

T. J. Demos

# To Save a World: Geoengineering, Conflictual Futurisms, and the Unthinkable

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The Anthropocene is proving to be an era of world war, or rather, worlds at war. Not that this is anything new. We are no doubt living in the continuation of longstanding onto-epistemological and politico-military conflicts set within (still unfolding) histories of colonial and global states of violence and dispossession. If catastrophe lies before us, then it flows from what's come before. Consider two ideological formations that speak to our current situation. First, geoengineering's techno-utopianism, which is premised on climate-change fixes for the symptoms of fossil capital's centuries-long effect on the environment. Adherents suggest that solar radiation management and carbon capture can stabilize temperatures so as to avert calamitous environmental transformation. The Breakthrough Institute offers a futurist vision of the "good Anthropocene," articulated as a coming world where "humans use their growing social, economic, and technological powers to make life better for people, stabilize the climate, and protect the natural world."<sup>1</sup> The second formation we should consider is the tragic and redemptive Afrofuturism appearing in Arthur Jafa's shattering 2016 video *Love is the Message, the Message is Death*. As one model among numerous Indigenous and anticolonial futurisms embedded within social movements dedicated to justice-to-come, it foregrounds the heartrending violence of the present as the fundamental basis upon which any alternative – one of co-existence, equality, love, and peace – can be imagined.

Following the impulses behind the 2016 Movement for Black Lives Platform, which built on longstanding African-American approaches to environmental justice, it is crucial to bring these politico-ecological strands together in intersectional analysis.<sup>2</sup> The above two modelings of the future offer an expedient comparison between the current techno-scientific rationality of climate-change response and the social in/justice concerns around racial capitalism. It invites a much-needed discussion of futures that could potentially be locked in for hundreds, even thousands of years, especially in light of the fact that technocratic climate science tends to ignore, or, at best, merely pays lip service to the differential impacts of environmental transformations on disenfranchised communities subject to ongoing racial and economic discrimination, and that social justice activism also tends to shunt ecological matters to the side due to an all-too-immediate confrontation with police brutality.

Jafa, a filmmaker by trade, unleashes an archive of citizen-journalist, dash cam, and media videos through which the black body is subjected to police brutality and other forms of

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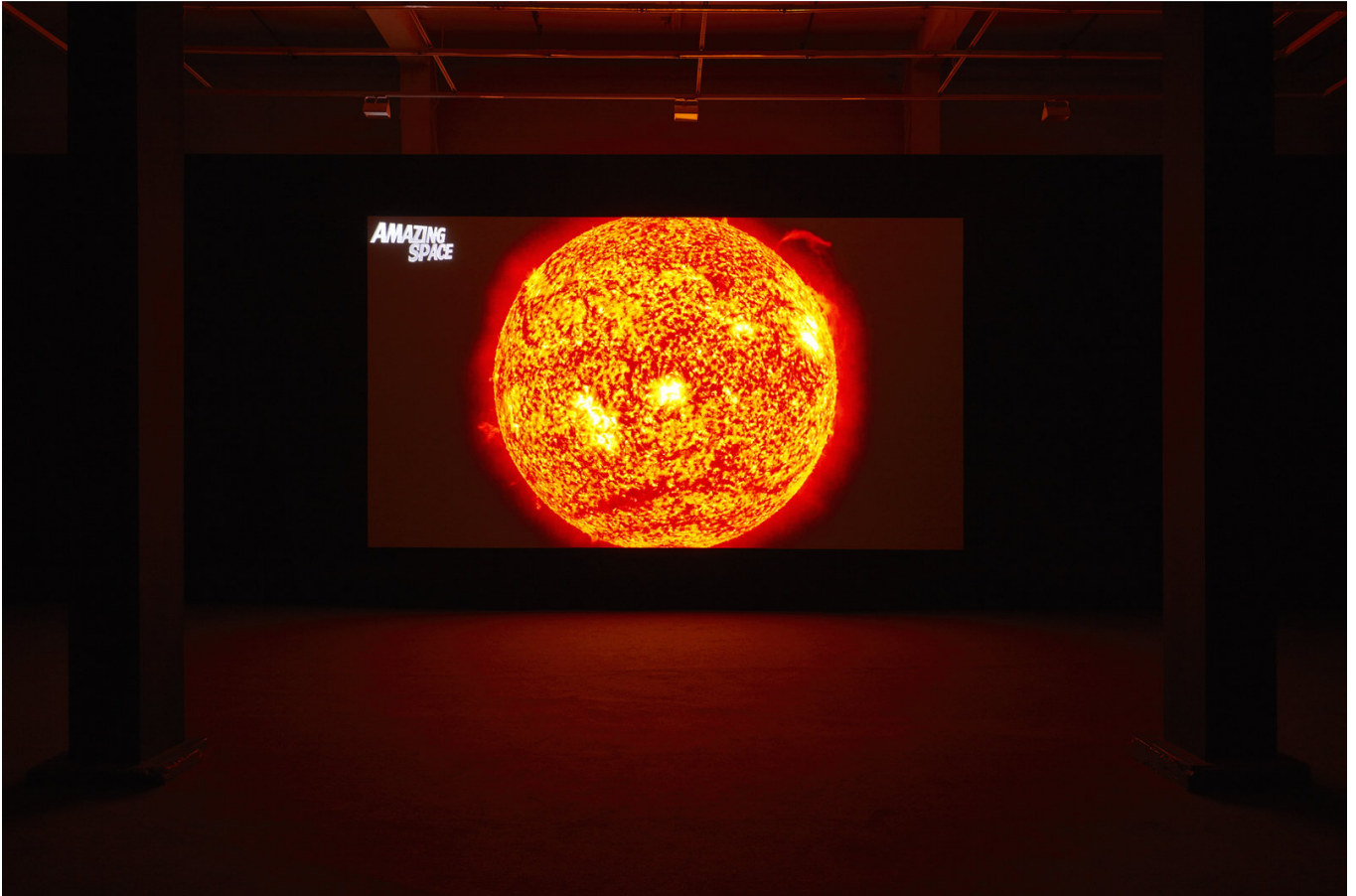
Arthur Jafa, *Love Is The Message, The Message Is Death*, 2016. Video (color, sound) 7' 25" Courtesy of the artist and Gavin Brown Enterprise. All images below unless otherwise noted are from the same piece.



