# Speech 1NC TFA Rd 4 vs Westlake 3-11 7AM

## 1

#### Interp: If the affirmative defends anything other than “In a democracy, a free press ought to prioritize objectivity over advocacy.” then they must provide a counter-solvency advocate for their specific advocacy in the 1AC.

#### Violation – you took out “in a democracy” and “a free press”

#### Prefer

#### 1. Limits – there are infinite things you could which pushes you to uncontestable arguments. Even if your interp, the only way to verify if it’s fair is proof of counter-arguments. That guts novice inclusion since if your arguments aren’t contestable, they’d all quit debate.

#### 2. Shiftiness- CSA conceptualizes what their advocacy is and how it’s implemented. Ambiguous affs we don’t know about can’t delink if they delineate these things.

#### 3. Research – Forces the aff to go to the other side of the library and contest their own view points and encourages more in-depth answers since I can find responses.

## 2

#### **Interpretation – Debaters cannot have images in the substantive offense sections of their speech doc.**

#### **Violation – you have graphs in** von Weizsäcker

#### **Vote aff–**

#### **Time skew—you get substantive offense that you don’t read aloud, this means that while I have 13 mins of substantive offense you get 13 PLUS additional offense from the images.**

#### **Judge intervention—you make the judge determine how much of the graph to buy and how much to not buy without making arguments describing or defending the graph. This leaves debate up to a subjective value judgment -outweighs because the judge’s obligation is to evaluate the round in an unbiased way.**

#### Fairness is good and prior –

#### A] debate’s a game that requires effective competition and negation, which makes their offense inevitable, it internal link turns clash and engagement.

#### B] Cutting negs to every possible aff wrecks small schools, which has a disparate impact on under-resourced and minority debaters.

#### C] Can’t weigh the aff—it’s just as likely that they’re winning it because we weren’t able to effectively prepare to defeat it.

#### D] Inescapable – the AC conforms to every norm of debate – speed, speech times, ballots – proves they value playing the game and isolating T as the one bad rule is arbitrary.

#### E] Probability – ballots can’t shape our subjectivity or create broad political change but can rectify in-round skews.

#### CI –

#### a) brightlines are arbitrary and self-serving which doesn’t set good norms

#### b) it collapses since weighing between brightlines rely on offense defense

#### Neg theory is drop the debater –

#### a) Prep skew – infinite prep means they frontline every shell enough to be efficient at DA and skew substance enough

#### b) 1AR Flex –you moot 6 min of my offense and restart on unpredictable layers while kicking the args.

#### No RVI’s-

#### a) logic – you shouldn’t win for being fair

#### b) clash – people go all in on theory which decks substance engagement

#### c) chilling effect – people will be too scared to read theory because RVI’s encourage baiting theory

#### 1NC theory first –

#### 1] Abuse was self-inflicted- They started the chain of abuse and forced me down this strategy

#### 2] Norming- We have more speeches to norm over whether it’s a good idea since the shell was read earlier.

#### Norming outweighs

#### A] Constutivism- It’s the constitutive purpose of theory debating

#### B] Sequencing- it’s a pre-requisite to actualizing any other voter like fairness or education

#### Neg abuse outweighs Aff abuse –

#### 1] Infinite prep time before round to frontline

#### 2] 2AR judge psychology and 1st and last speech

#### 3] Infinite perms and uplayering in the 1AR.

## 3

#### The ROB is to determine the truth of falsity of the resolution –

- can weigh with philosophical fw, a prioris, or permissibility/presumption

#### 1] Textuality – five dictionaries[[1]](#footnote-1) define to negate as to deny the truth of and affirm[[2]](#footnote-2) as to prove true.

#### That OW –

#### a] Jurisdiction – judges are constrained through their constitutive purpose and proves it’s a side constraint on what arguments they can vote on.

#### b] Predictability – people base prep off the pregiven terms in the resolution.

#### 2] Isomorphism – alternative ROBs aren’t binary truth/false because of topic lit biases which increases intervention and takes the debate out of the hands of debaters.

#### 3] Inclusion – any offense functions under it as long as debaters implicate their positions to prove the truth or falsity of the resolution which maximizes substantive clash through ground and is a sequencing question for engaging in debate.

#### 4] Logic – any statement relies on a conception of truth to function – for example, I’m hungry is the same as its true that I’m hungry – logic is a litmus test for any argument and proves your ROB collapse since it relies on truth.

#### Negate –

#### 1] Paradox of induction.

Black’s quotes Hume [Brackets Original. David Hume (Scottish Enlightenment philosopher, historian, economist, librarian and essayist). “The Paradox of Induction”. Black’s Academy. No Date. Accessed 12/18/21. <https://www.blacksacademy.net/pages/px-015-pxqekj-paradox-induction.php> //Xu]

The paradox of induction is the problem that in all scientific reasoning we form conclusions, called laws, that are of a general nature; however, the evidence we have for those laws is based upon particular experiences. For example, we form the conclusion that all rays of light will be bend as the pass from air into glass, but we have only ever observed a finite number of instances of this law. On further reflection we see that there is no necessary connection between something happening on one occasion and the same thing happening in like circumstances on another occasion. We are not directly acquainted with the “power” behind events that ensures the uniformity of nature throughout space and time.

#### 2] Bonini’s Paradox

Wikipedia [Brackets Original. This card summarizes summarizes Dutton and Starbuck. John M. Dutton (He enrolled in Harvard Business School in 1955, graduated with an M.B.A. in 1957, taught at Purdue University Krannert School of Industrial Engineering in Lafayette, ris research included organizational behavior, computer simulation of human behavior, history of business technology, progress-principal studies, and strategic changes in the energy industry) and William Haynes Starbuck (graduated from Harvard University and the Carnegie Institute of Technology. He is an organizational scientist who has held professorships in social relations, sociology, business administration, and management). “Bonini's paradox”. Wikipedia. No Date. <https://en.wikipedia.org/wiki/Bonini%27s_paradox> //Xu]

In modern discourse, the paradox was articulated by John M. Dutton and William H. Starbuck[2] "As a model of a complex system becomes more complete, it becomes less understandable. Alternatively, as a model grows more realistic, it also becomes just as difficult to understand as the real-world processes it represents".[3] This paradox may be used by researchers to explain why complete models of the human brain and thinking processes have not been created and will undoubtedly remain difficult for years to come. This same paradox was observed earlier from a quote by philosopher-poet Paul Valéry, "Ce qui est simple est toujours faux. Ce qui ne l’est pas est inutilisable".[4] ("A simple statement is bound to be untrue. One that is not simple cannot be utilized."[5]) Also, the same topic has been discussed by Richard Levins in his classic essay "The Strategy of Model Building in Population Biology", in stating that complex models have 'too many parameters to measure, leading to analytically insoluble equations that would exceed the capacity of our computers, but the results would have no meaning for us even if they could be solved.[6] (See Orzack and Sober, 1993; Odenbaugh, 2006)

#### 3] Risk of offense to falsehood negates but risk of truth doesn’t affirm.

**Nickles**, Thomas. (Philosopher @ University of Nevada, Reno) "Falsifiability." New Dictionary of the History of Ideas. **2005**. , <https://elearning.shisu.edu.cn/pluginfile.php/35320/mod_resource/content/1/Falsifiability%20%28Introduction%29.pdf> ///AHS PB

**Falsifiable contrasts with verifiable. A claim is empirically verifiable if possible observation statements logically imply the truth of the claim. If actual observation statements do imply the claim, then it is verified. "This raven is black" verifies "There are black ravens."** During the 1930s the logical empiricists of the Vienna Circle proposed verifiability both as a criterion of demarcation of science from nonscience and a criterion of meaning. Their idea was that a statement is meaningful if and only if it is verifiable in principle, and its meaning is given by its method of verification. For the logical empiricists, only empirically verifiable claims make genuine assertions about the world and are, in this broad sense, scientific. All other claims (metaphysical, religious, ethical, etc.) are cognitively meaningless. In his Logik der Forschung (1934; Logic of Scientific Discovery), Popper replied by rejecting the logical empiricists' concern with language and meaning and by noting that **verifiability as a criterion** of demarcation **excludes** scientific **law** claims and thus the core of science **itself. For** since **a law claim** is universal in scope (in simplest form, "All A's everywhere and everywhen are B's"), it **cannot possibly be verified: there are always actual or potential instances beyond those so far observed. Yet a** universal claim **can be falsified by a single negative instance. The first observed black swan refuted the claim "All swans are white."**

#### 4] Linguistics – words are indeterminate since every claim requires a empirical verification, which is impossible given the arbitrariness of meaning. If I say, “The man is on the table”, that statement is true if and only if a certain man is on a certain table.

