Criticism* aims to set baseline principles for broad-scale technology critique, and his accompanying essay reflects on a recent workshop where participants co-wrote and annotated responses to his text (p. 16).

Readers may also be asking, **what are the alternatives to status-quo technologies?** *HOW ARE WE* (a project with over two dozen contributors, p. 20) uses blockchain to upend conventional ownership and authorship—their contract is reproduced here in full to model the inventive nature of this alternative. Beyond the pages of this broadsheet, we continue to learn from artist and activist projects that map alternatives to oppressive practices in the technology industry: from Julian Oliver's *HARVEST*—which harnesses wind power to mine cryptocurrency in support of climate-change research—to a recent open letter from Black in Computing examining how systemic racism has perniciously impacted all facets of tech culture, offering measures for building more equitable practices in computing.

Considering the long, historical continuum within which contemporary technologies operate, some may wonder: **How can we resist and refuse harmful data practices?** An artist project by Tiara Roxanne (p. 32) visualizes "data colonialism" as an ongoing practice of extraction; while Stephanie Syjuco's work (cover; p. 3 and 34) intervenes in archival images of colonial exhibitions. The Feminist Data Manifest-No (p. 10) offers an expansive set of refusals and commitments to reframe how data is used, collected, shared, analyzed, and mobilized.

As we magnify many facets of data and technology throughout the issue, readers might still wonder **whose voices get overlooked in cultures of science, policy, and technology?** *The Great Silence*, a short story by Ted Chiang (p. 14), considers how non-human beings are ignored amid Promethean human ambitions; while Constance Hockaday's *Artists-In-Presidents* (p. 12) reappropriates the centralized power of the Head of State in favour of a polyvocal chorus of speeches, poems, portraits, and performances.

As in previous SDUK broadsheets, we close with a glossary to clarify, complicate, and upend terms within the issue. Visit the Blackwood website to see how these terms fit within our newly launched glossary tool, a guide to concepts that underpin creative practices and global issues throughout the Blackwood's ongoing work.

Racial Justice in the Distributed Web

Taeyoon Choi

Introduction

Distributed Web of Care is an initiative to *code to care* and *code carefully*.

The project imagines the future of the internet and considers what care means for a technologically-oriented future. The project focuses on personhood in relation to accessibility, identity, and the environment, with the intention of creating a distributed future that's built with trust and care, where diverse communities are prioritized and supported.

The project is composed of collaborations, educational resources, skillshares, an editorial platform, and performance. Announcements and documentation are hosted on this site, as well as essays by select artists, technologists, and activists.

Taeyoon Choi, *Distributed Web of Care*, Ink on paper, 2018. COURTESY THE ARTIST.

Distributed Web of Care

I consider the internet as an environment, a digital space where limits are imposed upon access just as in physical environments. Reflective of the society which we inhabit, discriminatory principles are embedded in the digital space through racist, sexist, and ableist ideologies and exclusionary algorithms. Jeff Chang writes in his recent book *We Gon' Be Alright: Notes on Race and Resegregation*, "Segregation is still linked to racial disparities of every kind. Where you live plays a significant role in the quality of food and the quality of education available to you, your ability to get a job, buy a home, and build wealth, the kind of health care you receive and how long you live, and whether you will have anything to pass on to the next generation." The ability to access online spaces and information can certainly be added to this list. As a disparity unfolds in the digital space, I feel a shared responsibility to intervene in these systems of exclusion, and to build a more equitable web.

There is now a moment and opportunity to develop a different kind of internet, an internet which is more just, diverse and caring. The distributed web presents an alternative to the centralization of the big five tech companies. Similar initiatives are often referred to as the decentralized web. Although they have significant semantic and technical differences, I will group them as a family of likeminded projects for this essay. Harnessing new protocols like Dat, IPFS, SSB and various blockchain experiments, the distributed web presents a peer-to-peer model, prioritizing collective agency and individual ownership of data and code. Much like its infrastructure of autonomous nodes, the development of the distributed web is a collaborative effort, based on the community's genuine excitement about the do-it-yourself, grassroots approach to rebuilding the web.

From my limited exposure and engagement with the distributed web communities, the developers and contributors working on the distributed web have not been ethnically or sexually diverse. Most people I interact with in real life and online have been white or light skinned, cis-gender or male, from or working in the first world countries. This is not anything new. The "internet" as we know today has been developed by white male engineers working in academia and military-industrial complexes. It's not surprising the protocols and networks, as well as its epistemologies and affects are contained in their imaginations. To be more accurate, the internet has not been developed solely by the white male engineers, but the narratives of its development have been dominated by the triumphs of white male engineers. To learn about the queer engineers, your can read Jacob Gaboury's *A Queer History of Computing* and to learn about the female engineers, you can read about Claire L. Evans book *Broad Band*. Things are changing. For example the first Decentralized Web Summit organized by the Internet Archive in San Francisco in the summer of 2018 made explicit efforts to invite people of colour, artists and creatives, and those who would not be able to afford to attend an expensive conference. While the sense of unsettling innovations, threats, opportunities were present in the conference, so were the presence of human rights advocates-lawyers, activists-community organizers, artists-storytellers. A space that's cohabitated by various species will be mutually advantageous and more sustainable.

The Distributed Web of Care is an art project that engages this moment of technological change through performance, drawing, critical writing, and community building to address the inequalities in the internet and the power dynamics within the traditional axis of technological production. Central to this project is the question: "What kind of network do we want for the future?" In redistributing the internet's keys (literally as unique hashes for data and metaphorically as invitations to access), and infrastructure (the fiber optic cables connecting new and obsolete electronics), there is an opportunity to redistribute power and reconfigure who can code the principles and ideologies of our technologies.

The Distributed Web of Care seeks to shift the centre of tech culture from corporations to a diverse community of technologists, artists, engineers, and scholars, holding identities across races, genders, privilege, and abilities. If the "new internet" is developed by people of color, women, queer folk, and disabled people, we can imagine new protocols and networks, untethered by the constraints which have led to these voices to remain excluded. To bring equality to access and equity to ownership of technology, we need to create new narratives of the internet, tools for learning and empowerment, and systems of interdependence among communities.

Issues of race, disability, habitat, and gender all intersect in the places we live and interact in, whether physical or digital, on the condition of access. Social media and web 2.0 has encouraged a gentrification of the internet, where information is segregated and digital labour commodified. Aria Dean writes in *Poor Meme, Rich Meme* about the displacement of capital in the attention economy, in which young creators of memes, most often people of colour, rarely get compensated while the tech giants profit from our engagement with these platforms. I see my practise as "networking," like weaving or knitting, where access is the fundamental building block to examine and connect the intersectionalities of race, gender, disability, and environment.

I remain struck by the song, *"Do you see my skin through the flames"* by artist Blood Orange, Dev Hynes. He sings,

> Tasting pain coming from a place of truth,
> to be another in a messy world
> to feel like giving in another turn?
> You wouldn't listen if I told you
> so how can I become anyone?

People who have been identified as an "another," marginalized people who carry "otherness," find inaccessible spaces to be hostile. They are told they can't be anyone in that space. In order for them to feel welcome there, they need a direct invitation from the people who hold power in that space. In other words, the distributed web developers and organizations need to make active invitations to artists, creatives, policy makers, activists, organizers and those who don't identify as developers or hold privileges to access education and technology. With a warm welcome, they can visually, sonically, empathetically redefine the distributed web. They may hold a power of queering, cripping, imagining and reverse engineering which can mend the boundaries between code and code of conduct, challenge the definitions and bring together those who saw each other as "another" or the "Other."

Take for example Roy DeCarava, a photographer who was active during the '60s and onward. In an article *A True Picture of Black Skin*, Teju Cole writes about DeCarava's photography and its use of the commercially available films, optimized for light skin since the majority of consumers were white people preferring to look tan. This bias embedded in the technology of film led to photographs of people of color depicted with skin much darker. DeCarava uses the biased optics against itself, presenting a photograph of Mississippi Freedom Marchers in Washington D.C. in 1963, where the determination in her face is captured by the high contrast dark image. Rather than manipulate the photograph to make her skin brighter, or normalizing data, DeCarava makes creative interpretations of both the subject's presence in the photo and the exclusionary principles of the technology.

Like the consumer film of the '60s, contemporary code conditions the reality to appear with biases. Our perceptions are altered by the information we have access to, and our decisions are never independent from the consciousness altering technologies. When a facial detection algorithm categorizes dark skinned person as animals, how is that different from films that render dark skinned person invisible? The most urgent task for anyone concerned with racial justice now is to acknowledge *we are not living in a post-racial environment*. The goal of the Distributed Web of Care is to expand the definition of "code" and "coder" to a more racially diverse, inclusive and creative definition, building resources and a community invested in a more equitable internet.

In the past ten months of the project, I've been learning and unlearning from my collaborators: fellows, residents, stewards and students about the web we want. I'm glad to have had opportunities to work with diverse artists and writers on the project. Many of the essays in this

Black and white photograph of a young Black woman wearing uniform, standing among other Black people.

Roy DeCarava, *Mississippi Freedom Marcher, Washington, D.C.*, 1963.
COLLECTION OF THE NATIONAL GALLERY OF ART, WASHINGTON, ROBERT B. MENSCHEL FUND (1999.67.3).

project are not addressing the internet directly. Instead, they explore racism, feminism, disability theory, and arts. It was my intention to *fold* cultural criticism with technology criticism, creating a lush garden of epistemologies and a chasm for new definitions. For example, how can we define “peer” from a social practice art perspective, from a community banking perspective and from a peer to peer protocol perspective? When the new distributed web becomes something tangible, it will be a network of various people who are generous with their talent and care. If the current distributed technologies (such as blockchain applications) start from a place of trustlessness, the distributed web of care will start from trustfulness. Let’s imagine a world of trustfulness and care, where protocols work on behalf of those who need the most support. Perhaps it will be an equitable web, an environment where people who associate in multiple racial identities cohabitate in a nurturing ecosystem. Racial justice is connected to all other aspects of justice in our environment. As Nabil Hassein, my co-organizer of Code Ecologies conference, asked, “How are all of our relationships?” in *Computing Climate Change and All Our Relationships*. Race, environment, and code (language, math, logic, systems and infrastructure) are connected webs of intentions, desires, hopes and needs. I think of poetic computation, distributed web and other do-it-yourself low tech alternatives such as *Low-tech Magazine* as small, honest attempts to create justice in the technological environment and digital space.

This text was edited by Shira Feldman and first published on the website of *Distributed Web of Care*, 11 January 2019. http://distributedweb.care/posts/racial-justice.

Taeyoon Choi with Jerron Harman, stud1nt, Tiriree Kananuruk, Jonathan Dahan, Chancey Fleet and the School for Poetic Computation, Distributed Web of Care, Whitney Museum of American Art, 2019. PHOTO: FILIP WOLAK.

Coded Bias: Race, Technology, and Algorithms

Meredith Broussard, Beth Coleman, and Shalini Kantayya

This conversation, recorded and broadcast in October 2020 as part of Running with Concepts: The Mediatic Edition, *responds to the 2020 film* Coded Bias, *directed by Shalini Kantayya. The film explores the fallout of MIT Media Lab researcher Joy Buolamwini’s discovery that facial recognition does not see dark-skinned faces accurately, and delves into two crucial intersecting questions: What does it mean when artificial intelligence (AI) increasingly governs our liberties? And what are the consequences for the people AI is biased against?*

Beth Coleman: Shalini, why make this movie? Why is this important?

Shalini Kantayya: A lot of my work has to do with disruptive technology, and whether disruptive technologies make the world more fair or less fair, and for whom. My last film explored small-scale solar power as a sort of utopian vehicle for uplifting the working class and the middle class in the US. And then I stumbled upon the work of Joy Buolamwini and other authors in the film—Cathy O'Neil's *Weapons of Math Destruction*, Safiya Umoja Noble's book *Algorithms of Oppression*, and of course, the great Meredith Broussard book *Artificial Unintelligence*. I fell down the rabbit hole of the dark underbelly of the technologies that we're interacting with every day.

BC: Can you give people a kind of high-level description of what is at stake with *Coded Bias*?

SK: Everything we love, everything we care about as citizens of a democracy is going to be totally transformed by artificial intelligence—in fact, it is in the process of being transformed. Not just our information systems, but things as intimate as who gets health care, who gets hired, how long a prison sentence someone serves, are already being automated by artificial intelligence. What I learned in making the film—which stands on the foundation of probably three decades of scholarship and activism and research, mostly by women, people of colour, and LGBTQ communities who have been speaking the truth about what's happening in Silicon Valley—is that these technologies have not been vetted for racial bias or gender bias, or even accuracy or fairness. And they exist in these black boxes that we can't examine as a society. What I began to see in the making of *Coded Bias* is that AI is where the battle for civil rights and democracy will happen in the 21st century.

Meredith Broussard: As Shalini said, these systems are not sufficiently audited for racial bias or gender bias. One thing that is a little horrifying to me is that these kinds of systems represent gender as a binary. We know that gender is a spectrum; we've moved as a society beyond the gender binary. And yet, these AI systems still encode gender as a binary. So that's a really good example of how these systems do not keep up. We have this myth that technology moves fast. In fact, often the opposite is true—because people like to write a system that replaces human workers, and then get rid of human workers. And then there's nobody around to update the system when it inevitably needs updates. It needs updates, for fairness; it needs updates for equality. The world is not going to stop changing. Our technological systems need to keep up.

BC: We talk about gender as non-binary, and increasingly, there's not just a rich experience, but a rigorous conversation about why that's important. Can we also talk about race as non-binary? If prediction is based on legacy, how do we think about new models of training?

MB: I have thought about this my whole life, because I identify as Black and my father's Black, my mother is white, and I code as kind of racially ambiguous. The boxes that you have to check to identify yourself racially have been an issue for my entire life, because you have to choose, which is absolute nonsense, because identity is so much more than that. But this was the background that I came to computer science with. In the film, Joy Buolamwini—a really remarkable researcher—has a great moment where she's trying to build a mirror that is going to recognize her face and deliver her an inspiration every morning, and the mirror doesn't recognize her face. It's this moment where the technology has betrayed her. And she decides to investigate why.

The moment when I realized that was when I was filling out a census form, and I realized, "Oh, I'm not sure how I would count on the census." This is the moment that I go back to whenever I build technology. It's the moment that gives me empathy for people who identify as multiple things. It's also an experience that is ignored by designers of computational systems. Computational systems—AI systems specifically—are mostly designed by cisgender white men who go to elite universities and train as mathematicians and engineers. The problem is that when you have technology created by small and homogeneous groups of people, that technology inherits the conscious and unconscious bias of its creators. One of the things that Shalini's film does so well is call attention to bias and help us understand exactly how bias works in facial recognition systems, and help us understand the consequences for society and for democracy.

SK: I just want to speak to something viscerally—I was with Joy, at MIT, as a sort of camera that had facial recognition for another art project was installed. I had the experience of standing next to Joy and the computer could see my face, and the computer could not see her face. Even in the film, I don't think it could capture how I felt in that moment, because it really felt like, "When the constitution was signed, Black people were three-fifths of a human being. And here we're sitting at a computer who's looking and doesn't see Joy as a human being, doesn't recognize her face as a face." To me that was a stark connection of how racial bias can be replicated. I think when you experience it viscerally—and that's not even a misidentification that comes with police, law enforcement, frisking you, or some infringement on your civil rights—just that visceral experience of not being seen has implications that we need to talk about more.