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violence. Set to (the artist formerly named) Kanye West's transcendent gospel-rap anthem "Ultralight Beam," the video quickly cycles through recent and historical footage, intermixing clips of horrific, civilization-destroying aliens from Hollywood films. It would appear that Jafa proposes an allegory for the destruction of the world that, in a parallel universe, geoengineering wishes to repair. My 2017 book *Against the Anthropocene* similarly criticizes the Anthropocene thesis for its regressive and narcissistic neo-humanism, its evasion of the differential causes and effects of climate breakdown, its disavowal of petrocapiatlist culpability, and its ecology of affluence.<sup>3</sup> That analysis extended to diverse visual-cultural expressions of remote sensing data, the kind that offers "whole earth" perspectives of the planet as not only devoid of social conflict but also safely in the grips of an emergent scientific mastery. These observations still plague theories, and the unfolding reception, of the Anthropocene today – despite parallel attempts to mobilize it critically, work progressively with its conceptualization, and also nominate additional terms to better comprehend current conditions, such as the Chthulucene or the Capitalocene.<sup>4</sup> While Jafa's video powerfully elucidates the problems with this formation – dramatizing the extreme costs of the social asymmetries that go unaddressed within engineering – the last couple of years have shown us, with increasing clarity, that the neoliberalization of the Anthropocene is ascendant. The growth in climate engineering theory and practice and its status-conserving technofixes threaten a future grounded in social justice.

Geoengineering unfolds directly from the Anthropocene thesis, beginning with the initial 2000 proposal made by atmospheric chemist Paul Crutzen and biologist Eugene Stoermer to designate a new geological era where Earth systems are increasingly determined by "human activities." As they explained, "an exciting, but also difficult and daunting task lies ahead of the global research and engineering community to guide man-kind towards global, sustainable, environmental management."<sup>5</sup> Crutzen soon followed up with more explicit suggestions that large-scale engineering projects, including his own one for stratospheric sulfur injections, may well be necessary to "optimize" the climate.<sup>6</sup> Much dispute remains over the dating of this post-Holocene epoch: whether it began with the nineteenth-century industrial revolution, or nuclear science in the 1940s, or again much earlier with the Orbis Spike of 1610. The latter coincides with the geological implications of colonization and genocide in the Americas, which

also unknowingly dropped atmospheric carbon levels thanks to large-scale afforestation of once-cultivated Indigenous lands.<sup>7</sup> Its apparently causal connection to geoengineering shows that the Anthropocene is not only far from innocent in historical diagnosis (it matters both geologically and politically when we date it), but preemptive in techno-scientific prescription for future response. Essentially, by interpreting the past, we determine the future.

For Crutzen, engineering may be a last resort to forestall catastrophic breakdown, where reducing emissions proves insurmountable; for others, it represents an attractive first option to advance ecological modernization, merging climate solutions with economic opportunity. This becomes explicit with The Breakthrough Institute's notorious proposal for a good Anthropocene, founded on the dubious "decoupling" of economic growth from environmental impacts.<sup>8</sup> This "leading big money, anti-green, pro-nuclear" – and pro-geoengineering – "think tank in the United States" was founded in 2003 by Michael Shellenberger and Ted Nordhaus. In their 2004 essay "The Death of Environmentalism: Global Warming Politics in a Post-Environmental World," Shellenberger and Nordhaus sought to dispatch what they termed the "politics of limits" – the kind based in the regulatory environmentalism of the 1970s emphasizing Earth's finite carrying capacity – and replace it with a "politics of possibility" dedicated to technologically-driven economic growth.<sup>9</sup> They count Carl Page, brother of Google founder Larry Page, among its funders, indicating the growing convergence of Big Tech with green economics. According to critics, The Institute remains singularly "dedicated to propagandizing capitalist technological-investment 'solutions' to climate change."<sup>10</sup>

The clearest articulation of the Institute's position is "An Ecomodernist Manifesto," written by eighteen authors including Shellenberger and Nordhaus. It advances this techno-solutions-based goal: "More-productive economies are wealthier economies, capable of better meeting human needs while committing more of their economic surplus to non-economic amenities, including better human health, greater human freedom and opportunity, arts, culture, and the conservation of nature."<sup>11</sup> Despite its familiar trickle-down economics and liberal-coated goodwill, the Manifesto's expansive spatiotemporal scales and abstract rhetoric, like much of the Anthropocene's planetary imagery and deep time frame, overshoot the figural, the actual, the experiential. It's not surprising, then, that its "politics of possibility" fails to mention the terms "race," "equality," or "justice," which would help connect to the actual antagonisms of

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current social experience, while the lofty and generalizing language of “human,” “technology,” and “growth” abound.<sup>12</sup> By evading such key facets of justice-based environmentalism – which they do their best to consign to the grave – Ecomodernism’s color-blind formulations reflect yet another version of what Van Jones has called “the unbearable whiteness of green,” here doubly unbearable because the Manifesto’s utopianism utterly fails to reflect on the intolerable social conditions that it disappears and implicitly seeks to protect.<sup>13</sup>