#### 5] they also said objectivity is impossible –

## 4

#### Presumption and permissibility negates – a) more often false than true since I can prove something false in infinite ways b) real world policies require positive justification before being adopted – there’s alwahys an institutional DA to going through Congress c) permissibility can’t affirm since then anything would be ok which would justify racism – we should be safe and do nothing.

#### Practical Reason first –

#### 1] Constitutivism – the only thing constitutive to subjectivity is reason. I could be dreaming or a brain in a vat but so all other forms of knowledge based on empirical circumstances are unreliable and doubtful. The only thing I know is that I am doubting and reasoning.

#### 2] Infinite Regress – a theory is only binding when you can answer “why should I do this?” and not continue to ask “why”. Only reason provides a deductive foundation since the question “why should I be rational” already concedes the authority of agency since your agency is at work.

#### Reason is universal and applies to everyone – it doesn’t make sense to say 2+2=4 for me but not for anyone else.

#### The counter-methodology – vote neg for a liberation strategy of universal reason. This entails a starting point where we abstract from individual perspectives to understand the universal and use this starting point to apply it to empirical circumstances.

#### No perms in a method debate –

#### a] It assumes fiat which doesn’t make sense. Their ROB forefronts the performance and method which a perm steals away

#### b] non-T affs can defend anything – the burden is on them to prove their advocacy is the best solution to their problem

#### c] you should hold them to the method they defended in the 1AC since anything else is severance which endorses bad scholarship as it’s a debate of methods.

#### Prefer Additionally –

#### 1] Performativity – when you enter debate, you presume that you will be free in round because of reciprocally enforced constraints which means objections are impossible and should be ignored on face.

#### 2] Ideal Theory Good –

#### a] Sequencing – we need an ideal world to envision to work towards so only ideal theory can guide action

#### b] Relativity Problem – We can’t assign universal obligation since non-ideal theory commits us to understanding individual circumstances which is radically different for each person

#### 3] Consistent action through egalitarian recognition of humanity solves oppression – viewing others through equal personhood along with adoption of principles of universality are key to mutual recognition.

**Mills 18** Charles W. Mills. “Black Radical Kantianism.” Res Philosophica, Vol. 95, No. 1, January 2018, pp. 1–33 https:// doi.org/ 10.11612/ resphil.1622 SJCP//JG

So the common theme is the demand for equal recognition, equal dignity, equal respect, equal personhood, in a white-supremacist world where disrespect rather than respect is the norm, the default mode, for blacks. A racesensitive Kantianism not merely purged of Kant’s own racism but attuned (in a way nominally color-blind Kantianism is not) to these racially demarcated particularities for the different sub-sections of the human population— a black radical Kantianism—will thus understand the need to “universalize” the categorical imperative in a very different way to register the crucial differences between those socially recognized as persons and those socially recognized as sub-persons. I suggest that we divide the different moral relations involved into two categories based on whether one is a member of the privileged race, the R1s, or the subordinated race, the R2s. That gives us the following six-way breakdown: (1) one’s duty as an R1 to give respect to oneself, (2) one’s duty as an R1 to give respect to one’s fellow-R1s, (3) one’s duty as an R1 to give respect to R2s, (4) one’s duty as an R2 to give respect to oneself, (5) one’s duty as an R2 to give respect to one’s fellow-R2s, and (6) one’s duty as an R2 to give respect to R1s. Historically, each of these will have been affected by race (as racism), leaving an ideological and psychological legacy, habits of disrespect, that will shape the “inclinations” most likely to be determinative and most imperatively to be resisted. Instead of (what could be graphically thought of as) “horizontal” relations of reciprocal and symmetrical race-indifferent respect among equal raceless persons, the R1s will have historically respected themselves and each other as R1s, while “vertically” looking down on, disrespecting, R2s as inferiors. In turn, the R2s will have been required to show racial deference to the R1s, looking up to them as R2s, and—having most probably internalized their lower ontological status—will have been prone to regard both themselves and their fellows with racial contempt.

#### Negate –

#### 1] not defending the topic is non-universalizable b/c if nobody defended the topic than a topic wouldn’t have even been created in the first place which is a contradiction.

#### 2] The aff has a deontological obligation to be topical.

**Nebel 15** Jake Nebel,"The Priority of Resolutional Semantics by Jake Nebel," Briefly, <https://www.vbriefly.com/2015/02/20/the-priority-of-resolutional-semantics-by-jake-nebel/>

A second strategy denies that such pragmatic benefits are relevant. This strategy is more deontological. One version of this strategy appeals to the importance of consent or agreement. Suppose that you give your opponents prior notice that you’ll be affirming the September/October 2012 resolution instead of the current one. There is a sense in which your affirmation of that resolution is now predictable: your opponents know, or are in a position to know, what you will be defending. And suppose that the older resolution is conducive to better (i.e., more fair and more educational) debate. Still, it’s unfair of you to expect your opponents to follow suit. Why? Because they didn’t agree to debate that topic. They registered for a tournament whose invitation specified the current resolution, not the Sept/Oct 2012 resolution or a free-for-all. The “social contract” argument for topicality holds that accepting a tournament invitation constitutes implicit consent to debate the specified topic. This claim might be contested, depending on what constitutes implicit consent. What is less contestable is this: given that *some* proposition must be debated in each round and that the tournament has specified a resolution, no one can reasonably reject a principle that requires everyone to debate the announced resolution as worded. This appeals to Scanlon’s contractualism. Someone who wishes to debate only the announced resolution has a strong claim against changing the topic, and no one has a stronger claim against debating the announced resolution (ignoring, for now, some possible exceptions to be discussed in the next subsection). So it is unfair to expect your opponent to debate anything other than the announced resolution. This unfairness is a constraint on the pursuit of education or other goods: it wrongs and is unjustifiable to your opponent.

#### 3] Journalists are required to respect those they report on, thus, advocacy journalism is required to alleviate suffering

Leshilo 18 Thabo Leshilo [A research report submitted to the Faculty of Humanities, University of the Witwatersrand, Johannesburg, in partial fulfilment of the requirements for the degree of Master of Arts, Applied Ethics for Professionals.] “Morality and Journalists: Objectivity versus Duty of Care” 13 July 2018, Johannesburg https://wiredspace.wits.ac.za/bitstream/handle/10539/26530/Morality%20and%20Journalists%20(markup)\_2.pdf?sequence=1