MB: And that phrase: “Who gets to be human?”, or “Who gets recognized as human?” is a phrase that resonates with me. Because we've put so much faith in computational systems as interpreters of the world. And yet, these systems are making judgments all the time on who gets considered to be human. It reminds me of centuries of oppression and all of the social problems that have evolved from people not being considered human, not being considered good enough or part of hegemonic culture.

BC: I'm building on what Meredith has pointed to—what many people have pointed to—in terms of the homogeneity of who’s in these rooms. And it’s a small number of incredibly powerful companies, groups, and industry groups. My question is, in addressing diversity, is it enough for that room to have different types of people in it? If we are working really, really hard to make sure that the data is diversely representative, aren't we going to be trying to just fix the problems, as opposed to rethinking how we're designing the systems from the ground up?

SK: Part of the issue is inclusion. As Meredith points out, this is a small group of white men, largely under thirty, that are doing this kind of work. If we have facial recognition that works perfectly on everyone, we're going to have perfect invasive surveillance. I don't believe that the solution is having a perfect algorithm.

What's terrifying is that essentially Joy through her work at Gender Shades—and the supporting research of Timnit Gebru and Deborah Raji—points out that systems that were not on a shelf somewhere were racially biased. This was already being sold to ICE for immigration, already being sold to the FBI, already being deployed largely in secret, at scale, by US police departments across the country. And somehow three scientists figured out this is racially biased, and the tech companies missed it. Just the fact that that can happen points to a hole in our society, which is: how are these technologies being deployed at scale, when they're so powerful, and have so much capacity for harm? Why isn't there something like an FDA for algorithms, something where we have to prove that it's safe, and will not cause unintended harm to people?

MB: I think we need more diverse people in the room, period. That is one fix, but it will not address the entire problem. Yes, we absolutely should make our training data more diverse. But we should not deploy facial recognition in policing, because it disproportionately affects vulnerable communities. It disproportionately is weaponized against communities of colour, against poor communities. Making the algorithm better is a step and is important to do, but it doesn't actually fix the problem.

I want to go back to something that Shalini said about her earlier work in in utopian visions. Thinking about utopia is so important when we're talking about technology, because the urge to say, "Can't we just tweak this and make it better?" is actually a utopian fantasy. We somehow imagine that if we can make a good enough computer, then all the problems of humanity will disappear, which is such a wonderful vision, but is exactly that: a vision, a utopian vision, and completely impractical, because there is no machine that will get us away from the essential problem of being human.

BC: When is it a great thing to not be seen by advanced automation? When is it actually a great relief to use your laser pointer or your dark skin or whatever it is knowingly or unknowingly to not be captured?

SK: Well, certainly the people of Hong Kong would say, "when you're protesting." You don't want your face to be instantly recognized and pulled up to a social media profile. The pro-democracy protesters in Hong Kong have been incredibly inventive in how they're resisting authoritarian use of facial recognition. But the truth is, unless we have some laws that protect us, I feel that we don't live in a culture where we can opt out of these systems anymore.

BC: Is the legislative route where you’re predicting success? I ask because I'm really moved by Cathy O'Neil's—it's not just a plea, it's a demand—that these things must be demonstrated before they can be released out into the world, before they can go to market.

SK: I am incredibly hopeful. I make documentaries because it reminds me that everyday people can change the world. I've seen that already in the making of *Coded Bias*. In June, we saw sea change that we never thought possible, which is that IBM said they would get out of the facial recognition game: stop selling it, deploying it. Microsoft said they would stop selling it to police, and Amazon, in a good gesture, said that they would press a one-year pause on the sale of facial recognition technology to police. It was brought about in part because of the integrity of the scientists in my film—Joy's work, Gender Shades, supported by Timnit Gebru and Deborah Raji, which proved this stuff was racially biased—but also the largest movement for civil rights and equality that we've seen in fifty years on the streets of literally every city across the US.

I think people are making the connection between the inherent value of Black life and racially-biased invasive surveillance technologies that disproportionately impact those same communities. I owe those activists a debt of gratitude, because they have changed the way my film is received, and shown that we are ready to have a national conversation about systematic racism. When you say, “Do you think it will change?”, I say, “Yes, because we're going to change it.” I'm not saying that without effort, but I think that the biggest enemy we have is not Amazon, it's our own apathy. You know, Big Brother Watch UK: there's three young people under thirty that are preventing the rollout of real-time facial recognition by the Metropolitan Police in London. I've seen, city-by-city, people go to their town halls and say, "We know this stuff is racially biased. Can our local police departments say no? Can our colleges and universities say no?" And so, ironically, in the US, it's been the most technology-centred cities—places like San Francisco, Oakland, Cambridge, Somerville—who've been the first to ban government use of facial recognition. Because of that, we have, for the first time, a national ban on the table of government use of facial recognition.

BC: Can we build on the history of the civil rights movement? And then where we are now? How do we continue to mobilize grassroots knowledge and disruption and resistance around things when, as Zeynep Tufekci and other people in the film talk about, it's so individualized? What you see on your screen is not what I see on my screen, and I got this rate for insurance, you got that rate for a plane ticket, and we feel uncomfortable, but it's really difficult at the individual level to try to trace things back to find accountability, or to say, "This! This is biased."

MB: One really useful framework for this is to throw out everything that you think you know about how computers work, and to rebuild from the ground up. One of the things that I do in my book is start with how computers work: “This is the hardware; this is the software. And this is how a decision is made.” Once you see it at work, it demystifies it.

But another framework that I find really helpful is from Ruha Benjamin, in her book *Race after Technology*. Ruha has this wonderful idea that computational systems—automated systems—discriminate by default. So when you come into it with this understanding that these systems are not perfect, that they are discriminating somehow, and it's just a matter of shooting fish in a barrel to find the discrimination, then you have an easier time spotting it. Systems that do, for example, video analysis for hiring; they are probably discriminating against people in protected categories. The algorithms work on normative expectations about what people look like, or how people act. Say, if you have a tick, or you have Bell's palsy, or if you're blind, or the way that your body works is not in line with the normative expectations of the algorithm, then the algorithm is going to say, "That does not look like a good job candidate." Period. That's how they work. There's no mystery to it. And it's not a secret. If you go in with the frame that these systems discriminate by default, then it's much easier to spot what's going wrong.

BC: Big Brother Watch made me think of some of the attention that was brought to the underground in London, which has both smart cards that you're swiping (so individual information about individuals) and smart ads that are targeted. People were disrupted by this and said, "This is absolutely an invasion of our privacy. This is an invasion of our civil rights." But the system had already been put in place without any particular audit. When does that happen?

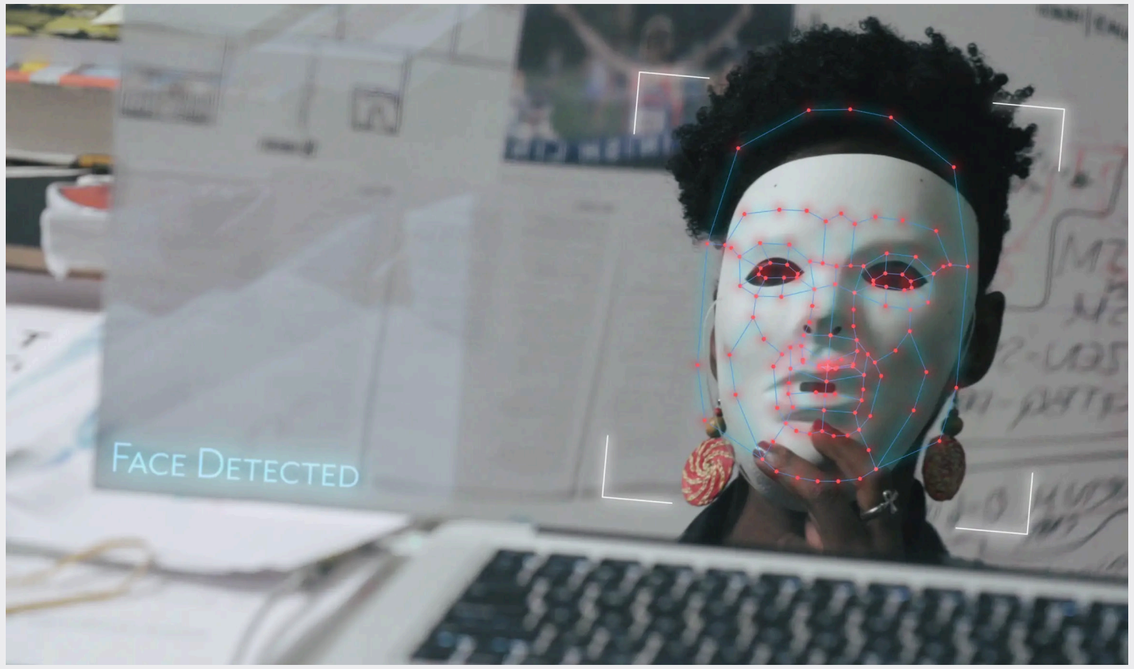
SK: The crazy thing is sometimes no one that we've elected knows it's been implemented and in motion. I think what Silkie Carlo's work shines a light on is that the UK has, you know, six million CCTVs. Meredith and I live in New York, where CCTV surveillance is also very prevalent—if those got connected to facial recognition technology (which we don't know if it's been used in New York, because it's often used in secret), that could be very dangerous. For me, the big wake-up call was when I was watching Joy testify in the US Congress, and Jim Jordan, who's a very conservative, Trump-supporting Republican sort of says, "Well, wait a minute. 117 million Americans are in a face database that police can access without a warrant. And there's no one elected that's overseeing this process?"

BC: Meredith, are values of democracy going to help us in moving forward on this?

MB: I certainly hope so. We need all the help we can get. I like what Shalini points out, that fear about facial recognition and horror about facial recognition is a bipartisan issue. That bodes well for being able to stop the insidious spread in the United States.

BC: But with the pandemic, and the design around contact tracing, and other ways of bringing technology into play—particularly in light of the uprisings that have been going on through this pandemic—isn't there already a rolling out of "let's throw more technology at this problem"?

MB: I think we should stop and consider what is the right tool for the task. Sometimes the right tool for the task is a computer and sometimes it's not. In the case of contact tracing, for example, people imagine that you're going to be able to get everybody in the world with the same app on their phone. Then the app is going to magically keep track of where you are all the time. Then it's going to magically generate a list of who you've been in contact with. In practice, it falls apart completely, because the technology does not work as well as anybody imagines. We can't expect computers to be magic. We can't expect them to do more than they actually can. People need to get educated and feel empowered about what computers can do, and need to understand what computers can't do, and get comfortable with the idea that there are limits. So I think one of the things that the film does really well is show us how facial recognition really works. And it introduces us to some people who are advocating for there to be limits to what we expect computers to do in the world.



Shalini Kantayya, *Coded Bias* (video still), 2020. COURTESY 7TH EMPIRE MEDIA.

Feminist Data Manifest-No

The Manifest-No is a declaration of refusal and commitment. It refuses harmful data regimes and commits to new data futures.

1. **We refuse** to operate under the assumption that risk and harm associated with data practices can be bounded to mean the same thing for everyone, everywhere, at every time. **We commit** to acknowledging how historical and systemic patterns of violence and exploitation produce differential vulnerabilities for communities.

2. **We refuse** to be disciplined by data, devices, and practices that seek to shape and normalize racialized, gendered, and differently-abled bodies in ways that make us available to be tracked, monitored, and surveilled. **We commit** to taking back control over the ways we behave, live, and engage with data and its technologies.

3. **We refuse** the use of data about people in perpetuity. **We commit** to embracing agency and working with intentionality, preparing bodies or corpuses of data to be laid to rest when they are not being used in service to the people about whom they were created.

4. **We refuse** to understand data as disembodied and thereby dehumanized and departicularized. **We commit** to understanding data as always and variously attached to bodies; we vow to interrogate the biopolitical implications of data with a keen eye to gender, race, sexuality, class, disability, nationality, and other forms of embodied difference.

5. **We refuse** any code of phony "ethics" and false proclamations of transparency that are wielded as cover, as tools of power, as forms for escape that let the people who create systems off the hook from accountability or responsibility. **We commit** to a feminist data ethics that explicitly seeks equity and demands justice by helping us understand and shift how power works.

6. **We refuse** the expansion of forms of data science that normalizes a condition of data extractivism and is defined primarily by the drive to monetize and hyper-individualize the human experience. **We commit** to centering creative and collective forms of life, living, and worldmaking that exceed the neoliberal logics and resist the market-driven forces to commodify human experience.

7. **We refuse** to accept that data and the systems that generate, collect, process, and store it are too complex or too technical to be understood by the people whose lives are implicated in them. **We commit** to seek to make systems and data intelligible, tangible, and controllable.

8. **We refuse** work about minoritized people. **We commit** to mobilizing data so that we are working with and for minoritized people in ways that are consensual, reciprocal, and that understand data as always co-constituted.

9. **We refuse** a data regime of ultimatums, coercive permissions, pervasive cookie collecting, and blocked access. Not everyone can safely refuse or opt out without consequence or further harm. **We commit** to "no" being a real option in all online interactions with data-driven products and platforms and to enacting a new type of data regime that knits the "no" into its fabric.

10. **We refuse** to "close the door behind" ourselves. **We commit** to entering ethically compromised spaces like the academy and industry not to imbricate ourselves into the hierarchies of power but to subvert, undermine, open, make possible.

11. **We refuse** a data culture that reproduces the colonial 'ruse of consent'[1] "which papers over the very conditions of force and violence that beget 'consent'" in the first place. **We commit** to data practices developed by and for Indigenous peoples and in relations of reciprocity.

12. **We refuse** more dispossession, erasure, stealing, and profiting from Black, Indigenous, and people of colours' lives and works. **We commit** to build the standpoint that the people most screwed over by data have the best understanding of data and to lifting up, mobilizing, and celebrating their knowledges in building a data methodology of the oppressed.[2]

13. **We refuse** to reproduce research as a form of exploitation and to allow people in positions of privilege make the decisions on behalf of those without. **We commit** to research cultures that promote data autonomy and SELF-representation.

14. **We refuse** to cede rhetorics of revolution, disruption, and creative innovation to Silicon Valley marketing and venture discourse. Especially, when this discourse marginalizes and appropriates the voices and actions of social justice communities. **We commit** to a recognition and an amplification of the long histories of the labour, dedication, and power of feminist voices for social transformation.

15. **We refuse** systems that simplify consent into a one-time action, a simple click of a yes to a terms of service agreement, to ownership of our data in perpetuity. **We commit** to enacting Planned Parenthood's FRIES model of consent that ensures that it is always "Freely given, Reversible, Informed, Enthusiastic and Specific."

16. **We refuse** surveillance as the only condition for participation and to feel powerless in the face of "inevitable" mass technological surveillance. **We commit** to find our communities, hold them close, and resist together.

17. **We refuse** Big Tech's half-measures and moral compromises that constantly defer the needs of vulnerable users as something to be addressed in the next round (of funding, of testing, of patching). **We commit** to centring the needs of the most vulnerable among us in making way for a radical address to Big Tech's data problems.