Alternately, if we can describe Jafa’s video as expressing an environmentalism of sorts – which I argue we can, even though the video’s reception to date has largely evaded such an analysis – then it’s one attuned to what Christina Sharpe terms “antiblackness as total climate.”<sup>14</sup> And compared to the Ecomodernist Manifesto’s many conceptual loopholes, *Love is the Message* is laser-focused on figurations distorted within the everyday environments of racial-capitalism’s necropolitics. Indeed, Jafa’s stream of rhythmic edits cycles relentlessly through shots of police hitting, pummeling, punching, shooting, and brutalizing Black bodies (recalling and updating approaches of Third Cinema and specifically Cuban filmmaker Santiago Álvarez’s then-shocking portrayal of US racist policing set to *Lena Horne*’s rousing civil-rights number in his short 1965 film *Now!*). Visualizing the policing of distinct climates of life and death, Jafa includes the 2015 murder of Walter Scott in South Carolina, the abusive 2014 arrest of Kametra Barbour in her car with her four children in Dallas, and the cruel ground-tackling of fifteen-year-old, bikini-clad Dajerria Becton, who a white police officer violently forced to the ground at a pool party in McKinney, Texas in 2015. Where long-term environmental management is integrally related to social control with racial, gendered, and classed differentials, we can term these practices “climate control.” Elsewhere, Jafa contextualizes this historic anti-blackness with additional footage drawn from the historical archive, showing midcentury scenes of police fire-hosing Black protestors, striking civil rights activists with nightsticks, as well as whites brutalizing lunch counter protestors in North Carolina, and footage from D. W. Griffith’s notorious 1915 film *The Birth of a Nation*, with its scandalously positive portrayal of Klu Klux Klan members and white actors in blackface.

In returning to Ecomodernism, The Breakthrough Institute willfully contributes to the widespread invisibility of these scenes, divorcing what may be termed the Black Anthropocene – wherein ecology is inseparable from the social terms of racial capitalism – from its geoengineered future.<sup>15</sup>

While these models are capable of climate control at the regional level, as in its solar radiation management proposals, Jafa’s video, which exhibits affinities with the fields of political ecology and climate justice<sup>16</sup> grounds the environment as the realm of socio-political and techno-economic inequality. This equation is most explicit where his video includes passages of African-Americans wading through the flood waters of Hurricane Katrina. For many New Orleanians, years of structural negligence, municipal and infrastructure defunding, systematic racial inequality, and impoverishment were only compounded by the “unnatural” disaster. In fact, taking that context writ large, geoengineering appears to be a technological construct mobilized in part precisely so as *not* to address social injustice and to restrict our understanding of environment to the biogeophysical realm. Showing how police brutality enacts the every day (and sometimes spectacular) meanings of US environmental management, *Love is the Message* brings environmental control down to the racialized and classed figural scale. We witness how white supremacy, disaster capitalism, and authoritarian neoliberalism operate at such a granular level, models that today have come to represent Trumpism, itself a signature instance of the pathologies of Anthropocene rationality.<sup>17</sup>

“Climate change is global-scale violence against places and species, as well as against human beings,” contends Rebecca Solnit.<sup>18</sup> Naomi Klein extends that insight where she writes how “the reality of an economic order built on white supremacy is the whispered subtext of our entire response to the climate crisis,” which is far from accidental, but rather “the result of a series of policy decisions the governments of wealthy countries have made – and continue to make – with full knowledge of the facts and in the face of strenuous objections.”<sup>19</sup> Attacking such decisions at UN climate summits, the Sudanese diplomat and climate negotiator Lumumba di Aping has predicted the results to be “climate genocide,” where limiting warming to two degrees Celsius means accepting a global average that will translate into 4-5 degrees in some places, meaning “Africa will burn.”<sup>20</sup> Owing to the massive scales, delayed impacts, and tremendous complexity of climate science, as well as its networked agencies built of cybernetic systems, the challenge is urgent to render these insights into visual evidence capable of forming collective political subjects who act, so that we can shape the future we want to live in – at least while there’s yet time left to do so.<sup>21</sup>

Even while *Love is the Message* doesn’t specifically reference geoengineering, it

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nonetheless offers a discernable cry of protest against the latter's ambition to sustain our present culture with no alteration to its governing sociopolitical and economic arrangements, with mitigation technology only intervening at the level of regional weather control and atmospheric waste management. By virtue of its montage, Jafa's video joins passages of black death and police violence to close-up shots of angry sun flares, as seen from NASA's International Space Station's near-live feed, offering an insight common in environmental justice circles that views global warming as a threat multiplier that exacerbates social conflict and inequality. According to well-documented research, disenfranchised and impoverished communities of color experience higher levels of exposure to climate-related disasters and their aftermath, food and water shortages, major health risks, and other forms of environmental vulnerability.<sup>22</sup> In this vein, it's feasible to understand the video's footage of the alien's dripping secondary jaws from Ridley Scott's 1979 classic, and those of the city-destroying monster from *Cloverfield*, Matt Reeve's 2008 faux-found-footage horror film, as further allegories, serving to elevate the tragic-but-quotidian documents of police violence and social oppression to the realm of cosmopolitical significance, the arena where worlds are annihilated and remade. In other words, any given police attack cannot be seen as a stand-alone local event, but rather, by virtue of Jafa's stream of collected footage, part of systematic and widespread violence, and more, as a matter of civilizational threat akin to the horror of an alien assault on planet earth. As such, the monstrous here is a story of racial injustice, which Jafa sets in a post-natural dystopia resulting from runaway climate change.

The many film fables that the monstrous proposes might also be read variously as representing the greedy and senseless destruction of the world conducted by the rapacious power of carceral capital, bolstered by police climate control, the colonization of debt, and the chains of spectacle; the radical and threatening otherness of racial difference become a predatory behemoth; alternately, a justice-seeking revenge fantasy upon white-supremacist culture by what lies beyond recognition; or the materialization of contemporary fears of a genetically and geo-engineered Frankensteinian science in creating post-natural dystopias and runaway climate change – or indeed some element of each all mixed together without articulate or stable meaning.