My view is that Detached Kevin Carter used the Sudanese child as a mere means to fame and (some mini-) fortune by simply photographing her and selling her photo; he did not treat her as a human being worthy of respect when he failed to come to her aid. In another formulation of the Categorical Imperative, Kant expresses the universal imperative of duty thus: “Act as though the maxim of your action were to become, through your will, a universal law of nature” ([1785] 2005, 24). The word ‘maxim’ refers to the basis on which one acts: what informs one’s action. What, indeed, would become of the world if all of us were to refuse to help people facing great hardship the way (some) journalists claim to be entitled to do? Kant also implores us to act beneficently, and might as well have had the Detached Kevin Carter in mind when he admonishes someone in a position to help, who does not: What concern of mine is it? Let each one be as happy as heaven wills, or as he can make himself; I won’t take anything from him or even envy him; but I have no desire to contribute to his welfare or help him in time of need. (25) According to Kant, although it is possible that a maxim such as the one quoted above should be a universal law of nature “it is impossible to will that it [be] so . . . [f]or a will that brought that about would conflict with itself, since instances can often arise in which the person in question would need the love and sympathy of others, and he would have no hope of getting the help he desires, being robbed of it by this law of nature springing from his own will” (ibid.). Expanding on this, Charles Fried (2007,206) says that we are all required to recognise that human beings have certain basic rights to which they are all entitled as human beings: These rights are subject to qualification only in order to ensure equal protection of the same rights in others. In this sense the view is Kantian; it requires recognition of persons as ends, and forbids the overriding of their most fundamental interests for the purpose of maximizing the happiness or welfare of others. (ibib.) Fried goes on to say that this recognition that all humans have moral entitlements, correlates with the concept of respect – the attitude which is manifested when a person observes the constraints of the principle of morality in his dealings with another person, and thus respects the basic rights of the other. Respect is also an attitude which may be taken in part as defining the concept of a person: persons are those who are obliged to observe the constraints of the principle of morality in their dealings with each other, and thus show respect towards each other. (207) On Kant’s account, a person commands respect by virtue of being a rational being. “I maintain that man – and in general every rational being – exists as an end in himself and not merely as a means to be used by this or that at its discretion” ([1785] 2005, 28). I argue that Kant’s ‘Formula of the End in Itself’ (or ‘Principle of Humanity’) compels journalists to go the extra mile to help alleviate the suffering of those that they report on, and even take action to save their lives. When they fail to do that and instead simply report on such plight with the clinical detachment displayed by Detached Kevin Carter towards the Sudanese child, they simply use their subjects as mere means to make money and build their careers. By acting this way, journalists act unjustly and wrongfully. That is because a victim of such tragedy would ordinarily expect another human being to help to alleviate his or her suffering.

## 5

#### Do not be mistaken – debate as a site of pedagogy and discourse is a fraud **– paving over very real conditions of pain and death that make this space possible. Its try or die for a semiotic insurrection.**

AnarchistNews 10. “The University, Social Death, and the Inside Joke,” https://web.archive.org/web/20171110115921/http://anarchistnews.org/content/university-social-death-and-inside-joke

Universities may serve as progressive sites of inquiry in some cases, yet this does not detract from the great deal of military and corporate research, economic planning and, perhaps most importantly, social conditioning occurring within their walls. Furthermore, they serve as intense machines for the concentration of privilege; each university is increasingly staffed by overworked professors and adjuncts, poorly treated maintenance and service staff. This remains only the top of the pyramid, since a hyper educated, stable society along Western lines can only exist by the intense exploitation of labor and resources in the third world. Students are taught to be oblivious to this fact; liberal seminars only serve to obfuscate the fact that they are themselves complicit in the death and destruction waged on a daily basis. They sing the college fight song and wear hooded sweatshirts (in the case of hip liberal arts colleges, flannel serves the same purpose). As the Berkeley rebels observe, “Social death is our banal acceptance of an institution’s meaning for our own lack of meaning.”[43] Our conception of the social is as the death of everything sociality entails; it is the failure of communication, the refusal of empathy, the abandonment of autonomy. Baudrillard writes that “The cemetery no longer exists because modern cities have entirely taken over their function: they are ghost towns, cities of death. If the great operational metropolis is the final form of an entire culture, then, quite simply, ours is a culture of death.”[44] By attempting to excel in a university setting, we are resigning ourselves to enrolling in what Mark Yudoff so proudly calls a cemetery, a necropolis to rival no other. Yet herein lies the punch line. We are studying in the cemeteries of a nation which has a cultural fetish for things that refuse to stay dead; an absolute fixation with zombies. So perhaps the goal should not be to go “Beyond Zombie Politics” at all. Writes Baudrillard: “The event itself is counter-offensive and comes from a strange source: in every system at its apex, at its point of perfection, it reintroduces negativity and death.”[45] The University, by totalizing itself and perfecting its critiques, has spontaneously generated its own antithesis. Some element of sociality refuses to stay within the discourse of the social, the dead; it becomes undead, radically potent. According to Steven Shaviro’s The Cinematic Body, “zombies mark the dead end or zero degree of capitalism’s logic of endless consumption and ever expanding accumulation, precisely because they embody this logic so literally and to such excess.”[46] In that sense, they are almost identical to the mass, the silent majorities that Baudrillard describe as the ideal form of resistance to the social: “they know that there is no liberation, and that a system is abolished only by pushing it into hyperlogic, by forcing it into excessive practice which is equivalent to a brutal amortization.”[47] Zombies do not constitute a threat at first, they shamble about their environments in an almost comic manner and are easily dispatched by a shotgun blast to the face. Similarly, students emerge from the university in which they have been buried, engaging in random acts of symbolic hyperconsumption and overproduction; perhaps an overly enthusiastic usage of a classroom or cafeteria here and there, or a particularly moving piece of theatrical composition that is easily suppressed. “Disaster is consumed as cheesy spectacle, complete with incompetent reporting, useless information bulletins, and inane attempts at commentary:”[48] Shaviro is talking about Night of the Living Dead, but he might as well be referring to the press coverage of the first California occupations. Other students respond with horror to the encroachment of dissidents: “the living characters are concerned less about the prospect of being killed than they are about being swept away by mimesis – of returning to existence, after death, transformed into zombies themselves.”[49] Liberal student activists fear the incursions the most, as they are in many ways the most invested in the fate of the contemporary university; in many ways their role is similar to that of the survivalists in Night of the Living Dead, or the military officers in Day. Beyond Zombie Politics claims that defenders of the UC system are promoting a “Zombie Politics”; yet this is difficult to fathom. For they are insistent on saving the University, on staying ‘alive’, even when their version of life has been stripped of all that makes life worth living, when it is as good as social death. Shaviro notes that in many scenes in zombie films, our conceptions of protagonist and antagonist are reversed; in many scenes, human survivors act so repugnantly that we celebrate their infection or demise.[50] In reality, “Zombie Politics are something to be championed, because they are the politics of a multitude, an inclusive mass of political subjects, seeking to consume brains. Yet brains must be seen as a metaphor for what Marx calls “the General Intellect”; in his Fragment on Machines, he describes it as “the power of knowledge, objectified.”[51] Students and faculty have been alienated from their labor, and, angry and zombie-like, they seek to destroy the means of their alienation. Yet, for Shaviro, “the hardest thing to acknowledge is that the living dead are not radically Other so much as they serve to awaken a passion for otherness and for vertiginous disidentification that is already latent within our own selves.”[52] In other words, we have a widespread problem with aspiring to be this other, this powerless mass. We seek a clear protagonist, we cannot avoid associating with those we perceive as ‘still alive’. Yet for Baudrillard, this constitutes a fundamental flaw: "at the very core of the 'rationality' of our culture, however, is an exclusion that precedes every other, more radical than the exclusion of madmen, children or inferior races, an exclusion preceding all these and serving as their model: the exclusion of the dead and of death."[53] In Forget Foucault, we learn the sad reality about biopower: that power itself is fundamentally based on the separation and alienation of death from the reality of our existence. If we are to continue to use this conception, we risk failing to see that our very lives have been turned into a mechanism for perpetuation of social death: the banal simulation of existence. Whereas socialized death is a starting point for Foucault, in Baudrillard and in recent actions from California, we see a return to a reevaluation of society and of death; a possible return to zombie politics. Baudrillard distinguishes himself as a connoisseur of graffiti; in Forget Foucault, he quotes a piece that said “When Jesus arose from the dead, he became a zombie.”[54] Perhaps the reevaluation of zombie politics will serve as the messianic shift that blasts open the gates of hell, the cemetery-university. According to the Berkeley kids, “when we move without return to their tired meaning, to their tired configurations of the material, we are engaging in war.”[55] Baudrillard’s words about semiotic insurrectionaries might suffice: "They blasted their way out however, so as to burst into reality like a scream, an interjection, an anti-discourse, as the waste of all syntatic, poetic and political development, as the smallest radical element that cannot be caught by any organized discourse. Invincible due to their own poverty, they resist every interpretation and every connotation, no longer denoting anyone or anything."[56]

#### And so it is with great regret that the 1AC is exiled! Vote neg to banish their project, where their press and association is unpoliced, re-oriented towards new ends.