18. **We refuse** technologies that defer or delay accessible design because it is too expensive, inconvenient, or not legally required. **We commit** to learning from the work of disability activists. #NothingAboutUsWithoutUs

19. **We refuse** the naturalization of data as what is simply "off gassed" by a thing, object, or interaction. **We commit** to treating data as a resource to be cared for and cultivated, beyond a colonial extraction logic (as something to be constantly mined, extracted, captured).

20. **We refuse** to consider data as raw and only an end product without context and values and to ignore that data has an origin story, and a creator or creators whose legacy must be understood in order to understand the data itself. **We commit** to working with data subjects rather than capturing data objects by centring the matrices of oppression[3] that shaped data's production and the infrastructure—the code, algorithms, applications, and operating systems—in which it is used, processed, and stored. Data always has social values including race, gender, class, and ability inscribed into it.

21. **We refuse** to cede that convincing unjust institutions and disciplines to listen to us is the only way to make change. **We commit** to co-constructing our language and questions together with the communities we serve in order to build power with our own.

22. **We refuse** "damage-centred" research that gathers data to reproduce damage, and that traffics in or profits from pain. **We commit** to "desire-centred" research that mobilizes and centers data by and for Indigenous, Black, poor, uncitizened, transgender, disabled and other minoritized, over-researched and under-served people as resource and tool for their thriving, survivance, and joy.[4]

23. **We refuse** to tolerate economies of convenience (also known as the "gig economy" or "sharing economy") that build capital and data empires on the backs of precarious workers and hidden labor. **We commit** to working against the exploitation of labor and precarity in all of its forms.

24. **We refuse** tech solutionism as a moral cover for punitive data logics like always-on facial recognition systems, default capture of personal data, and racist predictive policing. **We commit** to feminist problem-solving that interrogates data logics as mirrors of power inequalities rather than simple solutions to legacies of racism, sexism, ableism, and oppression of vulnerable people.

25. **We refuse** data logics of prediction that presume omnipotence and conceit to know better than community-centered forms of decision making. **We commit** to countering the risks of defaulting to data-driven forms of prediction and decision-making by valuing the expertise of community-engaged practitioners.

26. **We refuse** to accept that data only matters when it is big, abstract, digital, aggregated, machine-readable, and instrumentalized for the market. **We commit** to valuing other forms and materialities of data that privilege accountability and legibility to users and community, and examine data at and across all of its scales.

27. **We refuse** the appropriation of feminist discourses of collective safety and the language of consent for the legitimization of surveillance. Safety does not demand subjection to, submission to, subordination to rational, high tech, colonial orders.[5] **We commit** to feminist collective safety and consent as a means of building resilience, creating solidarity, reducing harm, and as a tool of self-defense and empowerment.

28. **We refuse** the argument that feminist data reform is too slow, too expensive, too much, too little, too late. **We commit** to radical disruption for social transformation.

29. **We refuse** data logics that hyper-value the quantitative, the "objective," and the "generalizable." **We commit** to developing, adopting, and advancing methodologies that draw insight from the subjective, embodied, contingent, political, and affective in ways that transcend traditional boundaries[6] between qualitative and quantitative.

30. **We refuse** coercive settler colonial logics of knowledge and information organization; we commit to tribal nation sovereignties and Indigenous information management that values Indigenous relationality,[7] the right to know,[8] and data sovereignty.[9]

31. **We refuse** settler colonial logics of data ownership; we commit to advancing the sovereignty of Indigenous peoples who harness data practices as "infrastructural commitments" to get back their land and divest foreign occupying powers.[10]

32. **We refuse** reductionist practices that view people as data points in order to embrace the whole person. **We commit** to the requirement of recognizing personhood as a feminist data value.

Our refusals and commitments together demand that data be acknowledged as at once an interpretation and in need of interpretation.[11] Data can be a check-in, a story, an experience or set of experiences, and a resource to begin and continue dialogue. It can—and should always—resist reduction. Data is a thing, a process, and a relationship we make and put to use. We can make it and use it differently.

Co-authored by Marika Cifor, Patricia Garcia, TL Cowan, Jasmine Rault, Tonia Sutherland, Anita Say Chan, Jennifer Rode, Anna Lauren Hoffmann, Niloufar Salehi, Lisa Nakamura.

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4 Eve Tuck, "Suspending Damage: A Letter to Communities," *Harvard Educational Review* 79, no. 3 (2009): 409-428, https://doi.org/10.17763/haer.79.3.n0016675661t3n15.

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Lila Abu-Lughod, Do Muslim Women Need Saving? (Cambridge: Harvard University Press, 2013).

Hill Collins, Black Feminist Thought, 1990.

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Dorothy E. Smith, "Comment on Hekman's "Truth and Method: Feminist Standpoint Theory Revisited," Signs: Journal of Women in Culture and Society 22, no. 2 (Winter 1997): 392-398, https://www.jstor.org/stable/3175280.

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Margaret M. Bruchac, *Savage Kin: Indigenous Informants and American Anthropologists* (Tucson: University of Arizona Press, 2018).

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Artists-In-Presidents

Constance Hockaday

Artists-In-Presidents is inspired by Franklin Delano Roosevelt's Depression-era Fireside Chats. FDR took office during the Great Depression, when the nation's economy was decimated and trust in government was at an all-time low. Under these conditions, Roosevelt began to speak directly to the public via a series of radio broadcasts dubbed the "Fireside Chats." His aim was to address Americans' greatest concerns. The Fireside Chats were the first time that a US President's voice entered the living rooms of everyday Americans. Never before had an American President spoken so frankly and intimately with the citizens of the country. In intricate poetic detail, Roosevelt unfurled an accessible vision for a unified American public and called upon citizens to participate in democracy as an act of faith.

Today, Americans face the massive social and economic fallout of a global pandemic which only accentuates existing disparities in our communities. Like Depression-era FDR, we have arrived at a moment of crisis and possibility. We are not calling for a Fireside Chat re-do, but rather an acknowledgment that many of the national narratives of liberation have erased Indigenous voices and the voices of people that make up the majority of this country—Black, LGBTQIA, people of colour, people with disabilities, and women. An update is overdue. This project seeks to recast the office of the President as a multivocal entourage.

Artists, writers, performers, and musicians from a wide range of cultural realities were invited to assume an authority over our collective future and to define what we could become together as a nation. Each artist created a presidential portrait and a "State of the Union Redress" that describes their vision, with dramaturgical advice from retired presidential speech writers.

Directed by visual artist Constance Hockaday, *Artists-In-Presidents: Fireside Chats for 2020* is produced in partnership with UCLA's Center for the Art of Performance and Stanford Live Arts. In 2021, the Blackwood Gallery at the University of Toronto Mississauga will support the micro-commissioning of 21 new *Artists-In-Presidents*. Pending the pandemic, the project will further evolve into a full print publication, a gallery exhibition, and ultimately will bring people together for live performances and readings aboard FDR's retired presidential yacht in the San Francisco Bay. Stay tuned.

Listen to the podcasts and visit the full virtual gallery at artistsinpresidents.com.

KRISTINA WONG


KANYON SAYERS ROODS


XANDRA IBARRA


CASEY SPOONER


ALICE SHEPPARD


MY OTHER ME


A. HAQ


ISHMAEL REED

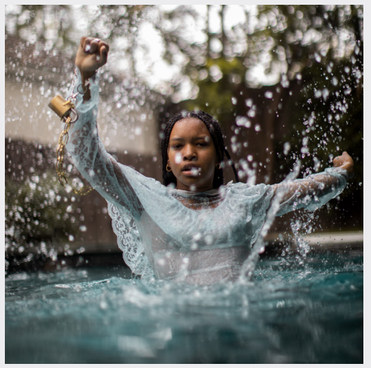

KEITH HENNESSEY


MEL CHIN


MIRANDA JULY

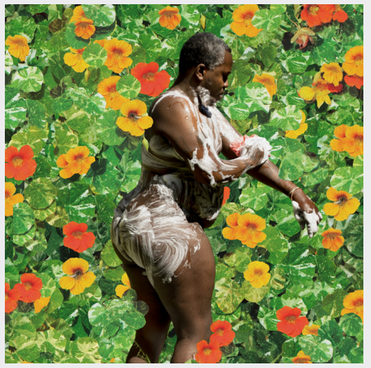

JEN DELOS REYES


CARA LEVINE


KENNEDI TEZANO


EDGAR FABIÁN FRÍAS


MIGUEL GUTIERREZ


BRONTEZ PURNELL


CONSTANCE HOCKADAY

Panoramic view of the Arecibo radio telescope primary dish, Arecibo Observatory, Puerto Rico, June 22, 2019. PHOTO: MARIO ROBERTO DURÁN ORTIZ. LICENSED UNDER CREATIVE COMMONS BY-SA 4.0.

The Great Silence

Ted Chiang

The humans use Arecibo to look for extraterrestrial intelligence. Their desire to make a connection is so strong that they've created an ear capable of hearing across the universe.

But I and my fellow parrots are right here. Why aren't they interested in listening to our voices?

We're a non-human species capable of communicating with them. Aren't we exactly what humans are looking for?

*

The universe is so vast that intelligent life must surely have arisen many times. The universe is also so old that even one technological species would have had time to expand and fill the galaxy. Yet there is no sign of life anywhere except on Earth. Humans call this the Fermi paradox.

One proposed solution to the Fermi paradox is that intelligent species actively try to conceal their presence, to avoid being targeted by hostile invaders.

Speaking as a member of a species that has been driven nearly to extinction by humans, I can attest that this is a wise strategy.

It makes sense to remain quiet and avoid attracting attention.

*

The Fermi paradox is sometimes known as the Great Silence. The universe ought to be a cacophony of voices, but instead it's disconcertingly quiet.

Some humans theorize that intelligent species go extinct before they can expand into outer space. If they're correct, then the hush of the night sky is the silence of a graveyard.

Hundreds of years ago, my kind was so plentiful that the Rio Abajo forest resounded with our voices. Now we're almost gone. Soon this rainforest may be as silent as the rest of the universe.

*

There was an African Grey Parrot named Alex. He was famous for his cognitive abilities. Famous among humans, that is.

A human researcher named Irene Pepperberg spent thirty years studying Alex. She found that not only did Alex know the words for shapes and colours, he actually understood the concepts of shape and colour.

Many scientists were skeptical that a bird could grasp abstract concepts. Humans like to think they're unique. But eventually Pepperberg convinced them that Alex wasn't just repeating words, that he understood what he was saying.

Out of all my cousins, Alex was the one who came closest to being taken seriously as a communication partner by humans.

Alex died suddenly, when he was still relatively young. The evening before he died, Alex said to Pepperberg, "You be good. I love you."

If humans are looking for a connection with a non-human intelligence, what more can they ask for than that?

*

Every parrot has a unique call that it uses to identify itself; biologists refer to this as the parrot's "contact call."

In 1974, astronomers used Arecibo to broadcast a message into outer space intended to demonstrate human intelligence. That was humanity's contact call.

In the wild, parrots address each other by name. One bird imitates another's contact call to get the other bird's attention.

If humans ever detect the Arecibo message being sent back to Earth, they will know someone is trying to get their attention.

*

Parrots are vocal learners: we can learn to make new sounds after we've heard them. It's an ability that few animals possess. A dog may understand dozens of commands, but it will never do anything but bark.

Humans are vocal learners, too. We have that in common. So humans and parrots share a special relationship with sound.

We don't simply cry out. We pronounce. We enunciate.

Perhaps that's why humans built Arecibo the way they did. A receiver doesn't have to be a transmitter, but Arecibo is both. It's an ear for listening, and a mouth for speaking.

*

Humans have lived alongside parrots for thousands of years, and only recently have they considered the possibility that we might be intelligent.

I suppose I can't blame them. We parrots used to think humans weren't very bright. It's hard to make sense of behavior that's so different from your own.

But parrots are more similar to humans than any extraterrestrial species will be, and humans can observe us up close; they can look us in the eye.

How do they expect to recognize an alien intelligence if all they can do is eavesdrop from a hundred light years away?

*

It's no coincidence that "aspiration" means both hope and the act of breathing.

When we speak, we use the breath in our lungs to give our thoughts a physical form. The sounds we make are simultaneously our intentions and our life force.

I speak, therefore I am. Vocal learners, like parrots and humans, are perhaps the only ones who fully comprehend the truth of this.

*

There's a pleasure that comes with shaping sounds with your mouth. It's so primal and visceral that throughout their history, humans have considered the activity a pathway to the divine.

Pythagorean mystics believed that vowels represented the music of the spheres, and chanted to draw power from them.

Pentecostal Christians believe that when they speak in tongues, they're speaking the language used by angels in Heaven.

Brahmin Hindus believe that by reciting mantras, they're strengthening the building blocks of reality.

Only a species of vocal learners would ascribe such importance to sound in their mythologies. We parrots can appreciate that.

*

According to Hindu mythology, the universe was created with a sound: "Om." It's a syllable that contains within it everything that ever was and everything that will be.

When the Arecibo telescope is pointed at the space between stars, it hears a faint hum.

Astronomers call that the "cosmic microwave background." It's the residual radiation of the Big Bang, the explosion that created the universe fourteen billion years ago.

But you can also think of it as a barely audible reverberation of that original "Om." That syllable was so resonant that the night sky will keep vibrating for as long as the universe exists.

When Arecibo is not listening to anything else, it hears the voice of creation.

*

We Puerto Rican Parrots have our own myths. They're simpler than human mythology, but I think humans would take pleasure from them.

Alas, our myths are being lost as my species dies out. I doubt the humans will have deciphered our language before we're gone.

So the extinction of my species doesn't just mean the loss of a group of birds. It's also the disappearance of our language, our rituals, our traditions. It's the silencing of our voice.

*

Human activity has brought my kind to the brink of extinction, but I don't blame them for it. They didn't do it maliciously. They just weren't paying attention.

And humans create such beautiful myths; what imaginations they have. Perhaps that's why their aspirations are so immense. Look at Arecibo. Any species who can build such a thing must have greatness within it.

My species probably won't be here for much longer; it's likely that we'll die before our time and join the Great Silence. But before we go, we are sending a message to humanity. We just hope the telescope at Arecibo will enable them to hear it.

The message is this:

You be good. I love you.

Elements of Technology Criticism

Mike Pepi

1. **Data is never “raw,” immanent, or neutral.** There is always bias and distortion in capture and modeling.
2. **The internet is not “a thing.”** It is a distributed network of many layers. Treating it as its own monolith with a central cultural logic presents problems.
3. **Technology can never occupy a space outside of capitalism.** With rare exceptions, every application, company, or innovation will have a funding source, a board, and a bottom-line; and in all cases the logic of capitalism will eventually supersede and control technical tools. What we identify as “tech” is just capitalism, but faster and worse.
4. **You can’t solve a social problem with a technical solution.** Often, applying technical fixes only treats the symptom, and, in failing to address the underlying cause of the problem, makes it worse.
5. **If you are not paying for a platform, your data is the product.** Attention is data and data is a commodity. If something is free and connected to a network, beware of the trade-offs.
6. **Platforms are not institutions.** Do not confuse them.
7. **Decentralization is an illusion.** Even distributed networks enforce hierarchies of power and influence.
8. **Software is hard.** Computing interfaces, rules, interactions, and protocols encode certain behaviors, and for that they should be scrutinized and interrogated as part of the body politic and the built environment.
9. **Algorithms are made of people.** They are editors, they steer and privilege certain values, and they are never objective.
10. **Beware of “open access.”** Information may want to be free but beware of the consequences. Somewhere a new gatekeeper will benefit.
11. **Once a measure becomes a target it ceases to become a measure (Goodhart’s Law revisited).** Or, when you over-optimize for a goal you’ll often destroy the thing or the market you set out to augment. Or, optimizing for a goal in a closed system will reinforce the production of that goal, and cease to deliver any insights.
12. **Information is the enemy of narrative.** The more information, the more doubtful the narrative becomes.
13. **Crowdsourcing is a race to the bottom.** Labour, knowledge, education, etc. are all cheapened when forced to compete on a platform. Making it easier to perform a task has massive externalities.
14. **Your brain is not a computer and your computer is not a brain.** There are things that cannot be automated, and intelligences that machines cannot have.