The Breakthrough Institute also references our “contemporary Frankenstein” – enlisting no less than Bruno Latour in its theoretical armory,

who argues that we must not disown the planetary monster we have created – the earth of the Anthropocene – but rather learn to love and care for it through further technological acts of “modernizing modernization.”<sup>23</sup> While Naomi Klein overlooks Latour's subtler call for a “compositionist” modernity as “a process of becoming ever-more attached to, and intimate with, a panoply of nonhuman natures,” she criticizes the presumptuousness of his proposal especially where it aids in the Institute's pro-engineering agenda: “The earth is not our prisoner, our patient, our machine, or, indeed, our monster. It is our entire world. And the solution to global warming is not to fix the world, it is to fix ourselves.”<sup>24</sup> Adding to mounting opposition to geoengineering, she highlights the unintended side-effects (e.g. interfering in Monsoons in South Asia, exacerbating drought in North Africa, widening the ozone hole); the lack of any regulatory protocol for climate interventions with trans-national implications; its lock-in effect making it next to impossible to abandon the technology once it's been implemented; its anti-democratic basis in an era of globalism led by a handful of powerful developed nations; and, crucially, its directing of precious resources away from the *causes* of climate disruption, in favor of addressing *symptoms*.<sup>25</sup>

Indeed, in recent years popular resistance movements have formed around climate justice, asserting the fundamental principle of “system change, not climate change,” where justice means dedication to equality, fairness, and the inclusion of the most vulnerable and members of frontline communities in the deliberation of climate solutions. Think of the ongoing battle in central France to stop the new airport and invent a non-capitalist commons at the Zad; Standing Rock's ongoing opposition to the Dakota Access Pipeline and expression of multi-national resurgence in the name of Indigenous and environmental rights; the many examples of Blockadia pitted against fossil-fuel infrastructure and extraction projects across the Americas, including protests in Louisiana against the Bayou Bridge Pipeline, in British Columbia against the Trans Mountain Pipeline, and those in Ecuador against oil drilling in Yasuní National Park; and the European climate camps and the Ende Gelände [Here and No Further!] movement in Germany, where the state is currently threatening to tear down the ancient Hambach forest to dig for coal, evicting activists along the way.<sup>26</sup> These are all pledged variously to the goal of reinventing forms of life by refusing the imperatives of capitalist growth and market-based mechanisms for addressing climate breakdown, even while they also seek to expand

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the social technologies of equality and justice.<sup>27</sup>

But despite such momentum and creative transitions, what's becoming clear with the ongoing development of geoengineering is that massive resources and funding bodies are mobilizing the technology under the star of the neoliberal Anthropocene.<sup>28</sup> If anything, that formation parallels and joins the same forces that support the militarization and technologization of police functions, growing economic inequality and generalized indebtedness, the privatization of and creation of for-profit prisons, and the criminalization of protest, to the point where the criminal justice complex increasingly treats both environmental and antiracist activism as terrorism.<sup>29</sup> Consider Breakthrough Initiatives – no relation to the Institute other than sharing a trending term within the field of competitive tech development – which is one among many trying to “save the planet” and motivated in doing so by what some see as a \$12 trillion opportunity.<sup>30</sup> Funded in part by Facebook's Mark Zuckerberg and Israeli-Russian venture capitalist Yuri Milner of Digital Sky Technologies, and counting the late Stephen Hawking among its collaborators, the project recently put \$100 million into a radio wave project to search for alien life.<sup>31</sup> Led by a libertarian entrepreneurialism that derides the outmoded and bureaucratic state agencies of the

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Cold War, Breakthrough Initiatives is part of a growing “colonial futurism” premised upon the neoliberalization of outer space. It connects to the projects of Silicon Valley's modeling of “NewSpace,” as in the rhetoric of Elon Musk, set on off-planet resource mining, terraforming other planets, and extending property claims far into the galaxy.<sup>32</sup> With the neoliberal corporate-military-state complex determined to occupy and settle the very place that certain Afrofuturists have long sought as a destination to escape colonized Earth, such starry-eyed fantasies are quickly becoming grim futures.

Other initiatives focus their attention on Earth, representing how the neocolonialist spirit haunts new wave environmentalism. There's ScoPex, Harvard University's current \$20 million Stratospheric Controlled Perturbation Experiment, notable for its first-ever plans to test solar radiation management technologies outside the lab in the earth's atmosphere above Arizona. Led by David Keith, Harvard professor of applied physics, founder and board member of the private corporation Carbon Engineering, and signatory of “An Ecomodernist Manifesto,” the project is supported by Microsoft's Bill Gates and his Fund for Innovative Climate and Energy Research, as well as by the Hewlett Foundation and the Alfred P. Sloan Foundation (an appropriate beneficiary, considering it is named



for the longtime CEO of General Motors).<sup>33</sup> Notable for its funding model joining university engineering and climate-science research to Big Tech and fossil capital, ScoPex parallels a marine cloud-brightening field experiment in Moss Landing, California, led by the Joint Institute for the Study of the Atmosphere and Ocean (JISAO) at the University of Washington, directed by Thomas Peter Ackerman, Professor of Atmospheric Sciences, with Paul Crutzen as a senior advisor.<sup>34</sup> With \$16 million in funding from Gates and others, the project plans to shoot seawater droplets into the atmosphere from a ship with high-pressure nozzles, creating a solar shield to deflect sunlight.<sup>35</sup> In light of Cameroonian theorist Achille Mbembe's diagnoses of creeping precariatization as "the becoming-black of the world" – meaning the post-racial generalization of dispossession, indebtedness, and loss of powers of self-determination – geoengineering's desire to save the world by whitening the sky reveals how completely detached the field is from the catastrophes currently occurring on the ground in the here and now.<sup>36</sup> While geoengineering may profess to stem from love of earth, its message is death: the death of social justice, equality, and democratic inclusion.

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The go-to guide for Zuckerberg and Gates is Yuval Noah Harari's recent book *Homo Deus: A Brief History of Tomorrow*, which, tellingly, includes a chapter titled "The Anthropocene."<sup>37</sup> Driven by an endless quest for "bliss, immortality, and divinity," *anthropos*, in this narrative, figures as ultimate self-creator, for whom no challenge – climate change, agricultural failure, artificial intelligence, planetary hunger, even death and extinction – will be beyond technological overcoming, especially when matched to Silicon Valley capital. At the same time, the cost will be greater inequality and technocracy, an expanding useless class, a new religion of algorithmic "dataism," and the reduction of humanity to "biochemical subsystems" monitored by global networks. More prosaically, the Good – read: Neoliberal – Anthropocene emerges in this and the Breakthrough Institute's narrations as the ideological mechanism of choice for suspending contradictions between economic growth and climate solutions. In fact, even climate-change denying Texas Republicans can get on board with geoengineering as a not-to-be-missed pro-tech economic opportunity, requiring no need to debate sources of environmental transformation



or hold petrocapi-talism responsible, as causality is sacrificed on the alter of techno-solutionism.