Neudorf 21 [Atlanta Rae Neudorf (PhD candidate in the History of Political Thought at Queen Mary, University of London. Her work explores the revolutionary political thought of French republican exiles in London after the 1848 revolutions with a particular focus on the writings, activism, and transnational networks of Félix Pyat). “Reconciling with Rupture: The Impact of Exile on Revolutionary Thought”. Journal of the History of Ideas. December 15, 2021. Accessed 12/24/21. <https://jhiblog.org/2021/12/15/reconciling-with-rupture-the-impact-of-exile-on-revolutionary-thought/> //Xu]

A common historiographical trope suggests that defeated revolutionaries tend to lose their fervor for drastic political transformation. In characterizing those cases where they do not, scholars once tended to explain away their continued commitment to the cause as mindless imitation, the endless repetition of inherited revolutionary tropes that remain static in the face of a changed socio-political reality. Pyat had previously been dismissed as a “1793 Jacobin superimposed on the political conditions of the mid-nineteenth century” (p. 334). As more recent scholarship has demonstrated, revolutionary defeat need not always signal ideological decline. In their critique of François Furet’s conceptualization of the death of the French Revolution, for example, Rosa Mucignat and Sanja Perovic invert this notion, reconfiguring the experience of defeat into a creative stimulus, where failure “enable[s] the revolution to be re-conceptualized and re-mobilized towards new ends” (p. 141). Barred from taking any direct political action in France, Pyat did precisely this, shifting his attention entirely to literary agitation and penning numerous manifestos for the political society he founded in London the summer of 1852, the Commune Révolutionnaire (p. 210), which outlined his recalibrated political vision and aims. France’s nineteenth-century battles were still being fought between the forces of reaction and revolution yet for Pyat, it became solely through epistolary means. In recognizing that he could no longer speak for the French people, as he believed himself to have done as an elected representative in the Assemblies of 1848-1849 or agitate within France due to the recent censorship laws, Pyat sets out a new set of aims for his new modus vivendi, caught between Paris and London, with no true possession of his liberties either. Pyat’s manifestosfor the Commune, particularly those from 1852-1855, articulated his increasingly violent revolutionary ideology, but notably, when taken in sum, reveal the ways in which Pyat engaged in a serious process of ideological synthesis, consciously readjusting his worldview and political aims in light of his present situation and the current state of France. Pyat firmly establishes his separation from his countrymen his earliest exilic manifesto, the Lettre au Peuple of autumn 1852. Addressed to “our fellow citizens” in France and in exile, it immediately sets out an assessment of the exiles’ authority to be speaking out, arguing that “we do not believe… that we represent France, which can only be represented by itself alone” [nous ne croyons pas… représenter la France qui ne peut être représentée que par elle] (p. 4). Pyat immediately situates himself along the radical political spectrum in his disavowal of representative authority speaking on behalf of the sovereign people. Pyat had spoken on this issue in the National Assembly on October 5, 1848, arguing that France had no need of a President because elected and revocable committees could do the role. However, rather than simply repeating his earlier argument, the Lettre clearly recognizes his and the other exiles’ estrangement from the very people being addressed: “separated members of the body,” perhaps even forgotten, he writes, “we can only express [our] wishes” on behalf of the French people. Yet Pyat clearly also envisions the exiles as remaining inherently connected to the French people, writing that “we think its thoughts, we speak its words” like a “distant but faithful echo” [nous pensons sa pensée, nous parlons sa parole… nous sommes un écho lointain, mais fidèle] (p. 4) thus bestowing upon the Commune (and by extension, himself) the authority with which to make pronouncements in the best interests of the French people. By presenting himself as a member of an imagined, international community of Frenchmen, bound together by their love of the nation and the republic, he can elevate his ideology to a level at which it is still applicable despite his banishment. Furthermore, while the wellbeing of the French people was at the heart of Pyat’s political worldview, and he refers time and again to the necessity of solidarity not just within France, but beyond its borders. Across Pyat’s addresses to the exiles in this period, he suggests that this should thus be a future aim, for example in 1855 in his Lettre aux Proscrits: “we know what we have to do and what we have not done: the universal Republic” (printed in the exilic newspaper L’Homme, 28 March 1855). However, he presents France as the ideal site from which this fraternal commitment should emanate in the future which reveals the tensions between his devotion to France on the one hand, and to international fraternity on the other. Pyat also recognizes a counterintuitive reality of exile in these texts, namely that his physical separation from France permitted an escape from the Second Empire’s repressive measures against the freedoms of the press and association. Despite commiserating with his fellow exiles about their lack of agency by comparing their situation to imprisonment, he counsels on numerous occasions to make the most of the current circumstances: “it is necessary to welcome exile and take advantage of banishment” [il faut… se féliciter de l’exil et bénéficier de la proscription] (p. 5). In this spirit, he decrees: “it will not be without profit that we have been cast into a foreign land, where at least the press is free” [ce ne sera pas sans profit que nous aurons été jetés sur une terre étrangère, où du moins la presse est libre] (p. 4). In the Lettre aux Proscrits , he goes as far as to suggest that the revolutionary exiles were destined to be banished from France so that they could be unified in a better understanding of their cause. Therefore, “since the voice of the expelled is the only free one at this hour” (p. 5) Pyat and his Commune will continue to agitate despite the distance separating them from the rest of the French people, imparting their vision in the hope that it will be enacted in their absence.

## 6

#### CP Text – ????

#### The 1AC’s semiotic coherence within the world is sutured through a western model of scriptocentrism that is exclusionary and violent towards racialized bodies

Conquergood, Dwight. Cultural struggles: Performance, ethnography, praxis. University of Michigan Press, 2013. (a professor of anthropology and performance studies at Northwestern University)//Elmer

According to de Certeau, this scriptocentrism is a **hallmark of Western imperialism**. Posted above the gates of modernity, this sign: “‘Here only what is written is understood.’ Such is the internal law of that which has constituted itself as ‘Western’ [and ‘white’]” Only middle-class academics could blithely assume that all the world is a text because reading and writing are central to their everyday lives and occupational security. For many people throughout the world, however, particularly subaltern groups, texts are often inaccessible, or threatening, charged with the regulator)' powers of the state. More often than not, subordinate people experience texts and the bureaucracy of literacy as instruments of control and displacement, e.g., **green cards, passports, arrest warrants, deportation orders**—what de Certeau calls "intextuation": "Ever)' power, including **the power of law, is written first of all on the backs of its subjects"** (1984:140). Among the most oppressed people in the United States today are the "undocumented" immigrants, the so-called "il- legal aliens," known in the vernacular as the people "sin papeles," the people without papers, indocitmentado/as. They are illegal because they are not legible, they trouble "the writing machine of the law" (de Certeau 1984:141). **The hegemony of textualism needs to be exposed and undermined.** Transcrip- tion is not a **transparent or politically innocent model for** conceptualizing or **engaging the world**. The root metaphor of the text underpins the **supremacy of Western knowledge systems** by **erasing** the vast realm of human **knowledge and meaningful action that is unlettered,** "a history of the tacit and the habitual" (Jackson 2000:29). In their multivolume historical ethnography of colonialism/ evangelism in South Africa, John and Jean ComarofFpay careful attention to the way Tswana people argued with their white interlocutors "both verbally and nonverbally" (1997:47; see also 1991). They excavate spaces of agency and strug- gle from everyday performance practices—clothing, gardening, healing, trading, worshipping, architecture, and homemaking—to reveal an impressive repertoire of conscious, creative, critical, contrapuntal responses to the imperialist project that exceeded the verbal. The Comarofis intervene in an academically fashionable textual fundamentalism and fetish of the (verbal) archive where "text—a sad proxy for life—becomes all" (1992:26). "In this day and age," they ask, "do we still have to remind ourselves that many of the players on any historical stage **cannot speak at all? Or**, under greater or lesser duress, **opt not to** do so" (1997:48; see also Scott 1990)?