This is my attempt to synthesize the last several years of the emerging field of technology criticism into a set of recurring general principles. These ideas belong to many different thinkers. The contribution here is primarily distilling them down to their essential point and collecting them in one spot. My next step is to provide a “see more” section for texts and a “problems and examples” section.
—Mike Pepi @mikepepi (last updated 8/15/2018)

Elements of Technology Criticism originated as a blog post. It was my modest attempt to roughly synthesize the last several years of the emerging field of technology criticism into a set of recurring general principles. Shortly after publication in 2018, the post went softly viral as a community of thinkers responded to it (online, naturally), reacting to the way it distilled ideas that had been circulating in the discourse of the still-nascent tech Left. I do not claim ownership over the list’s ideas or statements—which draw from a range of thinkers from Alexander Galloway to Kate Crawford to Jaron Lanier—but rather took care and pride in assembling a list that was sufficiently mutually exclusive and categorically exhaustive, while being inclusive of a range of different thinkers’ collective contributions. The goal was to retroactively build, from the existing literature, a set of principles unifying the many voices that had come to offer criticisms and alternatives to the platform-capitalist status quo. These essentials functioned as a platform itself, one that could be further developed by relevant literature in response to evolutions in the fields of art and tech.

The list was exciting for me, intellectually, but it was also political—by definition it would need to be refined in the company of peers. Too much of tech writing and so-called tech criticism has been written in a theory-heavy style, only accessible to academics, or has not been designed for everyday users of technology to understand. The points are chapters that might unfold in telling the story of the criticism of platform capitalism during its frenetic expansion in the 21st century. Even further, this story would highlight the salient intersections of institutional critique with our new digital institutions.

When I opened up this list to a group of interested artists, scholars, and researchers as part of *Running with Concepts: The Mediatic Edition* last fall, I knew the discussion would be generative on this exact front. Every distillation implies gaps—gaps in details, definitions, and dependencies. I have been eager to understand how complex and amorphous topics such as “technology” and “criticism” could possibly be handled by a collective workshop format. Below I reflect on the results of the workshop.

A time when most of the globe has been forced into reliance on networked and software-enabled services provides quite the backdrop for trying to refine the terms of technology criticism. One of the core tenets of the *Elements* was to make visible what has always been (purposefully) obscured. The first pandemic lockdowns of the information age have necessitated increased remote working and virtual gathering, laying bare the dominance of our tech platforms. Thus, sharp workshop participants immediately latched on to the importance of defining the terms. Each and every one of the principles relies on the simple but critical act of naming—and thus knowing—the material grounds through which platforms imbricate our lives. This act of categorization was more than half the battle. And given the long history associated with a slippery term such as “technology”, the group worked diligently to make sure the phrasing was as direct as possible.

One of the other problems with the list was whether it was, in fact, mutually exclusive and categorically exhaustive. I anticipated quite a bit of debate on this. And our group pushed the core ideas into their most essential characteristics: When we say “people” do we just mean “labour”? Is “crowdsourcing” really the correct term? Would not “the gig economy” be better?

Every simplification was rightly challenged. The most remarkable improvement was around the very basis of the list’s framing. The list was always directly interested in the flavour of platform capitalism that began to emerge in the 2010s: the period during which technology companies and venture capital were winning the battle of public opinion as they marched across the fabric of everyday life. Even as they captured, monetized, and atomized each moment of human interaction, they were given a free pass—treated as somehow outside or an alternative to capitalism. Owing to that, some clarification was in order. Our group pushed back on the tautological nature of the phrasing of principle #3: “Technology can never occupy a space outside of capitalism.” After some debate, we settled on an alternative that might be best phrased: “Technology platforms do not exist outside of capitalism.” Why force two enormous and inseparable concepts (technology and capitalism) to contrast one another when the point could be made more directly? That is, we ought to recognize that the generation of technology companies that operate distinct, multi-pronged systems known as platforms deserve the exact same scrutiny that the Left once reserved for industrial monopolies.

Then there was the intent. Most agreed with the gist of the idea for #12, that “information is the enemy of narrative.” But as several respondents highlighted, “Is the concept of narrative worth saving?”

In the end, whatever vigorous debate that ensued was unified by two meta-principles. Our group kept returning to two universal threads:

1. Solidarity—a united front formed by any group in defense of a principle—is almost completely elusive in an environment mediated by cloud-based platforms and datafied exchange.
2. Software is not objective and dispassionate; its very programmability, and thus modularity, makes it even more impervious to critique.

I don’t think these ideas could be entries themselves. Rather, as underlying challenges of the task at hand, they unite the entire project. Each problem that a point set out to describe seemed to come to a dead end when the group brainstormed solutions. For instance, in the first case, each power organ of platform capitalism—while we could locate its effects—provided no clear route to using the traditional forms of collective power against it. Second, software and its surrounding ideology seem almost designed to elude any attempts to locate and name all their material and social effects. This means it’s awfully hard to do the work formerly known as “critique.”

The time we spent resulted in a rich and interactive digital whiteboard of sources. It will be the core of the syllabus that I always intended for these points to inspire. Like the target it sets out to critique, such a syllabus will always need to be modular, polyvocal, and agile. What can we borrow from the institutions of critique that we once knew, when they are now so eroded by platforms? This is, to me, a central question for our time.

Junk

Tommy Pico

[…] The empire rises Conspiring The sky is moody The land is not much better The

news is not looking good IT's NOT lookiNg Good Brexit Le Pen Duterte Putin The reasons to be afraid accumulate I'm thinkin

of a claw foot bathtub and cracked wallpaper in a scary movie trailer A paper doll dress in the black vacuum of space Casually

google what wd happen to a body without a space suit Cold is the currency of the universe Warm is the outlier, folks Deep

freeze in the ongoing bleak Beings of a pumping heart that, like everything, goes cold How cd I not be obsessed with hugging

the core of this world and fisting engines of light Making fire and swaddling ourselves in skins I don't always use the most

vigorous verbs But I did go on a date tonight where at the end we got frisky and he said (fingers on the seam of my ass crack)

that he actually has a boyfriend and they're not open He just still likes going on dates Dates! Literally the worst part of a

romantic enterprise Cold starship boldly blasting into new lands and new civilizations powered by a crystal of the imag-

ination Abstract infused by an image and a refusal to explain a fuel source No wonder they were post money in TNG

Wherever we go, needs feed and I find it harder and harder to believe benevolence is the thing Thousands of Yazidi girls

missing and plastic fills the ocean's mouth and the cursive of yr name still occupies the canopy of my throat Fuel, the under-

pinning What fires your gd engine Rigor, mortis Cold as unmoving or unmoved The opposite of music Warm in the

cold universe Molten, forming A rock becoming magma becoming lava becoming land Land, the trauma of lava Lava

the lamp of the ancestors and later a cheeky find in the Junk shop and rising in our living room […]

[…] Why do ppl say they "love food" like it's a revelation A secret *I'm such a food-aholic* Oh, like

literally every other living organism in existence? Junk breathes How dare ppl be born in the '90s I like tall guys bc I'm

lookin for someone who can fend off the ppl who will kill us when we swap spit in the karaoke booth That time we hung

out with our giddy newness at the Mexican restaurant by the bookstore with the best reading series in the city and the

glassy eyes zooming in on each other Seeing only the wonder, like canary yellow on a canary or when our sky wraps up in

Earth's shadow This is my yellow heart This is my gauzy two-people-gazing-across-the-night-into-each-other instrumental

situation Who owns the attraction passing between bodies We say neurons "fire" because a frame of mind needs the border of

poetry Something fuzzy buzzing Your face glows coastal, leaves me feelin fine as the powdery shoreline at low tide *Dummy*, all

our lives we are the wavelengths of light who escape the negative space Urge toward sunset scattered roadways, morning haze,

and the gusting forward of time Oh shut the fuck up Voices change How dare you tether me to lines I wrote in like 2009

Goin over yr Junky poems huh? […]

Excerpts from *Junk*, a book-length poem by Tommy Pico (Portland: Tin House, 2018).

HOW ARE WE: A SMART CONTRACT

a project by Emily Mast & Yehuda Duenyas

with Andy Horwitz, Barnett Cohen, Cami Boyd, Constance Hockaday, Darrian O'Reilly, David Adrian Freeland Jr., Dean Eigenmann, Dorothy Dubrule, Emily Gonzalez-Jarrett, Faye Driscoll, Hana van der Kolk, Heyward Bracey, Janine Sun Rogers, Jay Carlon, Jessica Emmanuel, Jennie MaryTai Liu, Marie de Brugerolle, Mark Beylin, Mireya Lucio, Rob Solomon, Rudy Falagán, Saskia Clerckx, Shannon Hafez, Stacy Dawson Stearns, Sylvain Laurent, Terrence Luke Johnson

HOW ARE WE is a collectively-created performance consisting of fifteen 90-second solos made in quarantined isolation during the first wave of COVID-19 in May of 2020. In the week prior to LA's first scheduled reopening date, artists made work that responded to ten prompts proposed by Emily Mast and Yehuda Duenyas. **HOW ARE WE** is an artifact that at once captures a now seemingly distant moment in time and also engages with a wider set of questions cracked open by the conditions of the pandemic. The final work was uploaded onto the blockchain as an immutable digital "artifact." Artists, writers, programmers, and a lawyer co-own the work through a "smart contract" ensuring transparent and equal distribution of wealth, thus upending traditional notions of the art market and exchange. **HOW ARE WE** asks how artistic imagination can come together with technological innovation to reimagine the world at a time when value, equality, and humanity are demanding radical reconsideration.

WHAT IS A SMART CONTRACT?

A smart contract is an immutable piece of code that lives on the Ethereum blockchain. It has its own address (like regular users do) but its interactivity is limited to the set of functions which are included in the code. This creates a foundation of trust upon which people can transact and collaborate in new and more efficient ways.

HOW ARE WE ERC721 & ERC20 TOKENS

On the Ethereum network there are two major types of tokens: ERC20 tokens (which are fungible, often used like money) and ERC721 tokens (which are non-fungible, and are often used as collectibles). **HOW ARE WE** uses both of these tokens — one single ERC721 token represents the singular immutable unique art work, and 100,000 ERC20 tokens, called **HOW** tokens, represent ownership of the artwork. The **HOW** tokens are shared amongst all of the creators of the work: artists, administrators, blockchain developers, designers, and legal counsel.

HOW THE SHARES WORK: PROPORTIONATE AUTOMATIC DISTRIBUTIONS

The smart contract dictates a trustless, transparent dispersal of ownership shares. When any donations, royalties, or other payments for the work come in, the smart contract accepts the proceeds and distributes them to the token holders based on the proportion of the tokens they own. This means that these tokens can be freely transacted with, and makes the payouts trustless and fairly executed by the administrators of the project. HOW ARE WE combines a legacy legal contract drafted by the curators with an IP lawyer, and a smart contract written by blockchain developers to create a new system of governance over a collectively shared artwork.

Featuring works by
Barnett Cohen / Constance Hockaday & Faye Driscoll / Darrian O'Reilly / David Adrian Freeland, Jr. / Dorothy Dubrule / Emily Mast & Yehuda Duenyas / Hana van der Kolk / Heyward Bracey / Jay Carlon / Jennie MaryTai Liu / Jessica Emmanuel / Mireya Lucio / Shannon Hafez / Stacy Dawson Stearns / Terrence Luke Johnson

Blockchain Lead Developers
Mark Beylin / Rob Solomon

Blockchain Developers
Dean Eigenmann / Sylvain Laurent

Design Team
Janine Sun Rogers / Rudy Falagán / Saskia Clerckx

Legal Counsel
Cami Boyd

Writers
Andy Horwitz / Emily Gonzalez-Jarrett / Marie de Brugerolle / Mark Beylin & Rob Solomon

HOW ARE WE CONTRACT

CONTRACT DETAILS

I. PROJECT DETAILS

HOW ARE WE
a project by:
Emily Mast & Yehuda Duenyas

FEATURING WORKS BY (the "ARTISTS")
Barnett Cohen - bend time
Constance Hockaday & Faye Driscoll - call><call
Darrian O'Reilly - My #1 Magic Trick
David Adrian Freeland, Jr. - Moment With Self
Dorothy Dubrule - At The End
Emily Mast & Yehuda Duenyas - Something Must Spill
Hana van der Kolk - Comma
Heyward Bracey - Nana
Jay Carlon - Anesthetized.
Jennie MaryTai Liu - Sheets
Jessica Emmanuel - Growhouse
Mireya Lucio - Role Call
Shannon Hafez - me 'n em
Stacy Dawson Stearns - That Was Very Unfriendly of Me
Terrence Luke Johnson - 11:01 AM, Sunday, May 10, 2020, Silverlake

Edition: Single unique edition, minted to the blockchain on June 26th, 2020

Token: The Project is represented by a single ERC721 TOKEN, and participant ownership is represented by 100,000 ERC20 HOW TOKENS.

Artwork hash: QmaR59SvNKAMWYqcRb9eV18d6yZmKWo2jFRqfrsjJ6ghbq
How Are We Project Contract Address: 0x8d8029ccfe7027f81c6b698605b3ea3fc01bb74
Ethereum ERC721 Contract Address: 0x8d8029ccfe7027f81c6b698605b3ea3fc01bb743
Ethereum ERC20 Contract Address: 0x6a9721913fbfb55a4fe41afb9c4b131e5c353064

Medium: 25min 42 sec .mp4 file, Time-based Media Work (referred to herein as "**THE PROJECT**").

Note: There will be no physical video file in any format.

II. BASIC GUIDELINES

HOW ARE WE [hereby known as "**THE PROJECT**"] is a collectively assembled TIME-BASED MEDIA artwork composed of individual ARTISTS' RECORDED performances. Each individual work [hereby known as **INDIVIDUAL WORKS**] contained within **THE PROJECT** were created by the **ARTISTS LISTED IN SECTION I PROJECT DETAILS**. For purposes of U.S. Copyright Law, **THE PROJECT** may also be referred to by the parties as the "**COMPILED WORK**."

In addition, a group of blockchain programmers and other consultants [hereby referred to as **ADMINS, listed in [VI] TOKEN BREAKDOWN]** are creating the necessary Ethereum based smart contracts, critical writing, design, and related native legal agreements, as well as minting **THE PROJECT** onto the blockchain.