While the Trump administration has defied the scientific consensus on climate change and supported fossil-fuel deregulations, its February 2018 budget, supported by many in congress, included the first-ever tax breaks for new technologies of atmospheric carbon capture. Meanwhile, the Hoover Institution, The Heartland Institute, and the American Enterprise Institute – all key conservative think-tanks – support this move, the latter hailing geoengineering as nothing less than “a revolutionary approach to climate change.”<sup>38</sup> Even more alarming is the current conceptualization by Keith and others of “counter-geoengineering,” the counteracting of the militarization and weaponization of climate manipulation technologies as deployed by imagined rogue states or non-state actors.<sup>39</sup> This additional danger dramatizes engineering’s ungovernable status and potential for destructive instrumentalization in the era of *Homo Deus*. Even more than biologically regressive, neo-humanist and universalist, depoliticizing and neocolonialist, Anthropocene geoengineering is proving most threatening where techno-utopianism merges with military unilateralism in proposing near-future global weather wars, going far beyond anything imagined in the Cold War.

While the horror of those systems are devastatingly presented in Jafa’s video, *Love is the Message* also powerfully intercuts passages portraying the remarkable resilience, accomplishment, and beauty of African American culture – despite all – in activism, politics, speculative imagination, rhetoric, music, dance, literature, athletics, and, profoundly, everyday forms of creativity. The negative and the positive, love and death, repeatedly and relentlessly oscillate and converge in explosive combination in his piece, proposing something like a singular Vine compilation of cutting philosophical import, or an Instagram feed of alternating soul-destroying and restorative affects. Jafa terms it the “the abject sublime,” an extraordinary mix of beauty and horror, issuing from an archive of black visual culture that seems infinite in its range of experiences. For Jafa, this ultimately beyond-quantifiable record of being stems from an ontological construction inseparable from the wake of transatlantic slavery.<sup>40</sup> Indeed, the video’s description-defying vastness, its overwhelming multivalence, is signaled in Greg Tate’s necessarily transgressive grammar used in describing the piece: “The viral outgrowth of an aborted found-footage exercise, the 7-minute video is an alternately mirthful-cum-melancholic-cum-cardiac-arresting meditation

on race-agency wrapped in a visually sermonic recitation of race tragedy wrapped in a nuanced and feverish exultation of diverse Black American lives at various states of collapse and regeneration.”<sup>41</sup>

Yet even though the video offers an amazing account of generative ambivalence and creative survival, even while it also gives rise to encompassing hopefulness in collective moments of love, solidarity, ethical conviction, and collective justice-seeking, it simultaneously obliterates any consideration of extending or sustaining its world of horror, one of beyond-grotesque inequality, impoverishment, and violence that renders Black life and lives matterless by the state and its techno-human apparatuses. Unlike The Breakthrough Institute, which proffers art and leisure as rewards, Jafa’s sci-fi reaches the realm of cosmopolitical magnitude without losing sight of vernacular instances of in/justice, of situated expressions that are future-oriented but historically informed, and which are dedicated to the reinvention of everyday life, art, culture, politics, mourning. It follows, then, that Jafa would extend solidarity to a younger generation by including artist Martine Syms. During her cameo, she reads from her 2015 “Mundane Afrofuturist Manifesto,” which reprises the longstanding black cultural aesthetic that draws on visions of a utopian time to come, one reached only by passing through the traumatic alienations of racial capitalism. No simple time travel or shapeshifting is possible, however.<sup>42</sup> “Mundane Afrofuturists recognize that we are not aliens,” Syms explains, while facing the camera seated behind a desk.

Jafa borrows the clip from Syms’s eponymous documentary, which, over the course of its hour-long duration, eschews what its author sees as the depoliticized fantasies of past Afrofuturisms. According to Syms, they have sunk into hackneyed fashions, commodifiable styles and stale pop-cultural spectacles severed from any radical imagination inspiring collective liberation. More, she warns against acritical escapism, as when “magic interstellar travel and/or the wondrous communication grid” lead to “an illusion of outer space and cyberspace as egalitarian.” For her, “jive-talking aliens,” “reference to Sun Ra,” and “Egyptian mythology and iconography” are all out, calling instead for “a new focus on black humanity: our science, technology, culture, politics, religions, individuality, needs, dreams, hopes, and failings ... Mundane Afrofuturism is the ultimate laboratory for world-building outside of imperialist, capitalist, white patriarchy.”<sup>43</sup> While *Love is the Message* expresses potential solidarity with the oppressed and excluded, both

human and non, Syms's sentiment rejects equivalence between racial difference and the monstrous. It is expressive of what Aria Dean diagnoses as the conjunction of black accelerationism and Afrofuturism that entails both a catalytic movement toward "the end of the world" and a revolution beyond the in/humanisms of racial capitalism.<sup>44</sup> In other words, a younger generation has elected to update Afrofuturism, asking us to witness a double move that rhymes negative critique with positive transformation.

The challenge here is bringing this vision of social critique and social liberation into explicit connection – and more importantly, direct conflict – with the neoliberal Anthropocene, and to oppose the threat of white supremacist tendencies and colonial, extractive futurism. These Ecomodernist agendas are intent on shaping the world to come; with resources and the political will to do so, it will not only set us on a track of unstoppable climate transformation but also interminably extend racial injustice and white supremacy.<sup>45</sup> Against that scenario, we urgently need to invent and work toward cultivating futures beyond the world's end, where that end is no longer unthinkable beyond current socio-political and economic arrangements, or where that end has already in fact occurred.<sup>46</sup> It is urgent that we ask ourselves, why should cultures outside Afrofuturism – which remain comfortably shielded by whiteness and the current narratives that uphold its position – care?