#### Our method of opacity refuses the trade of images which disrupts the semiocapitalist drive towards hypervisualization.

**Steinmann 15** [Catherine A. Steinmann (THE UNIVERSITY OF BRITISH COLUMBIA). “Visceral Exposure: Melanie Gilligan, Hito Steyerl, and the Biopolitics of Visibility”. A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY in The Faculty of Graduate and Postdoctoral Studies (Art History) THE UNIVERSITY OF BRITISH COLUMBIA (Vancouver). March 2015. Accessed 11/29/20. <https://open.library.ubc.ca/media/download/pdf/24/1.0135689/1> //Houston Memorial DX]

In her 2007 essay “Documentary Uncertainty,” Hito Steyerl recounts a story in which she watched a CNN broadcast during the first days of the 2003 U.S. invasion of Iraq. In that segment, a correspondent riding in an armored vehicle jubilantly held a broadcast cell phone camera out the window, exclaiming that this type of live broadcast had never before been seen. He was right, Steyerl avers, but only because the low-resolution images showed nothing more than largely illegible green and brown blotches slowly moving across the screen. For Steyerl, what she calls the “abstract documentarism” of these blurred, poor images mirrors the uncertain reality of contemporary life: Actually, the picture looked like the camouflage of combat fatigues; a military version of abstract expressionism. What does this type of abstract documentarism tell us about documentarism as such? It points at a deeper characteristic of many contemporary documentary pictures: the more immediate they become, the less there is to see. The closer to reality we get, the less intelligible it becomes.112 For Steyerl, poor images such as these embody the “uncertainty principle of modern documentarism,”113 a genre that generates meaning more through how it is organized and how it circulates than what it represents—a form of abstract documentarism appropriate for an era in which political representation has become abstract and blurred. In her later essay “In Defense of the Poor Image” (2009), Steyerl elaborates on the poor image. For her, the poor image is a low-res image, a compressed, corrupted copy of a copy, always in motion, gradually deteriorating. Because it is constantly ripped, reproduced, remixed, reformatted, and re-edited, “the poor image tends towards abstraction,” she writes. “It is a visual idea in its very becoming.”114 Although Steyerl, who often refers to critic and philosopher Walter Benjamin as inspiration in her written work, does not mention Benjamin in “In Defense of the Poor Image,” her essay clearly owes a debt to his text The Work of Art in the Age of Its Technological Reproducibility (1936), in which Benjamin considers originals in relation to copies, to copies of copies, and subsequent iterations. As Daniel Rourke notes, for Benjamin, the copy detracts from the aura of the original, yet the copy’s own aura, as it propagates, remains stable, “actually heightened in a system of ever-poorer repetitions and redisplays.”115 At one level, Steyerl’s defense of the blurred or poor image, much like her Strike videos, appears as a critique of increasingly oppressive regimes of visual representation—for example, of the slick, smooth surfaces of the images of high-end advertising. It also anticipates the collective desire the artist would articulate yet another two years later, in her 2012 essay “The Spam of the Earth: Withdrawal from Representation” (as we saw in chapter two), to become invisible in an era of mass paparazzi and exhibitionist voyeurism in which “the flare of photographic flashlights turns people into victims, celebrities, or both.”116 Her championing of the low-res, degraded image also can be interpreted as a protest against the larger regime that information-rich images participate in—the regime that, since mid-2013, when Edward Snowden first came forward in public with revelations about NSA surveillance and data collection, has been popularly called “Big Data”; 117 this is a regime always seeking to learn more, to gather more information, to represent us as so many data points. In a sentence that brings to mind both the breaking down of human subjects into the data sets and the fractal-recombinant info-commodities that, as we have seen, Franco “Bifo” Berardi describes as the building blocks of semiocapital, Steyerl writes: “As we register at cash tills, ATMs, and other checkpoints—as our cellphones reveal our slightest movements and our snapshots are tagged with GPS coordinates—we end up not exactly amused to death but represented to pieces.”118 Reading between the lines in Steyerl’s text, we see that the poor image thus suggests a second kind of abstraction. If the poor image is in the first place formally abstract in being blurred or in containing less data, in the second, it also enacts a strategy of withdrawal in the spirit of the Latin abstrahere, which, as curator Maria Lind notes, means “to withdraw”: It tends toward a politically useful opacity that resists a culture of open surveillance, of oppressive transparency.119 Here, abstraction embodies the principle of “less data,” and the withdrawal and visual opacity it entails emerge as a subset of a larger impulse that can be observed among artists working in today’s milieu of ultraefficient data gathering and transmission: to reject the culture of “information”— information that describes, represents, and constitutes the contemporary subject, thereby controlling it. As the writer and curator Anthony Huberman observes in his essay “I (not love) information,” whereas conceptual artists in the 1960s and 1970s, attracted to “the raw blankness of information, which they saw as a powerful opponent to the tyranny of ‘content’,” embraced information as a means of stepping away from the modernist project,120 artists working in the period of late post-Fordism seek instead to disrupt information, “to compromise the way information clings to their practice and identities.”121 Today, Huberman holds, information has become poisonous. Instead of offering us freedom, it has become an addiction: “Like all drugs, information takes hold of everything, surrounds it, swallows it, clings to it, bludgeons it and spits it back out.”122 In formulating abstraction as a kind of opacity or retreat from hypervisualization, Steyerl’s work thus can be situated within a larger contemporary trajectory of flight from description. At yet another level, Steyerl’s 2009 “defense of the poor image” points to both the image that can no longer claim to represent and to a reality that cannot be represented in traditionally indexical images. The poor image is less about what the image shows than what it does, how it moves, what encounters it has. This is an image that no longer refers to “the real thing—the originary original,” she writes. “Instead, it is about its own real conditions of existence: about swarm circulation, digital dispersion, fractured and flexible temporalities. It is about defiance and appropriation just as it is about conformism and exploitation. In short: it is about reality.”123 Once again reading between the lines in Steyerl’s text, we can consider the poor image abstract in a third sense: It has been wrested—in other words, abstracted— from its original contexts of production and use and thrust into circulation, and its indexical role is lost. It now functions as what Berardi refers to as a fractal-recombinant fragment of semiocapital. In his book After the Future, Berardi argues that fragmentation and recombination (which I discussed in chapter two) are both abstract and biopolitical, with profound implications for the subject: Recombination is the (informational and biopolitical) technique that transforms the activity of individual brains in an abstract productive continuum. The individual brain can act effectively only through the recombinant modality: functional recombination of fragments of cognitive labor scattered in time and space, but functionally unified inside the Net.124 In the new globalized network of semiocapital, he asserts, workers have been replaced with “an infinite brain-sprawl, an ever-changing mosaic of fractal cells of available nervous energy.” Here, the worker or “person” is reduced to mere precarious residue.125

# AC

## Presumption

1] What parts of the 1AC were transformative or anti-capitalist? The parts where they read established scholars, using standard citational practices? Or the parts where they organized cards into a conventional 1AC?

2] Ballot not key---competitive incentives dilute solvency and permit affirming Westlake’s scholarship without tying it to external action. Nothing leaves Gregory Portland HS other than a winner and a loser

#### 3] Voting aff doesn’t access social change, but voting neg resolves our procedural impacts.

Ritter ‘13 (JD from U Texas Law (Michael J., “Overcoming The Fiction of “Social Change Through Debate”: What’s To Learn from 2pac’s Changes?,” National Journal of Speech and Debate, Vol. 2, Issue 1)//rct Joey

The structure of competitive interscholastic debate renders any message communicated in a debate round virtually **incapable of creating any social change**, either in the debate community or in general society. And to the extent that the fiction of social change through debate can be proven or disproven through empirical studies or surveys, academics instead have analyzed debate with **nonapplicable** rhetorical **theory** that **fails to account for the unique aspects** of competitive interscholastic debate. Rather, the current debate relating to activism and competitive interscholastic debate concerns the following: “What is the best model to promote social change?” But a more fundamental question that must be addressed first is: **“Can debate cause social change?”** Despite over two decades of opportunity to conduct and publish empirical studies or surveys, academic proponents of the fiction that debate can create social change have chosen **not to prove this fundamental assumption**, which—as this article argues—is **merely a fiction** that is **harmful in** most, if not **all, respects**. The position that competitive interscholastic debate can create social change is more properly characterized as a **fiction** than an argument. A fiction is an invented or fabricated idea purporting to be factual but is **not provable** by any human senses or rational thinking capability or is unproven by valid statistical studies. An argument, most basically, consists of a claim and some support for why the claim is true. If the support for the claim is false or its relation to the claim is illogical, then we can deduce that the particular argument does not help in ascertaining whether the claim is true. Interscholastic competitive debate is premised upon the assumption that debate is argumentation. Because fictions are necessarily not true or cannot be proven true by any means of argumentation, the competitive interscholastic debate community should be **incredibly critical** of those fictions and adopt them only if they promote the activity and its purposes.