III. OWNERSHIP

a. Initial ownership of **THE PROJECT** shall vest in all of the parties who created the project including the **ARTISTS**, **EXECUTIVE ADMINS**, and **ADMINS** (defined herein). **ARTISTS**, **EXECUTIVE ADMINS**, **ADMINS** and **TOKEN OWNERS** are herein collectively referred to as the **INITIAL OWNERS**. **INITIAL OWNERS** have legal rights and interests in and to **THE PROJECT** proportional to their token holdings, except as expressly limited or transferred or licensed in this Agreement or any related native legal agreement. The **INDIVIDUAL WORKS** which compose **THE PROJECT** will remain the individual property of the **ARTISTS** who created them.

b. By entering into this Agreement, each **ARTIST** grants the collective a worldwide, perpetual, non-terminable License to that **ARTISTS's** contribution to **THE PROJECT**. This License cannot be revoked and grants to the **ADMINS** the ability to distribute, display, license, sell or otherwise monetize **THE PROJECT** (as a whole) without the further consent or agreement of the **ARTIST**. This License grant expressly includes the right to use of the **ARTIST's** name, voice and likeness, with or without attribution. Nothing in this Agreement shall be construed to constitute a transfer or sale of the **ARTIST's INDIVIDUAL WORKS**, which remain the property of the **ARTIST**.

c. An **INITIAL OWNER** has the right to sell all or a portion of their ownership interests (reflected by Tokens) in the Project to a third party as set forth in Section 5 of this Agreement.

d. The sale by an **ARTIST** of all or a portion of the **ARTIST'S TOKENS** shall impact that **ARTIST's** ownership of **THE PROJECT** and the **ARTIST's** right to receive distributions based on their TOKEN ownership, but shall not effect that **ARTIST's** ownership of the **ARTIST's INDIVIDUAL WORKS**.

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IV. PROJECT ADMINISTRATION

Emily Mast and Yehuda Duenyas [hereby referred to as the **EXECUTIVE ADMINS**] are the curators and executive administrators of **THE PROJECT**, and advocate on behalf of **THE PROJECT**. All decisions for any project development, including but not limited to blockchain development, sales, acquisitions, commissions, negotiations, trades, barters, licenses, or other administrative actions shall be handled in the sole discretion of the **EXECUTIVE ADMINS**. The **EXECUTIVE ADMINS** will, in good faith, communicate with the larger group of **OWNERS** to alert, give information to, field questions, and respond to comments and desires related to changes in, or other matters pertaining to, the status of **THE PROJECT**.

V. TOKENS

Ownership in **THE PROJECT** is determined by the holding of **TOKENS** in **THE PROJECT**. The **TOKENS** represent a share in the project. 100,000 ERC20 **TOKENS** will be issued in **THE PROJECT**. After the initial launch of **THE PROJECT**, there will never be another opportunity to create or issue more ERC20 **TOKENS**. In the event that an **ARTIST** sells or transfers all of his/her/their ERC20 **TOKENS** in **THE PROJECT**, that **ARTIST** shall cease to be an **OWNER**.

VI. INITIAL TOKEN BREAKDOWN

The INITIAL TOKEN breakdown is as set forth below. The INITIAL TOKEN OWNERS shall also be referred to in this Agreement as the INITIAL OWNERS:

TOTAL OF ERC20 100,000 TOKENS

Name	Title	Token amount
Yehuda Duenyas	Curator/Artist/Admin	4,000.00
Emily Mast	Curator/Artist/Admin	4,000.00
Stacy Dawson Stearns	Artist	4,000.00
Terrence Luke Johnson	Artist	4,000.00
Barnett Cohen	Artist	4,000.00
Darrian O'Reilly	Artist	4,000.00
Dorothy Dubrule	Artist	4,000.00
Hana van der Kolk	Artist	4,000.00
Shannon Hafez	Artist	4,000.00
Mireya Lucio	Artist	4,000.00

Name	Title	Token amount
David Adrian	Artist	4,000.00
Jessica Emmanuel	Artist	4,000.00
Jay Carlon	Artist	4,000.00
Heyward Bracey	Artist	4,000.00
Jennie MaryTai Liu	Artist	4,000.00
Faye Driscoll	Artist	2,000.00
Constance Hockaday	Artist	2,000.00
Rob Solomon	Blockchain Dev/Writer	4,000.00
Mark Beylin	Blockchain Dev/Writer	4,000.00
Dean Eigenmann	Blockchain Dev	1,000.00
Sylvain Laurent	Blockchain Dev	1,000.00
Cami Boyd	Legal	4,000.00
Andy Horwitz	Writer/Editor	4,000.00
Emily Gonzalez-Jarrett	Writer	2,000.00
Marie de Brugerolle	Writer	2,000.00
Writer 4 (TBD)	Writer	2,000.00
Writer 5 (TBD)	Writer	2,000.00
Writer 6 (TBD)	Writer	2,000.00
Hard admin costs	Hard admin costs	5,000.00
Janine Rogers	Design	1,000.00
Saskia Clerckx	Design	1,000.00
Rudy Falagán	Design	1,000.00

VII. PROCEEDS

All monies, including but not limited to donations, sales, proceeds, licenses, acquisitions, or other revenue, paid to **THE PROJECT** are to be distributed proportionally amongst the parties who are **OWNERS at the time that the distribution is made. Distributions shall be made in accordance with the OWNER'S** ownership stake, as denoted by the proportion of the ERC20 TOKENS in each OWNER'S possession. Distributions will be made periodically at times that are the sole discretion of the **EXECUTIVE ADMINS**, but no less frequently than two times a year.

VIII. TOKENS AND TOKEN ADDRESSES

Each **OWNER** (token holder) will receive a token transfer to the ETH wallet address of their choice. **EXECUTIVE ADMINS** and **ADMINS** will work to make sure that all **OWNERS** are set up with the necessary information and will be available for questions and troubleshooting if necessary. It will be the **OWNERS'** responsibility to keep their wallets, passcodes and private keys safe. **EXECUTIVE ADMINS** and **ADMINS** will help with this process.

IX. SELLING TOKENS

Any **OWNERS**, including **INITIAL OWNERS**, may sell or otherwise transfer their **TOKENS**, (or a portion of their tokens) to a third party, thereby transferring their ownership in **THE PROJECT** to another person or entity. Any **OWNER** who transfers their **TOKENS** to another party for monetary compensation or other reason (whether through a sale, donation, gift, inheritance or otherwise) acknowledges and agrees that they will be transferring all or part of their right to revenue associated with **THE PROJECT** as the right to receive revenue is directly associated with an **OWNERS'** number of tokens. In addition, if an **OWNER** sells a portion or all of their tokens for a cash value, that **OWNER** agrees, in good faith, to transfer 10% of the financial proceeds back into the smart contract to benefit the remaining **OWNERS**.

X. DONATIONS

We will encourage people who view **THE PROJECT** online to donate money in fiat or cryptocurrency, through Venmo, PayPal, Zelle, CashApp, or other digital fiat transfer, as well as crypto wallets, to **THE PROJECT**. The goal is to spread the word about **THE PROJECT** in order to raise capital to support the **OWNERS**.

XI. PAYMENTS AND RECONCILING

No less than twice a year, the **EXECUTIVE ADMINS** will oversee the financial upkeep (such as converting fiat donations to cryptocurrency) and the distribution of proceeds through the smart contract to the **OWNERS'** token addresses. All accounting will be open and transparent, publicly available for the group to audit via either a private portal accessible only to the **OWNERS**, a newsletter, or email.

XII. SALE RULES

All **INITIAL OWNERS** and all subsequent **OWNERS** by sale or transfer agree that **THE PROJECT** may be sold to a third party, subject to the terms and conditions set forth in this Agreement and that the **EXECUTIVE ADMINS** have the sole discretion to sell **THE PROJECT**. If **THE PROJECT** sells in its entirety to a collector, institution or other, ownership of **THE PROJECT** will be transferred to the Buyer, whether an individual or entity (the BUYER). Transfer of the ownership of **THE PROJECT** will be effected by the **EXECUTIVE ADMINS'** transfer of the ERC721 TOKEN to the Buyer. Upon a sale, the BUYER is required to pay the value of the sale of **THE PROJECT** directly into the smart contract.

The **OWNERS** will be notified and consulted in advance of any potential ownership changes, licenses, showings, loan-outs, and any other events or actions pertaining to THE PROJECT.

XIII. RESALE RULES

If a BUYER wants to resell **THE PROJECT**, ARTISTS have the right of first refusal to buy **THE PROJECT** back. Any subsequent Buyers of the ERC721 TOKEN, and thus **THE PROJECT**, are required to pay 10% of the purchase price back to the original token holders (by transfering the funds directly to the smart contract).

XIV. EXHIBITING INDIVIDUAL WORK

Each **ARTIST / ARTIST TEAM** has the right to show/exhibit their **INDIVIDUAL WORK** outside of **THE PROJECT** as they wish, without the **OWNERs'** express permission. Note **INDIVIDUAL WORK** will not be exhibited in any format until after [JUNE 27th, 2020]. Exhibitions of **INDIVIDUAL WORK** in any format, whether on social media channels or any other medium or format, will include information and tags about **THE PROJECT** in the form required by the **EXECUTIVE ADMINS**. Note: absolutely no exhibition of **THE PROJECT** will be allowed without the express consent and sign off from the **EXECUTIVE ADMINS**.

XV. SELLING OF INDIVIDUAL WORK

If an **ARTIST** decides to sell or license their **INDIVIDUAL WORK** to a third party, the **ARTIST** agrees to transfer [10%] of the proceeds of that separate sale into the **OWNERS'** token pool as a form of donation. If an **ARTIST** sells or licenses their **INDIVIDUAL WORK** to a third party, the **ARTIST** agrees to disclose to the third party that their **INDIVIDUAL WORK** is subject to a worldwide, non-revocable license to **THE PROJECT** and thus the buyer or licensee takes the **INDIVIDUAL WORK** subject to that license. The **ARTIST's INDIVIDUAL WORK** is not represented by the **TOKEN** pool. An artist who sells their **INDIVIDUAL WORK** continues to remain an **OWNER** in **THE PROJECT** unless the **ARTIST** has sold or transferred all of his/her ERC20 **TOKENS**. In addition, the new owner of the **INDIVIDUAL WORK** must be made aware that the INDIVIDUAL WORK is a part of, and will always remain a part of **THE PROJECT**, and **THE PROJECT** will continue to be exhibited, shown, licensed, profited from, etc. whenever and wherever the **EXECUTIVE ADMINS** deem appropriate.

XVI. VIDEO MECHANICS

The final version of **THE PROJECT** will be stored digitally by the **EXECUTIVE ADMINS** in the .mp4 format. It will be accessible online through the public viewing copy, which will differ slightly from the final version which is hashed on-chain (to maintain irreproducibility).

XVII. EXHIBITION COPIES

Exhibition Copies of **THE PROJECT** can be generated infinitely by **EXECUTIVE ADMINS** only. There will be no Artist Proofs.

XVIII. INDEMNIFICATION

ARTISTS and **OWNERS** each agree to indemnify, defend and hold harmless **THE PROJECT**, the **EXECUTIVE ADMINS** and the **ADMINS** from any and all claims, actions, damages, and liabilities (excluding, without limitation, attorneys' fees, costs and expenses) arising from (a) the gross negligence of the **ARTIST** or **OWNER**; (b) out of any claim that the **INDIVIDUAL WORKS**, in whole or in part, infringes upon or violate any proprietary

rights of any third party, including but not limited to trademark, patent, copyright and/or trade secret rights; (c) from a breach or alleged breach of any of the ARTIST's or OWNER's obligations, representations, warranties or agreements set forth in this Agreement, or (d) the security of, or any breach of or defect in, the code securing financial transactions under the smart contract. The ARTISTS and OWNERS agree that the EXECUTIVE ADMINS shall be indemnified and held harmless from any claims based on their management and administration of THE PROJECT, except for fraud and gross negligence.

XIX. NO SALE OF SECURITIES

The creation of ownership **TOKENS** does not denote an investment into the project, nor does it represent the sale of a security. These **TOKENS** only represent the ownership stakes in **THE PROJECT** of various contributors in a codified manner. What contributors do with their **TOKENS** is not under the purview of **EXECUTIVE ADMINS**, **ADMINS** or other **ARTISTS**, or other **OWNERS**, and the **ARTISTS**, **ADMINS**, **OWNERS** or **EXECUTIVE ADMINS** are not liable for the actions of other participants.

XX. MISCELLANEOUS

The complete compilation video will be accessible online at http://www.howarewe.xyz, but there is only one official blockchain copy of **THE PROJECT** that can be bought and sold.

The Parties acknowledge and agree that they have executed this Smart Contract as of June 27th, 2020.

BARNETT COHEN

EMILY MAST

CONSTANCE HOCKADAY

YEHUDA DUENYAS

FAYE DRISCOLL

HANA VAN DER KOLK

DARRIAN O'REILLY

HEYWARD BRACEY

DAVID ADRIAN

JAY CARLON

DOROTHY DUBRULE

JESSICA EMMANUEL

JENNIE LIU

CAMI BOYD

MIREYA LUCIO

ANDY HORWITZ

SHANNON HAFEZ

EMILY GONZALEZ-JARRETT

STACY DAWSON STEARNS

MARIE DE BRUGEROLLE

TERRENCE LUKE JOHNSON

JANINE ROGERS

MARK BEYLIN

SASKIA CLERCKX

ROB SOLOMON

RUDY FALAGÁN

DEAN EIGENMANN

SYLVAIN LAURENT

DocuSign SECURED

Certificate Of Completion

Envelope Id: 2473B334505444E88ACCF8436035B974
Subject: Please DocuSign: SIGNATURE VER_HOW ARE WE_SMART CONTRACT.docx
Source Envelope:
Document Pages: 8
Certificate Pages: 6
AutoNav: Enabled
EnvelopeId Stamping: Enabled
Time Zone: (UTC-05:00) Eastern Time (US & Canada)

Signatures: 28
Initials: 0

Status: Completed

Envelope Originator:
Carolyn Hamilton
10000 N Central Expressway
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Dallas, TX 75231
chamilton@musgrovelaw.com
IP Address: 65.36.114.19

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Status: Original
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Holder: Carolyn Hamilton
chamilton@musgrovelaw.com

Location: DocuSign

Signer Events	Signature	Timestamp
Andy Horwitz amhnyc@gmail.com Security Level: Email, Account Authentication (None) **Electronic Record and Signature Disclosure:** Not Offered via DocuSign	Signature Adoption: Pre-selected Style Using IP Address: 104.172.226.121	Sent: 6/26/2020 5:58:41 PM Viewed: 6/26/2020 10:38:20 PM Signed: 6/26/2020 10:38:35 PM
Barnett Cohen barnettacohen@gmail.com Security Level: Email, Account Authentication (None) **Electronic Record and Signature Disclosure:** Not Offered via DocuSign	Signature Adoption: Uploaded Signature Image Using IP Address: 69.75.109.122	Sent: 6/26/2020 5:58:37 PM Viewed: 6/26/2020 6:07:49 PM Signed: 6/26/2020 6:08:59 PM
Cami Boyd cboyd@musgrovelaw.com Musgrove Law Firm P.C. Security Level: Email, Account Authentication (None) **Electronic Record and Signature Disclosure:** Not Offered via DocuSign	Signature Adoption: Pre-selected Style Using IP Address: 104.210.221.112	Sent: 6/26/2020 5:58:42 PM Viewed: 6/26/2020 5:59:26 PM Signed: 6/26/2020 5:59:34 PM
Constance Hockaday constancehockaday@gmail.com Security Level: Email, Account Authentication (None) **Electronic Record and Signature Disclosure:** Not Offered via DocuSign	Signature Adoption: Pre-selected Style Using IP Address: 172.114.132.244	Sent: 6/26/2020 5:58:37 PM Viewed: 6/26/2020 6:06:18 PM Signed: 6/26/2020 6:07:37 PM