One answer is to reiterate the desirable terms of a shared world where "injustice anywhere is a threat to justice everywhere." Expressing a future-oriented imperative with new politico-ecological purpose, Fred Moten, in a recent public conversation with Robin D. G. Kelley, has updated that famous ethico-political formulation of Dr. Martin Luther King Jr. (who, it should be noted, makes a notable appearance in Jafa's video). He posits the mission of contemporary Black studies as "on the most fundamental level to try to save the earth, and on a secondary level to save the possibility of human existence." Kelley adds that this is a "project for liberation," a "transformative project," and if it doesn't exist as a response to "the neoliberal, neo-fascist turn, then it's worthless."<sup>47</sup> Why should this project for liberation not also be the overarching imperative of artistic practice today? If so, then art will name the practice of creative aesthetics that merges ecological insight with political engagement in the hopes of not only saving what good we have but securing a flourishing and emancipated future for all.

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All images unless otherwise noted are from Arthur Jafa, *Love Is The Message, The Message Is Death*, 2016. Video (color, sound) 7' 25" Courtesy of the artist and Gavin Brown Enterprise.

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1 John Asafu-Adjaye et al., "An Ecomodernist Manifesto," 2015, <http://www.ecomodernism.org/s/An-Ecomodernist-Manifesto.pdf>, 6.

2 See <https://policy.m4bl.org/platform/>

3 T. J. Demos, *Against the Anthropocene: Visual Culture and Environment Today* (Sternberg Press, 2017).

4 See: Donna Haraway, *Staying with the Trouble: Making Kin in the Chthulucene* (Duke University Press, 2016); Anna Tsing, Heather Swanson, Elaine Gan, and Nils Bubandt, eds., *Arts of Living on a Damaged Planet* (University of Minnesota Press, 2017); John Bellamy Foster, *Marx's Ecology: Materialism and Nature* (Monthly Review Press, 2000); and Jason Moore, *Capitalism in the Web of Life* (Verso, 2015).

5 Paul Crutzen and Eugene Stoermer, "The 'Anthropocene,'" *Global Change Newsletter* 41 (2000), 17–18.

6 See Paul J. Crutzen, "Geology of Mankind," *Nature* 415, no. 23 (January 3, 2002): 23; and Paul Crutzen, "Albedo Enhancement by Stratospheric Sulfur Injections: A Contribution to Resolve a Policy Dilemma? An Editorial Essay," *Climatic Change* (2006) 77: 211–219. For Crutzen, the Cold War provided the opportunity to first consider the atmosphere as theater of large-scale military intervention transformed by a hypothetical "nuclear winter," an experience that fed into his consideration of technology in the 1990s as a means of tackling climate change. Also see his co-authored book *The Atmosphere After a Nuclear War: Twilight at Noon* (1982).

7 Heather Davis and Zoe Todd, "On the Importance of a Date, or Decolonizing the Anthropocene," *ACME: An International Journal for Critical Geographies*, 2017, 16 (4), 761–80.

8 Asafu-Adjaye et al., "Ecomodernist Manifesto," 6.

9 Michael Shellenberger and Ted Nordhaus, "The Death of Environmentalism: Global Warming Politics in a Post-Environmental World," *June* 16, 2010, [https://thebreakthrough.org/archive/the\\_death\\_of\\_environmentalism](https://thebreakthrough.org/archive/the_death_of_environmentalism). The Institute's philosophy advances ecological modernization theory, which contends, as Richard York and Eugene Rosa explain, that "industrialization, technological development, economic growth,

and capitalism are not only potentially compatible with ecological sustainability but also may be key drivers of environmental reform." Richard York and Eugene A. Rosa, "Key Challenges to Ecological Modernization Theory," *Organization & Environment* 16, no. 3 (September 2003).

10 "Notes from the Editors" *Monthly Review* 66, no. 2 (June 1, 2014), [https://monthlyreview.org/2014/06/01/mr-066-02-2014-06\\_0/](https://monthlyreview.org/2014/06/01/mr-066-02-2014-06_0/). Also see: Colin McInnes, "Time to Embrace Geoengineering: Beyond Planetary Boundaries," *The Breakthrough*, June 27, 2013, <http://thebreakthrough.org/programs/energy-and-climate/time-to-embrace-geoengineering>

11 Asafu-Adjaye et al., "Ecomodernist Manifesto," 29.

12 For a thorough critique of the manifesto, see Jeremy Caradonna et al., "A Degrowth Response to an Ecomodernist Manifesto," *Resilience.org*, May 6, 2015, <http://www.resilience.org/stories/2015-05-06/a-degrowth-response-to-an-ecomodernist-manifesto>.

13 Van Jones, "Vanity Fair: The Unbearable Whiteness Of Green," *Huffpost*, May 17, 2007, [https://www.huffingtonpost.com/van-jones/vanity-fair-the-unbearabl\\_b\\_48766.html](https://www.huffingtonpost.com/van-jones/vanity-fair-the-unbearabl_b_48766.html).

14 Christina Sharpe, *In the Wake: On Blackness and Being* (Durham: Duke University Press, 2016), 21. Similarly drawing ecology together with racial politics, Alessandra Raengo asks "What is the ontology of black lives, when they are so thoroughly wrapped in an atmospheric anti-blackness?" in "Black Ontology and The Love of Blackness: Introduction," *Liquid Blackness*, vol. 3, no. 6 (December 2016), <http://liquidblackness.com/love-of-blackness/>. Meanwhile, the recent 848-page catalog with essays by Fred Moten, Tina M. Camp, Ernest Hardy, John Akomfrah, and Hans Ulrich Obrist & Yana Peel – Amira Gad and Joseph Constable, eds., *Arthur Jafa: A Series of Utterly Improbable, Yet Extraordinary Renditions* (König and Serpentine, 2018) – doesn't mention ecology, climate, atmosphere at all.