## Impact

### Space Col

#### Causes space colonization.

Thiessen ‘20 – writes a twice-weekly column for The Post on foreign and domestic policy. He is a fellow at the American Enterprise Institute, and the former chief speechwriter for President George W. Bush. (Marc A., "SpaceX’s success is one small step for man, one giant leap for capitalism," Washington Post, 6-1-2020, https://www.washingtonpost.com/opinions/2020/06/01/spacexs-success-is-one-small-step-man-one-giant-leap-capitalism/, Accessed 6-27-2021, LASA-SC)

It was one small step for man, one giant leap for capitalism. Only three countries have ever launched human beings into orbit. This past weekend, SpaceX became the first private company ever to do so, when it sent its Crew Dragon capsule into space aboard its Falcon 9 rocket and docked with the International Space Station. This was accomplished by a company Elon Musk started in 2002 in a California strip mall warehouse with just a dozen employees and a mariachi band. At a time when our nation is debating the merits of socialism, SpaceX has given us an incredible testament to the power of American free enterprise. While the left is advocating unprecedented government intervention in almost every sector of the U.S. economy, from health care to energy, today Americans are celebrating the successful privatization of space travel. If you want to see the difference between what government and private enterprise can do, consider: It took a private company to give us the first space vehicle with touch-screen controls instead of antiquated knobs and buttons. It took a private company to give us a capsule that can fly entirely autonomously from launch to landing — including docking — without any participation by its human crew. It also took a private company to invent a reusable rocket that can not only take off but land as well. When the Apollo 11 crew reached the moon on July 20, 1969, Neil Armstrong declared “the Eagle has landed.” On Saturday, SpaceX was able to declare that the Falcon had landed when its rocket settled down on a barge in the Atlantic Ocean — ready to be used again. That last development will save the taxpayers incredible amounts of money. The cost to NASA for launching a man into space on the space shuttle orbiter was $170 million per seat, compared with just $60 million to $67 million on the Dragon capsule. The cost for the space shuttle to send a kilogram of cargo into to space was $54,500; with the Falcon rocket, the cost is just $2,720 — a decrease of 95 percent. And while the space shuttle cost $27.4 billion to develop, the Crew Dragon was designed and built for just $1.7 billion — making it the lowest-cost spacecraft developed in six decades. SpaceX did it in six years — far faster than the time it took to develop the space shuttle. The private sector does it better, cheaper, faster and more efficiently than government. Why? Competition. Today, SpaceX has to compete with a constellation of private companies — including legacy aerospace firms such as Orbital ATK and United Launch Alliance and innovative start-ups such as Blue Origin (which is designing a Mars lander and whose owner, Jeff Bezos, also owns The Post) and Virgin Orbit (which is developing rockets than can launch satellites into space from the underside of a 747, avoiding the kinds of weather that delayed the Dragon launch). In the race to put the first privately launched man into orbit, upstart SpaceX had to beat aerospace behemoth Boeing and its Starliner capsule to the punch. It did so — for more than $1 billion less than its competitor. That spirit of competition and innovation will revolutionize space travel in the years ahead. Indeed, Musk has his sights set far beyond Earth orbit. Already, SpaceX is working on a much larger version of the Falcon 9 reusable rocket called Super Heavy that will carry a deep-space capsule named Starship capable of carrying up to 100 people to the moon and eventually to Mars. Musk’s goal — the reason he founded SpaceX — is to colonize Mars and make humanity a multiplanetary species. He has set a goal of founding a million-person city on Mars by 2050 complete with iron foundries and pizza joints. Can it be done? Who knows. But this much is certain: Private-sector innovation is opening the door to a new era of space exploration. Wouldn’t it be ironic if, just as capitalism is allowing us to explore the farthest reaches of our solar system, Americans decided to embrace socialism back here on Earth?

#### That solves every impact

Drake '16 – a science journalist and contributing writer at National Geographic. She earned an A.B. in biology, psychology, and dance at Cornell University, worked in a clinical genetics lab at The Johns Hopkins University School of Medicine, then returned to Cornell for her Ph.D. in genetics and development. (Bynadia, "Elon Musk: A Million Humans Could Live on Mars By the 2060s," Science, 9-27-2016, https://www.nationalgeographic.com/science/article/elon-musk-spacex-exploring-mars-planets-space-science, Accessed 6-22-2021, LASA-SC)

In perhaps the most eagerly anticipated aerospace announcement of the year, SpaceX founder Elon Musk has revealed his grand plan for establishing a human settlement on Mars. In short, Musk thinks it’s possible to begin shuttling thousands of people between Earth and our smaller, redder neighbor sometime within the next decade or so. And not too long after that—perhaps 40 or a hundred years later, Mars could be home to a self-sustaining colony of a million people. “This is not about everyone moving to Mars, this is about becoming multiplanetary,” he said on September 27 at the International Astronautical Congress in Guadalajara, Mexico. “This is really about minimizing existential risk and having a tremendous sense of adventure.” Musk’s timeline sounds ambitious, and that's something he readily acknowledges. “I think the technical outline of the plan is about right. He also didn’t pretend that it was going to be easy and that they were going to do it in ten years,” says Bobby Braun, NASA’s former chief technologist who’s now at Georgia Tech University. “I mean, who’s to say what’s possible in a hundred years?” And for those wondering whether we should go at all, the reason for Musk making Mars an imperative is simple. “The future of humanity is fundamentally going to bifurcate along one of two directions: Either we’re going to become a multiplanet species and a spacefaring civilization, or we’re going be stuck on one planet until some eventual extinction event,” Musk told Ron Howard during an interview for National Geographic Channel’s MARS, a global event series that premieres worldwide on November 14. “For me to be excited and inspired about the future, it’s got to be the first option. It’s got to be: We’re going to be a spacefaring civilization.” Mars Fleet Though he admitted his exact timeline is fuzzy, Musk thinks it’s possible humans could begin flying to Mars by the mid-2020s. And he thinks the plan for getting there will go something like this: It starts with a really big rocket, something at least 200 feet tall when fully assembled. In a simulation of what SpaceX calls its Interplanetary Transport System, a spacecraft loaded with astronauts will launch on top of a 39-foot-wide booster that produces a whopping 28 million pounds of thrust. Using 42 Raptor engines, the booster will accelerate the assemblage to 5,374 miles an hour. Overall, the whole thing is 3.5 times more powerful than NASA’s Saturn V, the biggest rocket built to date, which carried the Apollo missions to the moon. Perhaps not coincidentally, the SpaceX rocket would launch from the same pad, 39A, at Kennedy Space Center in Cape Canaveral, Florida. The rocket would deliver the crew capsule to orbit around Earth, then the booster would steer itself toward a soft landing back at the launch pad, a feat that SpaceX rocket boosters have been doing for almost a year now. Next, the booster would pick up a fuel tanker and carry that into orbit, where it would fuel the spaceship for its journey to Mars. Once en route, that spaceship would deploy solar panels to harvest energy from the sun and conserve valuable propellant for what promises to be an exciting landing on the Red Planet. As Musk envisions it, fleets of these crew-carrying capsules will remain in Earth orbit until a favorable planetary alignment brings the two planets close together—something that happens every 26 months. “We’d ultimately have upward of a thousand or more spaceships waiting in orbit. And so the Mars colonial fleet would depart en masse,” Musk says. The key to his plan is reusing the various spaceships as much as possible. “I just don’t think there’s any way to have a self-sustaining Mars base without reusability. I think this is really fundamental,” Musk says. “If wooden sailing ships in the old days were not reusable, I don’t think the United States would exist.” Musk anticipates being able to use each rocket booster a thousand times, each tanker a hundred times, and each spaceship 12 times. At the beginning, he imagines that maybe a hundred humans would be hitching a ride on each ship, with that number gradually increasing to more than 200. By his calculations, then, putting a million people on Mars could take anywhere from 40 to a hundred years after the first ship launches. And, no, it would not necessarily be a one-way trip: “I think it’s very important to give people the option of returning,” Musk says. Colonizing Mars After landing a few cargo-carrying spacecraft without people on Mars, starting with the Red Dragon capsule in 2018, Musk says the human phase of colonization could begin. For sure, landing a heavy craft on a planet with a thin atmosphere will be difficult. It was tough enough to gently lower NASA’s Curiosity rover to the surface, and at 2,000 pounds, that payload weighed just a fraction of Musk’s proposed vessels. For now, Musk plans to continue developing supersonic retrorockets that can gradually and gently lower a much heavier spacecraft to the Martian surface, using his reusable Falcon 9 boosters as a model. And that’s not all these spacecraft will need: Hurtling through the Martian atmosphere at supersonic speeds will test even the most heat-tolerant materials on Earth, so it’s no small task to design a spacecraft that can withstand a heated entry and propulsive landing—and then be refueled and sent back to Earth so it can start over again. The first journeys would primarily serve the purpose of delivering supplies and establishing a propellant depot on the Martian surface, a fuel reservoir that could be tapped into for return trips to Earth. After that depot is set up and cargo delivered to the surface, the fun can (sort of) begin. Early human settlers will need to be good at digging beneath the surface and dredging up buried ice, which will supply precious water and be used to make the cryo-methane propellant that will power the whole enterprise. As such, the earliest interplanetary spaceships would probably stay on Mars, and they would be carrying mostly cargo, fuel, and a small crew: “builders and fixers” who are “the hearty explorer type,” Musk said to Howard. “Are you prepared to die? If that’s OK, then you’re a candidate for going.” While there will undoubtedly be intense competition and lots of fanfare over the first few seats on a Mars-bound mission, Musk worries that too much emphasis will be placed on those early bootprints. “In the sort of grander historical context, what really matters is being able to send a large number of people, like tens of thousands if not hundreds of thousands of people, and ultimately millions of tons of cargo,” he says.