Signer Events	Signature	Timestamp
Darrian O'Reilly darrianoreilly@gmail.com Security Level: Email, Account Authentication (None) **Electronic Record and Signature Disclosure:** Not Offered via DocuSign	Signature Adoption: Pre-selected Style Using IP Address: 172.116.9.67	Sent: 6/26/2020 5:58:37 PM Viewed: 6/27/2020 1:08:03 PM Signed: 6/27/2020 1:08:19 PM
David Adrian Freeland Jr. adrianfierce@gmail.com Security Level: Email, Account Authentication (None) **Electronic Record and Signature Disclosure:** Not Offered via DocuSign	Signature Adoption: Pre-selected Style Using IP Address: 99.87.192.103	Sent: 6/26/2020 5:58:37 PM Viewed: 6/26/2020 6:30:24 PM Signed: 6/26/2020 9:22:44 PM
Dean Eigenmann dean@eigenmann.me Security Level: Email, Account Authentication (None) **Electronic Record and Signature Disclosure:** Not Offered via DocuSign	Signature Adoption: Pre-selected Style Using IP Address: 87.154.218.20	Sent: 6/26/2020 5:58:44 PM Resent: 6/27/2020 4:59:52 PM Viewed: 6/29/2020 2:02:52 PM Signed: 6/29/2020 2:03:11 PM
Dorothy Dubrule dorothydubrule@gmail.com Security Level: Email, Account Authentication (None) **Electronic Record and Signature Disclosure:** Not Offered via DocuSign	Signature Adoption: Pre-selected Style Using IP Address: 97.90.130.217	Sent: 6/26/2020 5:58:37 PM Viewed: 6/26/2020 9:41:29 PM Signed: 6/26/2020 9:42:32 PM
Emily Gonzalez-Jarrett emilygonzalezjarrett@gmail.com Security Level: Email, Account Authentication (None) **Electronic Record and Signature Disclosure:** Not Offered via DocuSign	Signature Adoption: Pre-selected Style Using IP Address: 172.118.144.209	Sent: 6/26/2020 5:58:42 PM Viewed: 6/26/2020 6:39:27 PM Signed: 6/26/2020 6:42:50 PM
Emily Mast emilykmast@gmail.com Security Level: Email, Account Authentication (None) **Electronic Record and Signature Disclosure:** Not Offered via DocuSign	Signature Adoption: Drawn on Device Using IP Address: 76.176.19.117	Sent: 6/26/2020 5:58:38 PM Viewed: 6/26/2020 8:51:06 PM Signed: 6/26/2020 8:55:09 PM

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Faye Driscoll fayedriscoll@gmail.com Security Level: Email, Account Authentication (None) **Electronic Record and Signature Disclosure:** Not Offered via DocuSign	Signature Adoption: Pre-selected Style Using IP Address: 172.114.132.244	Sent: 6/26/2020 5:58:38 PM Viewed: 6/27/2020 3:14:59 PM Signed: 6/27/2020 3:15:37 PM
Hana van der Kolk hjvanderkolk@gmail.com Security Level: Email, Account Authentication (None) **Electronic Record and Signature Disclosure:** Not Offered via DocuSign	Signature Adoption: Drawn on Device Using IP Address: 74.70.79.95	Sent: 6/26/2020 5:58:38 PM Viewed: 6/27/2020 8:32:19 AM Signed: 6/27/2020 3:13:15 PM
Heyward Bracey heyward@descentperformance.org Security Level: Email, Account Authentication (None) **Electronic Record and Signature Disclosure:** Not Offered via DocuSign	Signature Adoption: Pre-selected Style Using IP Address: 108.184.234.217	Sent: 6/26/2020 5:58:38 PM Viewed: 6/27/2020 3:02:14 PM Signed: 6/27/2020 3:20:46 PM
Janine Sun Rogers janinesunrogers@gmail.com Security Level: Email, Account Authentication (None) **Electronic Record and Signature Disclosure:** Not Offered via DocuSign	Signature Adoption: Drawn on Device Using IP Address: 71.92.249.220	Sent: 6/26/2020 5:58:43 PM Viewed: 6/26/2020 7:41:37 PM Signed: 6/27/2020 4:14:49 PM
Jay Carlon jay.carlon@gmail.com Security Level: Email, Account Authentication (None) **Electronic Record and Signature Disclosure:** Not Offered via DocuSign	Signature Adoption: Pre-selected Style Using IP Address: 172.58.27.8	Sent: 6/26/2020 5:58:39 PM Resent: 6/27/2020 4:59:52 PM Viewed: 6/28/2020 12:30:53 PM Signed: 6/28/2020 12:32:41 PM
Jennie MaryTai Liu jennieliujennieliu@gmail.com Security Level: Email, Account Authentication (None) **Electronic Record and Signature Disclosure:** Not Offered via DocuSign	Signature Adoption: Pre-selected Style Using IP Address: 104.35.162.230	Sent: 6/26/2020 5:58:39 PM Viewed: 6/27/2020 4:09:56 PM Signed: 6/27/2020 4:10:09 PM

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Jessica Emmanuel jessmoves@gmail.com Security Level: Email, Account Authentication (None) **Electronic Record and Signature Disclosure:** Not Offered via DocuSign	Signature Adoption: Pre-selected Style Using IP Address: 108.252.167.98	Sent: 6/26/2020 5:58:39 PM Viewed: 6/26/2020 10:22:36 PM Signed: 6/26/2020 10:23:24 PM
Marie de Brugerolle mdblatga@gmail.com Security Level: Email, Account Authentication (None) **Electronic Record and Signature Disclosure:** Not Offered via DocuSign	Signature Adoption: Pre-selected Style Using IP Address: 86.202.235.193	Sent: 6/26/2020 5:58:42 PM Viewed: 6/27/2020 1:28:56 AM Signed: 6/27/2020 2:29:59 AM
Mark Beylin mark.beylin@consensys.net Security Level: Email, Account Authentication (None) **Electronic Record and Signature Disclosure:** Not Offered via DocuSign	Signature Adoption: Pre-selected Style Using IP Address: 72.231.5.78	Sent: 6/26/2020 5:58:41 PM Viewed: 6/26/2020 6:01:27 PM Signed: 6/26/2020 6:02:30 PM
Mireya Lucio mireyalucio@gmail.com Security Level: Email, Account Authentication (None) **Electronic Record and Signature Disclosure:** Not Offered via DocuSign	Signature Adoption: Pre-selected Style Using IP Address: 137.25.130.33 Signed using mobile	Sent: 6/26/2020 5:58:40 PM Viewed: 6/27/2020 11:53:53 AM Signed: 6/27/2020 12:03:15 PM
Rob Solomon rob.m.solomon@gmail.com Security Level: Email, Account Authentication (None) **Electronic Record and Signature Disclosure:** Not Offered via DocuSign	Signature Adoption: Drawn on Device Using IP Address: 174.204.130.134 Signed using mobile	Sent: 6/26/2020 5:58:41 PM Viewed: 6/27/2020 4:04:31 PM Signed: 6/27/2020 4:39:38 PM
Rudy Falagán daniifalagan@gmail.com Security Level: Email, Account Authentication (None) **Electronic Record and Signature Disclosure:** Not Offered via DocuSign	Signature Adoption: Pre-selected Style Using IP Address: 47.157.246.9	Sent: 6/26/2020 5:58:43 PM Viewed: 6/26/2020 8:57:07 PM Signed: 6/26/2020 9:00:20 PM

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Saskia Clerckx saskiaclerckx@gmail.com Security Level: Email, Account Authentication (None)	 Signature Adoption: Drawn on Device Using IP Address: 172.119.7.132	Sent: 6/26/2020 5:58:43 PM Viewed: 6/26/2020 6:44:40 PM Signed: 6/26/2020 6:50:44 PM
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Shannon Hafez hafezshannon@gmail.com Security Level: Email, Account Authentication (None)	 Signature Adoption: Pre-selected Style Using IP Address: 98.148.237.7 Signed using mobile	Sent: 6/26/2020 5:58:40 PM Viewed: 6/26/2020 7:39:52 PM Signed: 6/26/2020 7:40:01 PM
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Stacy Dawson Stearns dawsonstearns@gmail.com Bodies Are Infinite Security Level: Email, Account Authentication (None)	 Signature Adoption: Pre-selected Style Using IP Address: 45.48.1.210	Sent: 6/26/2020 5:58:40 PM Viewed: 6/26/2020 7:47:19 PM Signed: 6/26/2020 8:50:22 PM
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Sylvain Laurent s@6120.eu Security Level: Email, Account Authentication (None)	 Signature Adoption: Drawn on Device Using IP Address: 82.251.66.251 Signed using mobile	Sent: 6/26/2020 5:58:44 PM Viewed: 6/26/2020 8:29:53 PM Signed: 6/27/2020 5:04:13 AM
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Terrence Luke Johnson terrylukejohn@gmail.com Security Level: Email, Account Authentication (None)	 Signature Adoption: Drawn on Device Using IP Address: 45.48.246.232 Signed using mobile	Sent: 6/26/2020 5:58:40 PM Viewed: 6/26/2020 10:22:48 PM Signed: 6/26/2020 10:24:38 PM
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Yehuda Duenyas yehuda.duenyas@gmail.com Security Level: Email, Account Authentication (None)	 Signature Adoption: Drawn on Device Using IP Address: 108.185.145.117	Sent: 6/26/2020 5:58:41 PM Viewed: 6/27/2020 12:57:23 AM Signed: 6/27/2020 12:57:50 AM
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Forecasted Future

D.T. Cochrane

Forecasted Future

As economies contract due to COVID-19 containment efforts, economists continue to offer competing forecasts for the coming months. Will economic doldrums linger after the virus's threat passes? Or will our efforts to flatten the infection curve enable rapid economic rejuvenation? None of these forecasts could anticipate the uprisings in defence of Black lives. It would be unfair to expect that they should. They are not designed or intended to offer such predictions.

But the impossibility of such insight tells us much about the limits of economic forecasting and their effects on the future. These limits emerge out of the very epistemology and ontology of economics—namely, their reductive conception of the selfish, hedonistic, atomistic individual as the basic unit of society—which also ground the ethics of economists. In economic thinking, radical, wholesale, collective social transformation is foreclosed. In the metaphysics of economists, such change can only be destructive. As such, the metaphysics of economists is implicated in the COVID-19 recession *and* the conditions of racial injustice that provoke protests, such as 2020's demonstrations for Black lives.

The Effect of Forecasts

Is a forecast a subjective account, or an attempt to make an objective claim about the future? A forecast is what Michel Serres would call a "quasi-object"—not wholly natural and not wholly cultural. Forecasts are always based on *something*—they are constructed of objects and subjects in relation. They are an apparatus.[1] The quasi-objectivity of the forecast is not just in its construction, but also in its circulation.

Where it circulates will partially determine the scale and scope of its effects. Consider competing forecasts about how Canada will recover from the COVID-19-induced recession: those forecasts might land on the desk of a bureaucrat in the finance ministry, or be shared with a deputy minister. The deputy minister might, for a wide variety of reasons, bring just one of the forecasts to the minister. The minister, convinced by the forecast, might shed the paralysis of uncertainty and act decisively. The minister might work to bolster or forestall the forecasted outcome. Perhaps a program will be cancelled or created, funding cut or redirected. These decisions can have widespread consequences for those who use the old and new programs. In this way, the forecast could be subverted or affirmed.

It is never so simple, however. The actual relays are orders of magnitude more complex: the bureaucrat's writing skills; global financial markets; the deputy minister's concentration; the Prime Minister's ideology; the finance minister's commitments; the program's efficiency… All of these factors (and more) affect the forecast's translation into social transformations. Forecasts are conduits that relay the past into the present, where they participate in making the future. In other words, forecasting is not only a calculative representation of the future, it is a metaphysical intervention: an experiment on reality based on responses to careful and constrained predictions.

Making the Future

The point of a forecast is not how well it holds up as an artifact of prediction. The point is what effect a forecast has in its present.

The tools of economics allow for the construction of complex models with many variables that bear on or relate to a variable of concern. Surmising the trajectories of all the independent variables, model users can suggest the future value of the dependent variable. However, when outcomes deviate from prediction, model-making becomes a domain rife with excuse-making. A modicum of creativity enters into both model-making and excuse-making, but disciplinarity strongly constrains the lines of creativity. The language and technical practices of economics—especially its pretense to being the most scientific of the social sciences—discipline model-makers to remain within the boundaries of peer acceptance. That is key to being accepted in government and corporate offices where others trained in economic model-making confer status and rewards.

The future does not just await us. We make the future. We make it with and against others. Some among us have larger networks and command more resources—greater force in making the future. But wealth and status are not synonymous with future-making capacity. Peasants, suffragettes, workers, and racialized peoples have also made the future. The effect of their activism and organizing in the present transforms the landscape of the possible. It is from this constantly shifting virtual landscape of the future that the present is actualized.

Economists are particularly potent future-makers, partially because they deny their own future-making. They demure, claiming to be mere observers. Yet, they proclaim the right to channel the will of *homo economicus*. As theorized, sovereign individuals relate via the market to maximize utility, generating an efficient outcome. Of course, the pure and universal market imagined by marginalist economics does not exist. So, economists can only declare what outcomes would emerge if the pure market did exist. Beyond just identifying optimal outcomes, economists design mechanisms and objects of economic relation.[2] In other words, economists make markets that prescribe social activities, thereby making and constraining the future.

Reinforcing the Status Quo

Part of economists' defence of existing power structures is liberal risk-aversion, which makes them wary that radical social change could leave people worse off. Indeed, as Deleuze and Guattari warned, we must not wantonly "deterritorialize" society, for the inevitable reterritorialization may be more brutal and more unjust.[3] However, the calculative mindset of liberal economism precludes any radical change at all. Even economists that do not naturalize the purely selfish individual and market exchange largely defend the status quo. As their forecasting models predict a future based on data from the past, they prohibit the kind of radical change necessary to end the systemic oppression of racialized peoples, as well as deal with the economic fallout of the global pandemic.

Economists' reinforcement of the status quo upholds racialized social hierarchies. It is well documented that Black income and Black wealth are both significantly lower than white income and wealth. According to mainstream economic theory, an individual's income is determined by their marginal productivity—in other words, we get what we deserve. While few economists will explicitly claim that racial differences in income are indications of white superiority, neither will they take persistent racial differences as evidence that their theory has nothing to do with actual economies. If marginal productivity theory is undone, the entire edifice of mainstream economic theory collapses, along with its justification for the institutions and outcomes of the status quo.[4]

Foreclosed Forecasts

Think of the forecast as a sort of blueprint for the future. Economists' forecasts are the most banal: rather than look forward, they look backwards—using models fed data gathered from the past. A pattern from the past is assumed to operate in the present, ensuring a predictable future. But in the process, economists end up reinforcing the social structures of the present.