15 For a discussion of the Black Anthropocene, where racialization is premised on exclusion as well as creative survival, and which stresses the formative influence of Octavia Butler's dystopian sci-fi and Earthseed series, see Stephanie LeMenager, "To Get Ready for

Climate Change, Read Octavia Butler," *Electrastreet*, November, 2017. See <https://electrastreet.net/2017/11/to-get-ready-for-climate-change-read-octavia-butler/>

16 For further discussion of art and climate justice, see my specially edited issue of *Third Text* on "Contemporary Art and the Politics of Ecology" (January 2013); T. J. Demos, *Decolonizing Nature: Contemporary Art and the Politics of Ecology* (Sternberg Press, 2016); and Yates McKee, "On Flooded Streets and Breathing-in-Common: Climate Justice, Black Lives Matter, and the Arts of Decolonization," *Strike Art: Contemporary Art and the Post-Occupy Condition* (Verso, 2016), 181–236.

17 Robinson Meyer, "Donald Trump Is the First Demagogue of the Anthropocene," *The Atlantic*, Oct 19, 2016, <https://www.theatlantic.com/science/archive/2016/10/trump-the-first-demagogue-of-the-anthropocene/504134/>; and Christopher Schaberg, "Trump in the Anthropocene," *Sierra*, Feb 1 2017, <https://www.sierraclub.org/sierra/green-life/trump-anthropocene>: "we have to acknowledge Trump as endemic to, and symptomatic of, the current state of our world. His bullying tweets and destructive executive orders; his prioritizing dirty fossil fuels over clean renewable energy; his 'us versus them' and 'America first' ethic all expose the very same pathologies that got us an 'Anthropocene' in the first place."

18 Rebecca Solnit, "Climate Change Is Violence," *Truthout*, February 5, 2015, <http://truthout.org/progressivepicks/item/28933-climate-change-is-violence>.

19 Naomi Klein, "Why #BlackLivesMatter Should Transform the Climate Debate," *The Nation* (December 12, 2014), <http://www.thenation.com/article/what-does-blacklivesmatter-have-to-do-climate-change/>

20 See <http://www.forensic-architecture.org/file/climate-crimes/>

21 Two recent contributions supporting movement in this direction are adrienne mare brown, *Emergent Strategies: Shaping Change, Changing Worlds* (Chico: AK Press, 2017); and Shelley Streeby, *Imagining the Future of Climate Change: World-Making through Science Fiction and Activism* (Oakland: University of California Press, 2018).

22 Lindsey Dillon and Julie Sze,

"Police Power and Particulate Matters: Environmental Justice and the Spatialities of In/Securities in U.S. Cities," *English Language Notes* (Fall–Winter 2016).

23 Bruno Latour, "Love Your Monsters: Why We Must Care for Our Technologies as We Do Our Children," *Breakthrough* 2 (Winter 2012), <http://thebreakthrough.org/index.php0%20/journal/past-issues/issue-2/love-your-monsters>.

24 Naomi Klein, *This Changes Everything: Capitalism vs. the Climate* (New York: Allen Lane, 2014), 279. That said, there are also progressive engineering models that are not technofixes, such as forest management practices, mangrove protection, and permaculture farming, all of which accelerate carbon sequestration through natural processes. See Troy Vettese, "To Freeze the Thames: Natural Geo-Engineering and Biodiversity," *New Left Review*, 111 (May–June 2018), <https://newleftreview.org/II/111/troy-vettese-to-freeze-the-thames>.

25 For critical overviews of geoengineering, see [www.geoengineeringmonitor.org](http://www.geoengineeringmonitor.org), a joint project of Biofuelwatch and ETC Group, with support from Heinrich Boell Foundation; Linda Schneider, "Geoengineering and Environmental Capitalism: Extractive Industries in the Era of Climate Change," *Science for the People* (Summer 2018), <https://magazine.scienceforthepeople.org/geoengineering-environmental-capitalism/>; and John Bellamy Foster, "Making War on the Planet: Geoengineering and Capitalism's Creative Destruction of the Earth," *Science for the People* (Summer 2018), <https://magazine.scienceforthepeople.org/making-war-on-the-planet/>. For current proposals for developing a governance system based on functional, strategic, and normative demand rationales, see Sikina Jinnah, "Why Govern Climate Engineering? A Preliminary Framework for Demand-Based Governance," *International Studies Review* 20 (2018), 272–82.

26 See Dominic Roser and Christian Seidel, *Climate Justice: An Introduction* (Routledge, 2016); I discuss some of these formations further in "The Great Transition: The Arts and Radical System Change," *e-flux architecture*, April 12, 2017 <http://www.e-flux.com/architecture/accumulation/122305/the-great-transition-the-arts-and-radical-system-change/>

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e-flux journal #94 — october 2018 T. J. Demos  
To Save a World: Geoengineering, Confictual Futurisms, and the Unthinkable

As sci-fi writer Kim Stanley Robinson puts it: "Justice is a climate-change technology of great power, so there is no need to set up false dichotomies as to which good cause we support. The good causes reinforce each other and we need them all at once. This is why capitalism has to give way to an ecologically-based post-capitalism, which, in some features, will be aspects of socialism chosen democratically. We have to figure out a way to pay ourselves to do the work of survival." Javier Sethness, "Toward an Ecologically Based Post-Capitalism: Interview With Novelist Kim Stanley Robinson," *Truthout*, March 17, 2018, <http://www.truth-out.org/opinion/item/43864-toward-an-ecologically-based-post-capitalism-interview-with-novelist-kim-stanley-robinson>

28  
Jedediah Purdy, *After Nature: A Politics for the Anthropocene* (Harvard University Press, 2015): the risk of a "neoliberal Anthropocene" occurs when nature is consigned to "natural capital" in economic mechanisms, where techno-optimism forces our collective fate into the hands of markets and technology.