### Sustainability

#### 1] Sustainability is nonsense – we’re nowhere near collapse. Prioritize solving extinction, even if that means more resource extraction.

Ted **Nordhaus**, 5-20-20**21** [Ted Nordhaus is the founder and executive director of the Breakthrough Institute, an environmental policy think tank committed to technological solutions for climate problems, and the author of several books including Break Through: From the Death of Environmentalism to the Politics of Possibility and An Ecomodernist Manifesto., "Interview: Ted Nordhaus on ecomodernism," Works in Progress https://www.worksinprogress.co/issue/interview-ted-nordhaus-on-ecomodernism/ //DMcD]

**Sustainability is** such **a gauzy**, **hand-wavy concept**, though I find even myself using it sometimes. **Insofar as** “**sustainability**” **suggests that there’s some set of natural limits that we need to keep human societies within**, I think **it’s just nonsense**. **We’ve been modifying natural environments** on this planet **to support numbers of humans that are much greater** today **than could have ever been supported even 100** or 1,000 **years ago**, let alone 10,000 or 100,000 years ago. There is, of course, **some theoretical limit to how much energy we can harness or use**, but **we’re nowhere close to that**. If you have **cheap**, **clean energy**, you **can ultimately solve everything else**. I would offer an alternate framework for sustainability. I think what we would **like** is for **large populations of humans to be able to live materially comfortable and prosperous lives**, to pursue their imaginations, their dreams, and their ideas of what a good life is. I think it’s very hard for us, sitting here today, to know what the average person or someone in 2100 will think that is, and to do that in ways that preserve as much of our deep evolutionary ecological inheritance as possible, which was always already shaped by human agency and will continue to be. And that might mean that we do end up removing carbon and geoengineering the planet to have that 1950 or an 1850 climate, for that matter. It might mean that we decide to bring mammoths back, or to genetically modify the Great Barrier Reef so that it can supply the warmer oceans, or something else. I don’t know. I want to **give people living in the future the options**, **choices**, **agency**, and the **ability to make those decisions** on their own terms. I don’t know if you would call that “sustainability” or something else, but **that’s the future** that I think **we ought to create** for those who come after us. We can **do that by building out the knowledge base**, **technology base**, **wealth base**, **and resource base that will make that possible**. Do we have functioning institutions that are adaptive and democratic, and that can navigate what are always going to be trade-offs? That’s the future that I think we ought to be pursuing.

**2] Yes decoupling**

**Hausfather 21** – a climate scientist and energy systems analyst whose research focuses on observational temperature records, climate models, and mitigation technologies. He spent 10 years working as a data scientist and entrepreneur in the cleantech sector, where he was the lead data scientist at Essess, the chief scientist at C3.ai, and the cofounder and chief scientist of Efficiency 2.0. He also worked as a research scientist with Berkeley Earth, was the senior climate analyst at Project Drawdown, and the US analyst for Carbon Brief. He has masters degrees in environmental science from Yale University and Vrije Universiteit Amsterdam and a PhD in climate science from the University of California, Berkeley. (Zeke, "Absolute Decoupling of Economic Growth and Emissions in 32 Countries," Breakthrough Institute, 4-6-2021, https://thebreakthrough.org/issues/energy/absolute-decoupling-of-economic-growth-and-emissions-in-32-countries, Accessed 4-11-2021, LASA-SC)