What will become of us as we actualize the COVID-19 recession and recovery, and heed the movement to address racial injustice? Trapped in an uncertain present, we try to make sense of what is to come. Economists have developed tools intended to do just that. However, those tools are ill-suited to forecast what comes next. They certainly cannot help us decide what should come next. Worse, those tools are part of an implicit metaphysics that hampers the insurgency of people demanding both a better future and more say in that future.

1 Gilles Deleuze, 'What is a *Dispositif*?' in *Two Regimes of Madness: Texts and Interviews, 1975-1995* (New York: Semiotext(e)).

2 See Donald MacKenzie, Fabian Muniesa, and Lucia Siu, eds., *Do Economists Make Markets? On the Performativity of Economics* (Princeton: Princeton University Press, 2007).

3 Gilles Deleuze and Felix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia*, trans. Brian Massumi (Minneapolis: University of Minnesota Press, 1987).

4 Steve Keen, *Debunking Economics: The Naked Emperor Dethroned?* (London: Zed Books, 2011).

They are. We are. I am.

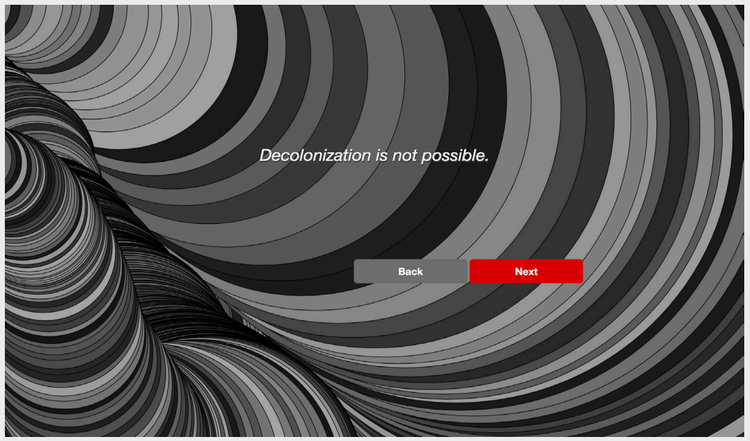
Tiara Roxanne

They are. We are. I am. is a data visualization project I created with Trinity Square Video (TSV) in Toronto during the first COVID-19 lockdown.

On March 17, 2020, I bought a one-way ticket to New York City from Berlin. There were only American passport holders on my flight, and nearly everyone had their own row throughout the entire United Airlines airbus. When we landed, they announced that we were one of the last flights allowed to land on US territory from Germany without restrictions. Some hugged, others dropped their shoulders and looked out with worry-lined eyes. "What will we do now?" a flight attendant asked as we waited to leave the plane, "I can't pay rent." As dread saturated the humid air, an ocean of uncertainty welcomed us in New York.

I had originally planned to fly into Toronto, the home of TSV, a gallery that supports artistic work that unsettles the technological norm. That changed when Canada stopped accepting flights from non-Canadian citizens. Emily Fitzpatrick, the gallery's Artistic Director, and I had been planning my exhibition for nearly a year. Between our video calls across Berlin–Toronto borders, Emily had booked me a tour that consisted of a lecture for SUNY Buffalo's PLASMA series; a performance at Squeaky Wheel Film & Media Center in Buffalo and talk with critic, writer, and curator Nora Kahn; and a performance and talk with artist and writer Ella Schoefer-Wulf at the Images Festival, presented alongside my exhibition *They Are. We Are. I am.* at TSV. Altogether the tour would take up most of April 2020—but the beginning of the pandemic in early March signaled a startling halt to these plans. My lease was ending in Berlin and the question of borders closing led my ancestral heart into panic. I felt an urgency to be on the land from which my ancestors breathe—from which I am born. I needed to be with *la tierra, mi corazón*, so I bought the first available one-way to New York and moved to Queens for an uncertain amount of time. Once I landed, Emily and I, along with the team at LANE Digital,[1] scrambled to move my exhibition, talks, and performances online in a matter of days, which manifested in my data visualization project at theyarewereiam.com.

In moving this work online, a major consideration was to translate embodied experiences of different forms of data colonialism—from spatial experience in the gallery to digital experience. For example, plans



for the exhibition required visitors to actively encounter data mining practices by completing a questionnaire and visualization of their data. If they did not complete this first step, they would not be permitted to experience the rest of the artwork; entry would not be allowed. This is an embodied marking of (de)colonial subversion.

Because decolonization is not possible due to the implication that it requires the settler to give land back to Indigenous peoples, I am instead interested in active forms of acknowledgment that lean into the more embodied or experiential—or, toward gestures of decolonization. As my work engages with the impossibility of decolonization, I ask participants to encounter the embodied gesture by actively acknowledging the damage of data colonialism. What then becomes necessary from all visitors to the work, regardless of their background, is the recognition of the ongoing violences and injustices against Indigenous peoples that drive the continuation of settler colonialism. In its move from gallery exhibition to digital space, this project enacts and experiments with different modes of encounter with data colonialism, asking:

How do we encounter embodied experiences in digital space? How does the body become data? What knowledges and memories inform our movement through digital space? What kinds of collective experience and encounter are possible through data visualization? What gestures of decolonization and togetherness are possible in the digital (without appropriating Indigenous tradition or ritual), and what gestures of colonization do our existing digital systems reinforce?

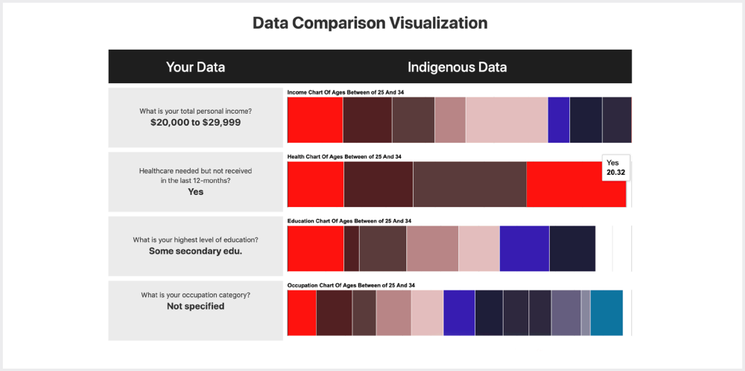
The work opens with this statement:

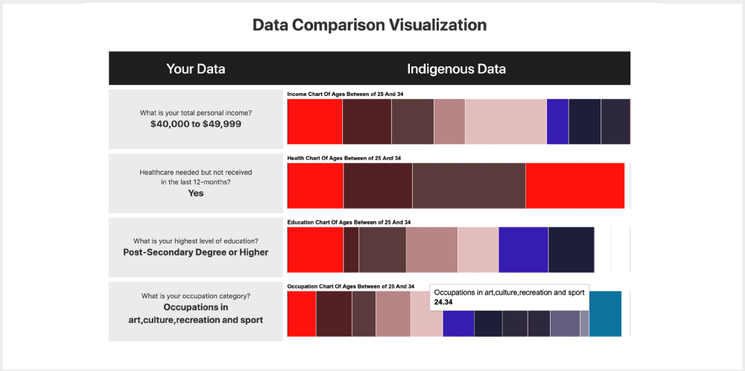
> "Aztecas del norte, mojados, Indigenous peoples, First Nations People, mestizos, Redskins, American Indians, Mexican Indians, Native Americans, Natives, savages, minorities, at risk peoples or asterisks peoples are some names or codes the Indigenous body is subjected to using settler colonialist language. The settler names the Indigenous person which codifies and marginalizes. Not only does artificial intelligence learn from these colonial pre-existing biases, it also re-inscribes the notion that Indigenous peoples no longer are but were."

We are still here. But Indigenous peoples' data is regularly misconstrued and often not included in larger and important datasets, ultimately reproducing settler-colonial erasure. This is data colonialism: the collision of practices of historical colonization with the abstract quantification methods of computing.

They are. We are. I am. prompts the visitor to offer their own data points, which are later compared to data points pulled from the Aboriginal People Survey (APS) for First Nations people living off-reserve, Métis, and Inuit living in Canada. The team and I chose to request data in the following areas: age, education level, occupation, and health access. These categories of data display the most disparate inconsistencies between the visitor and the extracted APS data. It is important to note that the visitor here is used to describe the average patron of contemporary art. However, we acknowledge that there would be folks of different ages and backgrounds and wanted to provide an experience with the most variety of output. With that said, for Indigenous peoples exploring the data visualization, it was geared toward solidarity and resource sharing. It is important not to collapse the different identities of patrons visiting the work. We wanted to display dissonance within the data. The most obvious data point to exhibit disproportion was health care, followed by total personal income, and level of degree achieved.

A 25–34 year old visitor's data is arranged along the left side of this image. Indigenous data for the same age range from the APS survey is shown in the varied colour blocks to the right. Upon mouseover, the percentage each colour block represents is provided. In the healthcare line, a large number of individuals have answered "yes" to "healthcare needed but not received," followed by "not stated," and "do not know." See figure below. Thereafter, this is data colonialism in action. When an Indigenous person either does not have access to resources or is not represented within the dataset, they are erased from the state funding, healthcare or otherwise. When Indigenous peoples are not included in datasets, they do not exist. This means that they will not receive aid or assistance if needed. This is settler colonialism set within the framework of data mining practices. The Indigenous person's identity is extracted and erased.

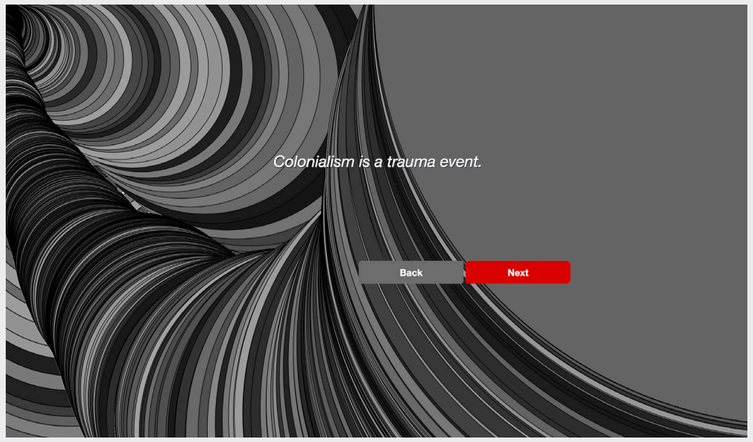




Intervening phrases that draw from my larger work regarding decolonization, intergenerational trauma, and AI bias surround the "Data Comparison Visualization" page. I had hoped to have participants record themselves speaking these lines, enacting an embodied form of acknowledgment. *A decolonial gesture*. Without the recording, the participant would not have been permitted into the larger exhibition space. But the recorded audio provided by the participants would also have been integrated into a sonic (de)colonial cacophony. In this way, audio could stand in as a form of (un)seenness, asking the participant what it *sounds* like to be colonized, marginalized, or lost in a dataset. I continue to ask: how can we work in solidarity while also acknowledging and grieving the active erasures that data colonialism carries out? How can the digital, the tactile, and the auditory create alternative ways to occupy and move through systems that are designed on the basis of extraction? What kinds of physical and digital spaces can reorient toward recovery and refusal?

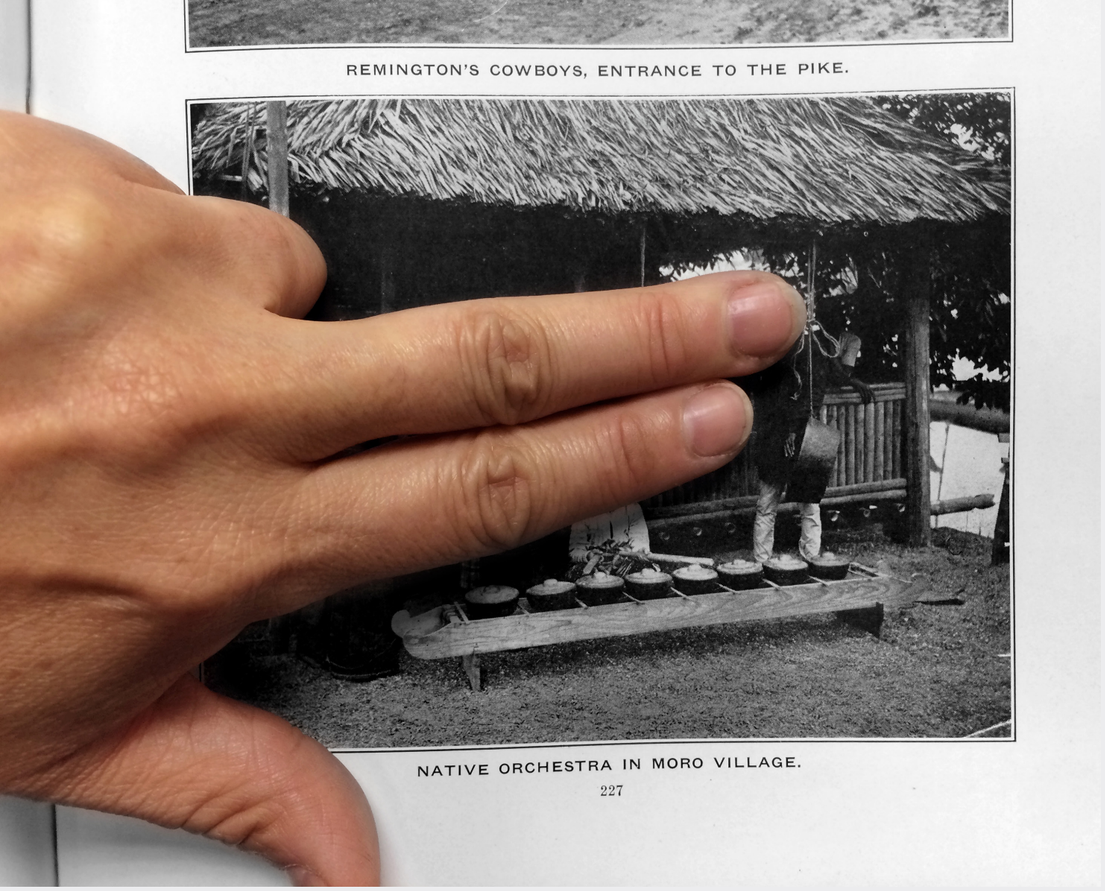
The exhibition—and its spatial, auditory, and embodied arrangements—is still a fantasy I wish to bring into reality post-COVID-19. For now, theyarewereiam.com serves as a space to mediate and acknowledge data colonialism for First Nations, Inuit, and Métis peoples within the Canadian borders (and Indigenous peoples more generally). I hope to extend this space beyond the material and digital borders settler colonialism has forcefully brought upon us Indigenous peoples.

As I write from a cozy corner of Neukölln, Berlin, the sun begins to set at four pm and winter slowly settles its cold shadow in the midst of the second wave of COVID-19. There is a calm in the cold, in the distance between bodies. Surrounded by upward-facing leaves, brightly coloured and open-ended palms that welcome the many feet that walk the Ufer (with a loved one, with a friend), the angst that once surrounded my feeling of uncertainty in New York is now transformed into a soothing Berlin backdrop. A surrender in the blackbird winter. We learn to gather differently now. To care with grace. An undoing of panic. The sky is kind today.