29  
See Jackie Wang, *Carceral Capitalism* (MIT Press, 2018).

30  
Cited in John Elkington, "Saving the Planet from Ecological Disaster Is a \$12 Trillion Opportunity," *Harvard Business Review*, May 4, 2017, <https://hbr.org/2017/05/saving-the-planet-from-ecological-disaster-is-a-12-trillion-opportunity>

31  
See <https://breakthroughinitiatives.org/>

32  
See Rory Rowan, "Beyond Colonial Futurism: Portugal's Atlantic Spaceport and the Neoliberalization of Outer Space," April 18, 2018, <http://www.e-flux.com/video/198108/e-flux-lectures-rory-rowan-beyond-colonial-futurism-portugal-s-atlantic-space-port-and-the-neoliberalization-of-outer-space/>.

33  
See David Keith's book *The Case for Geoengineering* (MIT Press, 2013). Gates and Tar Sands tycoon Murray Edwards are among the key funders of Carbon Engineering. See the interactive geoengineering map designed by ETC Group and the Heinrich Boell Foundation, which shows the global state of climate engineering research and experimentation, including nearly 1000 current projects: <https://map.geoengineeringmonitor.org/>

34  
More info on the project can be

found here:  
<http://mcbproject.org/>

35  
See <https://map.geoengineeringmonitor.org/Solar-Radiation-Management/marine-cloud-brightening-project-former-silver-lining-project-silver-lining-inc/>

36  
Achille Mbembe, *Critique of Black Reason*, trans. Laurent Dubois (Duke University Press, 2017), 6.

37  
Yuval Noah Harari's *Homo Deus: A Brief History of Tomorrow* (Harvill Secker, 2016). Gates featured the book on his blog in 2017, <https://www.gatesnotes.com/Blogs/Homo-Deus>; and in Bill Gates, "What Are the Biggest Problems Facing Us in the 21st Century?," *New York Times*, September 4, 2018, <https://www.nytimes.com/2018/09/04/books/review/21-lessons-for-the-21st-century-yuval-noah-harari.html>. Also see Joanna Zalinska, *The End of Man: A Feminist Counterapocalypse* (University of Minnesota Press, forthcoming), where she writes: "there is a very clear sense in many of the science papers on the Anthropocene and their popularized media versions that the salvation from the Anthropocene's alleged finalism will come from a secularized yet godlike elsewhere: an escape to heavens (i.e., a planetary relocation), or an actual upgrade of humans to the status of *Homo Deus*. In both of these narratives Man arrives in the post-Anthropocene New Jerusalem fully redeemed – and redesigned." (manuscript, 10). *Homo Deus* resonates with Breakthrough Institute affiliate and EcoModernist Mark Lynas's *The God Species: The God Species: Saving the Planet in the Age of Humans* (Fourth Estate, 2011), itself an update of Stuart Brand's *Whole Earth Catalog* motto from the late 1960s: "We are as gods and have to get good at it."

38  
Cited in Matthias Schrader, "Why Climate Change Skeptics Are Backing Geoengineering," *Wired*, March 28, 2018. "The future is bright for geoengineering," claimed Republican Representative Randy Weber of Texas, chairman of the Energy Subcommittee of the House Committee on Science, Space and Technology, and noted climate skeptic.

39  
See Parker, Andy, Joshua Horton, and David Keith, "Stopping Solar Geoengineering Through Technical Means: A Preliminary Assessment of Counter-Geoengineering," *Earth's Future* (May 2018).

40  
Arthur Jafa, with reference to

Fred Moten, in conversation with Greg Tate, at the Hammer Museum, 2017: <https://www.youtube.com/watch?v=CAYSXam1vOA>

41  
Greg Tate, "The Changeling Mise-en-Scène – Arthur Jafa's Meta Love and the New Black Reportage," in *Love Is the Message, The Message Is Death* (Gavin Brown's Enterprise, 2016), n.p.

42  
Syms video can be found here <https://www.youtube.com/watch?v=otUJvQhCjJ0>

43  
Martine Syms, "Mundane Afrofuturist Manifesto," <http://martinesyms.com/the-mundane-afrofuturist-manifesto/>. Syms builds off the "Mundane Sci-Fi Manifesto" conceptualized by Geoff Ryman in 2007 (<http://mundane-sf.blogspot.com/2007/09/take-third-star-on-left-and-on-right.html>), although she notably injects social justice and progressive political imperatives into her version. See also: Reynaldo Anderson and Charles E. Jones, eds., *Afrofuturism 2.0: The Rise of Afro-Blackness* (Lexington Books, 2015), x, which defines Afrofuturism 2.0 as "The early twenty-first century technogenesis of Black identity reflecting counter histories, hacking and or appropriating the influence of network software, database logic, cultural analytics, deep remixability, neurosciences, enhancement and augmentation, gender fluidity, posthuman possibility, the speculative sphere with transdisciplinary applications and has grown into an important Diasporic techno-cultural Pan African movement."

44  
Aria Dean, "Notes on Blacceleration," *e-flux journal* 87 (December 2017), <http://www.e-flux.com/journal/87/169402/notes-on-blacceleration/>

45  
Nicholas Mirzoeff, "It's Not the Anthropocene, It's the White Supremacy Scene, or, the Geological Color Line," in *After Extinction*, ed. Richard Grusin (University of Minnesota Press, 2018). On "white environmentalism," see Danielle Purifoy, "On the Stubbhorn Whiteness of Environmentalism," *Inside Higher Ed*, June 22, 2018, <https://www.insidehighered.com/advice/2018/06/22/how-environmentalism-academe-today-excludes-people-color-opinion#W0DWuAoGtMg.facebook>

46  
As Kyle Powys Whyte observes, Native Americans – like other groups that have suffered slavery, dispossession, and genocide – "are already living in what our ancestors would have

understood as dystopian or post-apocalyptic times," in "White Allies, Let's Be Honest About Decolonization," *Yes Magazine*, Apr 03, 2018, <https://www.yesmagazine.org/issues/decolonize/white-allies-lets-be-honest-about-decolonization-20180403>

47  
Fred Moten in conversation with Robin D. G. Kelley, University of Toronto, April 3, 2017, <https://www.youtube.com/watch?v=fP-2F9MXjRE>. Moten also appears in Jafa's 2012 video *Dreams Are Colder than Death*.

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