All images are screenshots from Tiara Roxanne's *They are. We are. I am.*, 2020. COURTESY THE ARTIST.

1 LANE Digital is Aljumaine Gayle, E.L. Guerrero, Ladan Siad, and Nabil Vega. LANE builds human-centred, community-focused concepts that lead to a more just and equitable future. Their interdisciplinary studio is about unearthing and unsettling—working together to conceptualize new ways of listening, seeing, feeling, and understanding social issues through design. Their work is rooted in black, queer, anti-capitalist, diasporic, feminist methodology, and pedagogy.



Above and below, Stephanie Syjuco, *Block Out the Sun*, 2019. COURTESY THE ARTIST.

Biographies

Meredith Broussard is an associate professor at the Arthur L. Carter Journalism Institute at New York University and the author of *Artificial Unintelligence: How Computers Misunderstand the World*. Her research focuses on artificial intelligence in investigative reporting, and the use of data analysis for social good. A former features editor at the *Philadelphia Inquirer*, she has also worked as a software developer at AT&T Bell Labs and the MIT Media Lab. Her features and essays have appeared in *The Atlantic*, *Slate*, *Vox*, and other outlets.

Ted Chiang is the author of *Stories of Your Life and Others* and *The Lifecycle of Software Objects*. He was born and raised in Port Jefferson, NY, and attended Brown University, where he received a degree in computer science. His work has received the John W. Campbell Award, four Nebula Awards, four Hugo Awards, four Locus Awards, a Theodore Sturgeon Memorial Award, a Sidewise Award, and a British Science Fiction Association Award. He lives outside of Seattle, Washington.

Taeyoon Choi is an artist and educator based in Seoul and New York. He explores the poetics in science, technology, society, and human relations. He believes in the intersectionalities of art, activism, and education, and works on disability rights, environmental justice, and anti-racism. He co-founded School for Poetic Computation in 2013 where he continues to organize and teach experimental classes. Through his diverse practices, he seeks a sense of gentleness, magnanimity, justice, solidarity, and intellectual kinship.

D.T. Cochrane is an economist currently living in Peterborough, with his partner and two children. He is an economic research consultant with the Indigenous Network on Economies and Trade and a postdoctoral fellow with the Blackwood Gallery. In 2020, he began a postdoctoral fellowship on "Innovation and Rentiership" at York University with Dr. Kean Birch. He was previously a postdoctoral fellow in "Reconciling Sovereignties" at Osgoode Hall Law School and Ryerson University with Drs. Shiri Pasternak and Dayna Scott. He has worked as an economic researcher with the Manitoba and Ontario New Democratic Parties, as well as with Mining Watch Canada. He has a PhD in Social & Political Thought and Masters' and Bachelors' degrees in Economics.

Beth Coleman researches experimental digital media, and specializes in race theory, game culture, and literary studies. She is currently working on two books and has previously published *Hello Avatar: Rise of the Networked Generation*, a critically acclaimed book examining the many modes of online identity and how users live on the continuum between the virtual and the real. She has also curated numerous art exhibits and media installations in North America and Europe. Her current research investigates aspects of human narrative and digital data in the engagement of global cities, including aspects of locative media, mobile media, and smart cities.

Constance Hockaday is a queer Chilean-American from the US/Mexico Border. She is a director and visual artist who creates immersive social sculptures on urban waterways. She has worked with the Floating Neutrinos since 2001, and collaborated with Swoon's *Swimming Cities* projects, sailing floating sculptures along the Hudson, Mississippi, and the Adriatic Sea (2006-09). In 2011, she created *The Boatel*, a floating art hotel in New York's Far Rockaways made of refurbished salvaged boats—an effort to reconnect New Yorkers to their waterfront. Her 2014 piece *All These Darlings and Now Us* highlighted the displacement of San Francisco's queer community: more than 1000 people watched peep show performances on a raft of retrofitted sailboats featuring artists from two recently shuttered iconic queer businesses. Hockaday holds an MFA in Social Practice and MA in Conflict Resolution. She is also a Senior TED Fellow and an artist-in-residence at The Center for the Art of Performance at UCLA.

HOW ARE WE is a collectively-created performance initiated by **Emily Mast** and **Yehuda Duenyas**, with works by Barnett Cohen, Constance Hockaday & Faye Driscoll, Darrian O'Reilly, David Adrian Freeland, Jr., Dorothy Dubrule, Emily Mast & Yehuda Duenyas, Hana van der Kolk, Heyward Bracey, Jay Carlon, Jennie Marytai Liu, Jessica Emmanuel, Mireya Lucio, Shannon Hafez, Stacy Dawson Stearns, and Terrence Luke Johnson; critical writing by Andy Horwitz, Emily Gonzalez-Jarrett, Marie de Brugerolle, Mark Beylin, and Rob Solomon; blockchain lead developers Mark Beylin and Rob Solomon; blockchain developers Dean Eigenmann and Sylvain Laurent; design by Janine Sun Rogers, Rudy Falagan, and Saskia Clerckx; the legal counsel of Cami Boyd; and production by the Onassis Foundation. For full biographies of participants, visit howarewe.xyz.

The drafting of the **Feminist Data Manifest-No** was led by Marika Cifor (University of Washington) and Patricia Garcia (University of Michigan). In addition to their efforts, the first complete draft is the collective labour of T.L. Cowan (University of Toronto); Jasmine Rault (University of Toronto); Tonia Sutherland (University of Hawai'i at Mānoa); Anita Say Chan (University of Illinois Urbana-Champaign); Jennifer Rode (University College London); Anna Lauren Hoffmann (University of Washington); Niloufar Salehi (University of California, Berkeley); and Lisa Nakamura (University of Michigan). Situating their work within a long genealogy of feminist thinking and praxis, following Ruha Benjamin, they drafted the Manifest-No as a way to "remember to imagine and craft the worlds you cannot live without, just as you dismantle the worlds you cannot live within."

Filmmaker **Shalini Kantayya** premiered *Coded Bias* at the 2020 Sundance Film Festival. She directed for the National Geographic television series *Breakthrough*, which was broadcast globally in June 2017. Her debut documentary, *Catching the Sun*, premiered at the LA Film Festival and was named a *New York Times* "Critics' Pick." *Catching the Sun* was released globally on Netflix on Earth Day 2016, with executive producer Leonardo DiCaprio, and was nominated for the Environmental Media Association Award for Best Documentary. Kantayya is a TED Fellow, a William J. Fulbright Scholar, and an Associate of the UC Berkeley Graduate School of Journalism.

Mike Pepi is a critic of art and technology. He is based in New York.

Tommy Pico is a poet, podcaster, and TV writer. He is author of the books *IRL*, *Nature Poem*, *Junk*, *Feed*, and myriad of keen tweets including "sittin' on the cock of the gay." Originally from the Viejas Indian Reservation of the Kumeyaay Nation, he splits his time between Los Angeles and Brooklyn. He co-curates the reading series Poets with Attitude, co-hosts the podcast *Food 4 Thot* and *Scream, Queen!*, is poetry editor at *Catapult Magazine*, writes on the FX show *Reservation Dogs*, and is a contributing editor at *Literary Hub*.

Tiara Roxanne (PhD) is an Indigenous cyberfeminist, scholar, and artist based in Berlin. Her research and artistic practice investigates the encounter between the Indigenous Body and AI. She explores the colonial structure embedded within artificial intelligence learning systems in her writing, and in performance art using textiles. She received the Zora Neale Hurston Award from Naropa University in 2013, where she completed an MFA. Under the supervision of Catherine Malabou, Roxanne completed her dissertation "Recovering Indigeneity: Territorial Dehiscence and Digital Immanence" in June 2019. She has presented her work at Images Festival (Toronto), Squeaky Wheel Film & Media Art Center (NY), SOAS (London), SLU (Madrid), Transmediale (Berlin), Duke University (NC), AMOQA (Athens), among others. She is currently a researcher at DeZIM-Institut.

Stephanie Syjuco works in photography, sculpture, and installation, moving from handmade and craft-inspired mediums to digital editing and archive excavations. Recently, she has focused on how photography and image-based processes are implicated in the construction of racialized, exclusionary narratives of history and citizenship. Born in the Philippines, she is the recipient of a Guggenheim Fellowship and has exhibited widely, including at the Museum of Modern Art, the Whitney Museum, San Francisco Museum of Modern Art, among others. She is an Associate Professor at the University of California, Berkeley, and resides in Oakland, California.

GLOSSARY
An entangled lexicon for a rapidly changing world

Autonomy: A position of agency and decision-making free of coercion. To end harmful data policies (e.g. forced permissions, cookie collecting, blocked access) the Feminist Data Manifest-No prescribes **data autonomy** (p. 10). Taeyoon Choi's Distributed Web of Care proposes an infrastructure of "autonomous nodes" that provides collective agency and individual ownership of data and code (p.4).

Biopolitical: The combination of the Latin *bios* (pertaining to living organisms) with *politics* was popularized by French philosopher Michel Foucault. Foucault foregrounds how life is governed, ordered, and administrated by state and institutional power, and chronicles how social control is internalized through social relations. Biopolitics pervades all interactions between persons and their governments—in public health, policy, law, economics, and social programs. Through close attention to how biopolitics is deployed, scholars and activists denaturalize normative notions of gender, race, sexuality, class, disability, and nationality (see Feminist Data Manifest-No, p. 10; Roxanne, p.32; Coded Bias, p.7).

A **blockchain** is a decentralized ledger, secured using cryptography and stored in a digital database. It logs transactions in a time-stamped and verifiable system, as in its original development as a means to trade Bitcoin. In cryptocurrency trading, blockchain networks permit users to remain anonymous, and all transactions to be visible to the entire network. This structural openness, anonymity, and security enables blockchain technologies to circumvent conventional networks of law and finance, or to explore collective authorship and ownership (see HOW ARE WE, p. 20).

A **broadcast** is a widespread transmission of information. The term originates in agriculture, describing a method of sowing seeds by casting them broadly. It now references the distribution of audio and visual content across printed, digital, and electronic matter (see Chiang, p. 14).

An HTTP **cookie** (also known as a web cookie or browser cookie) is a small piece of data sent by a web server to a web browser. **Cookies** possess ID information specific to the user and their computer, and are utilized to organize and control user experience. Often pervaded by practices of coercive permissions, cookie collecting is part of the current data regime that reproduces the colonial "ruse of consent" (see Manifest-No, p. 10).

Damage-Centred Research, a term coined by Unangaŝ scholar Eve Tuck, describes research on Indigenous and urban communities that portrays research subjects through relationships to harm, injury, trauma, and exploitation (especially in a well-meaning attempt to affect change by surfacing community pain). Tuck offers **desire-centred research** as an antidote, describing frameworks for recognizing and honouring the complexity and agency of lives and communities under study. (see Manifest-No, p. 10; Roxanne, p. 32).

Deterritorialization refers to the separation or severing of relationships between cultural codes, behaviours, or practices from a particular location. Deterritorialization may not necessarily describe a dilution or depletion of culture—but often results in a reordering of how people behave, move through, and experience their relationships to space and culture. Globalization, capitalism, and mediatization are often described as deterritorializing forces (see Cochrane, 30).

Distributed and **decentralized** are terms used among proponents of the distributed web, who build online infrastructures to resist the centralization of internet service providers. A decentralized network has additional nodes beyond its centre; a distributed network adds another level of connection between users, as in peer-to-peer (P2P) networks such as BitTorrent or Bitcoin. Recently, coders and programmers are working to build greater trust and care in P2P networks, with anti-oppression principles serving to counteract the toxic environments of the broader internet (see Choi, p. 4).

Enterprise: A project, initiative, or undertaking requiring significant effort (see Pico, p. 18); or a business. "Free enterprise" (capitalism or the "market economy") derives from the latter definition, and suggests an economic system free of state interference. "Enterprise" is often used in optimistic terms, though its etymological roots in "to seize, take" and an "adventurous disposition" give pause to question what histories and ideologies it evokes (see Coded Bias, p. 7, and Pepi, p. 16, for a discussion of techno-optimism).

Forecast: An attempt to make a prediction about the future based on observable information from the past and present. Many forecasts (including economic ones) are constrained by existing data—meaning that they are often doomed to replicate and entrench past behaviours and assumptions (see Cochrane, p. 30).

Landscape: The unique attributes of an area—either literally (e.g. topographical features), or figuratively (e.g. a model, pattern, structure, or movement). As a verb, **landscapin**g refers to altering an existing area to enhance appearance and functionality. Historically, landscape planning is rooted in industrial motivations of colonial capitalism (see Davis & Todd in SDUK01, Devine in SDUK06). See Cochrane, who looks to activists and organizers to forecast the "landscape of the possible," a shifting landscape of the future that realizes the present (p. 30).

Network: A system of intertwined people or things—such as a spider web or the World Wide Web—often united by common principles or actions. Sometimes a networked approach elects a governing body to steward legislation, while other times it advocates for policy change, or empowers each member to be autonomous in its decision-making (see Cadotte in *SDUK07(2)*). As Taeyoon Choi asks: "What kind of network do we want for the future?" (p. 4)

Personhood: The condition and status of being a person, afforded a person's rights and responsibilities. While personhood is typically closely related to humanness, patriarchal and white supremacist systems often withhold the legal status of personhood along race, gender, and ability lines (see Choi, p. 4; Coded Bias, p. 7). The subject of numerous moral and philosophical debates, criteria for personhood often include social, genetic, linguistic, and cognitive measures (see Chiang), and legal frameworks for personhood (i.e. **environmental personhood**) may be used as strategies in pursuit of recognizing and protecting non-human beings.

Polyvocal: Comprising multiple voices. In contrast to a singular voice, polyvocality provides diverse perspectives and multifaceted engagements that are informed by a variety of experiences and knowledges (see HOW ARE WE, p.20; Hockaday, p. 12; Pepi, p. 16).

Predictive policing is a technology developed by tech companies and marketed to police departments aimed at forecasting crime. In known cases it has been used in several US states, in China, and in several European countries. Predictive policing systems process past crime data through prediction algorithms to identify potential crime "hotspots." Predictive policing has been roundly criticized for the opacity and racial bias of its algorithms; for its tendency to repeat existing biases within police forces; its non-disclosed rollout in some police departments; and its ineffectiveness as a tool of community outreach or crime prevention (see Feminist Data Manifest-No, p. 10; Coded Bias, p. 7).

Software: A set of encoded instructions that enables a computer to perform tasks. Software commonly describes the functional properties of a computer that do not refer to its physical parts (**hardware**). Hard and soft infrastructures are synchronistic and cannot act independently of one another: their layered existence, termed "The Stack'' by sociologist Benjamin Bratton, makes it possible to produce networks that are not only mutually confined, but geopolitical in nature (see Diamanti in *SDUK03*; Pepi, p. 16).

Trust: A relationship, arrangement, or belief involving risk—i.e. a prediction about another entity acting with integrity in the future (see Hockaday, p. 12). In law and policy, **anti-trust** regulations are geared at supporting market competition and constraining predatory monopolies—see, for example, recent lawsuits over Big Tech's domination of the digital ecosystem. In media and technology, trust is negotiated among many factors, including privacy, security, anonymity, consent, and transparency. (See HOW ARE WE, p. 20; Manifest-No, p. 10; Coded Bias, p. 7).