The past 30 years have seen immense progress **in improving the quality of life for much of humanity**. Extreme poverty — the number of people living on less than $1.90 per day — has fallen by nearly two-thirds, from 1.9 **billion to** around 650 **million**. Life expectancy has risen in most of the world, along with literacy and access to education, while infant mortality has fallen. Despite perceptions to the contrary, **the average person born today is likely to have access to more opportunities and have a better quality of life than at any other point in human history**. Much of this increase in human wellbeing has been propelled by rapid economic growth driven largely by state-led industrial policy, particularly in poor-to-middle income countries. However, this growth has come at a cost: between 1990 and 2019, global emissions of CO2 **increased by 56%.** Historically, economic growth has been closely linked to increased energy consumption — and increased CO2 emissions in particular — leading some to argue that a more prosperous world is one that necessarily has more impacts on our natural environment and climate. There is a lively academic debate about our ability to “absolutely decouple” emissions and growth — that is, the extent to which the adoption of clean energy technology can allow emissions to decline while economic growth continues. Over the past 15 years, however, **something has begun to change.** Rather than a 21st century dominated by coal that energy modelers foresaw, **global coal use peaked in 2013 and is now in structural decline**. We have succeeded in making clean energy cheap, with solar power and battery storage costs falling 10-fold since 2009. The world produced more electricity from clean energy — solar, wind, hydro, and nuclear — than from coal over the past two years. And, according to some major oil companies, **peak oil is upon us** — not because we have run out of cheap oil to produce, but because demand is falling and companies expect further decline as consumers increasingly shift to electric vehicles. The world has long been experiencing a relative **decoupling** between economic growth and CO2 emissions, with the emissions per unit of GDP **falling for the past 60 years**. This is the case even in countries like **India and China** that have been undergoing rapid economic growth. But relative decoupling alone is inadequate in a world where global CO2 emissions need to peak and decline in the next decade to give us any chance at limiting warming to well below 2℃, in line with Paris Agreement targets. Thankfully, there is increasing evidence that the world is on track **to absolutely decouple CO2 emissions and economic growth** — with global CO2 emissions potentially having peaked in 2019 **and unlikely to increase substantially in the coming decade**. While an emissions peak is just the first and easiest step towards eventually reaching the net-zero emissions required to stop the world from continuing to warm, it demonstrates that linkages between emissions and economic activity are not an immutable law, but rather simply a result of our current means of energy production. In recent years we have seen more and more examples of absolute decoupling — economic growth accompanied by falling CO2 emissions. Since 2005, 32 countries with a population of at least one million people **have absolutely decoupled** emissions from economic growth, both for terrestrial emissions (those within national borders) and consumption emissions (emissions embodied in the goods consumed in a country). This includes the United States, Japan, Mexico, Germany, United Kingdom, France, Spain, Poland, Romania, Netherlands, Belgium, Portugal, Sweden, Hungary, Belarus, Austria, Bulgaria, El Salvador, Singapore, Denmark, Finland, Slovakia, Norway, Ireland, New Zealand, Croatia, Jamaica, Lithuania, Slovenia, Latvia, Estonia, and Cyprus. Figure 1, below, shows the declines in territorial emissions (blue) and increases in GDP (red). To qualify as having experienced absolute decoupling, we require countries included in this analysis to pass four separate filters: a population of at least one million (to focus the analysis on more representative cases), declining territorial emissions over the 2005-2019 period (based on a linear regression), declining consumption emissions, and increasing real GDP (on a purchasing power parity basis, using constant 2017 international $USD). We chose not to include 2020 in this analysis because it is not particularly representative of longer-term trends, and consumption and territorial emissions estimates are not yet available for many countries. There is a wide range of rates of economic growth between 2005-2019 among countries experiencing absolute decoupling. Somewhat counterintuitively, there is no significant relationship between the rate of economic growth and the magnitude of emissions reductions within the group. **While it is unlikely that there is not at least some linkage between the two factors, there are plenty of examples of countries (e.g., Singapore, Romania, and Ireland) experiencing both extremely rapid economic growth and large reductions in CO2 emissions.** One of the primary criticisms of some prior analyses of absolute decoupling is that they ignore **leakage**. Specifically, the offshoring of manufacturing from high-income countries over the past three decades to countries like China has led to “illusory” drops in emissions, where the emissions associated with high-income country consumption are simply shipped overseas and no longer show up in territorial emissions accounting. There is some truth in this critique, as there was a large increase in emissions embodied in imports from developing countries between 1990 and 2005. After 2005, however, structural changes in China and a growing domestic market led to a reversal of these trends; the amount of emissions “exported” from developed countries to developing countries **has actually declined over the past 15 years.** This means that, for many countries, both territorial emissions and consumption emissions (which include any emissions “exported” to other countries) **have jointly declined**. In fact, on average, consumption emissions have been declining slightly faster than territorial emissions since 2005 in the 32 countries we identify as experiencing absolute decoupling. Figure 2, below, shows the change in consumption emissions (teal) and GDP (red) between 2005 and 2019. There is a pretty wide variation in the extent to which these countries have reduced their territorial and consumption emissions since 2005. Some countries — such as the UK, Denmark, Finland, and Singapore – have seen territorial emissions fall faster than consumption emissions, while the US, Japan, Germany, and Spain (among others) have seen consumption emissions fall faster. Figure 3 shows reductions in consumption and territorial emissions for each country, with the size of the dot representing the size of the population in 2019. **Absolute decoupling is possible.** There is no physical law requiring economic growth — and broader increases in human wellbeing — to necessarily be linked to CO2 emissions. All of the **services that we rely on today that emit fossil fuels** — electricity, transportation, heating, food — can in principle **be replaced by near-zero carbon alternatives**, though these are more mature in some sectors (electricity, transportation, buildings) than in others (industrial processes, agriculture).

### Transitions

#### The move away from capitalism causes mass starvation, ecological collapse, and doesn’t solve their offense.

Monbiot 9 [George Monbiot 8-17-2009. Visiting Professor in the School of the Built Environment, Oxford Brookes University; recipient of the United Nations Global 500 Award for outstanding environmental achievement; named one of the forty international prophets of the twenty-first century by the UK’S Independent. “Is There Any Point in Fighting to Stave Off Industrial Apocalypse.” Guardian. <http://www.guardian.co.uk/commentisfree/cif-green/2009/aug/17/environment-climate-change>.] Recut Jet

The interesting question, and the one that probably divides us, is this: to what extent should we welcome the likely collapse of industrial civilisation? Or more precisely: to what extent do we believe that some good may come of it?

I detect in your writings, and in the conversations we have had, an attraction towards – almost a yearning for – this apocalypse, a sense that you see it as a cleansing fire that will rid the world of a diseased society. If this is your view, I do not share it. I'm sure we can agree that the immediate consequences of collapse would be hideous: the breakdown of the systems that keep most of us alive; mass starvation; war. These alone surely give us sufficient reason to fight on, however faint our chances appear. But even if we were somehow able to put this out of our minds, I believe that what is likely to come out on the other side will be worse than our current settlement.

Here are three observations: 1 Our species (unlike most of its members) is tough and resilient; 2 When civilisations collapse, psychopaths take over; 3 We seldom learn from others' mistakes.

From the first observation, this follows: even if you are hardened to the fate of humans, you can surely see that our species will not become extinct without causing the extinction of almost all others. However hard we fall, we will recover sufficiently to land another hammer blow on the biosphere. We will continue to do so until there is so little left that even Homo sapiens can no longer survive. This is the ecological destiny of a species possessed of outstanding intelligence, opposable thumbs and an ability to interpret and exploit almost every possible resource – in the absence of political restraint.

From the second and third observations, this follows: instead of gathering as free collectives of happy householders, survivors of this collapse will be subject to the will of people seeking to monopolise remaining resources. This will is likely to be imposed through violence. Political accountability will be a distant memory. The chances of conserving any resource in these circumstances are approximately zero. The human and ecological consequences of the first global collapse are likely to persist for many generations, perhaps for our species' remaining time on earth. To imagine that good could come of the involuntary failure of industrial civilisation is also to succumb to denial. The answer to your question – what will we learn from this collapse? – is nothing.

This is why, despite everything, I fight on. I am not fighting to sustain economic growth. I am fighting to prevent both initial collapse and the repeated catastrophe that follows. However faint the hopes of engineering a soft landing – an ordered and structured downsizing of the global economy – might be, we must keep this possibility alive. Perhaps we are both in denial: I, because I think the fight is still worth having; you, because you think it isn't.

### Tech

**Technological progress is self sustaining and corrective**

**Teixeira** 3-7-**2017** – PhD in sociology @ U W-Madison, author or co-author of six books (Ruy, “The Optimistic Leftist: Why the 21st Century Will Be Better Than You Think,” Kindle Reader)

Of course, Naam's views may be rejected by some on the left because he is unabashedly a techno- optimist. Well, what's wrong with that? The fact of the matter is that almost everything people like about the modern world, including relatively high living standards, is traceable to technological advances and the knowledge embodied in those advances. From smart phones, flat screen TVs and the internet to air and auto travel to central heating and air conditioning to the medical devices and drugs that cure disease and extend life to electric lights and the mundane flush toilet—the list is endless—technology has dramatically transformed people's lives, making them both much better and much longer than they ever have been before. It is difficult to argue that the average person today is not far, **far better off** than her counterpart in the past. As the Northwestern University economic historian Joel Mokyr puts it, the so-called good old 42 days were old but they were not good. And what do we have to thank for all these spectacular advances? Technology! Technology has both enabled the new goods, machines, medicine and so on that we consume and enabled the economic growth that allows us to consume at such a high level. Of course, economists debate endlessly about the exact mechanisms connecting technology to growth and what social and institutional conditions must be met for technology to maximize its effect on growth, but at the end of the day the growth we have seen—and the living standards we enjoy—would simply not have been possible without the massive breakthroughs and continuous improvements we have seen in the technological realm. Given all this and given the central importance of economic growth to the left's prospects, one would think that the left would embrace techno- optimism rather than shying away from it. After all, if the goal is to be successful and improve people's lives, rapid technological advance is surely something to promote enthusiastically. But the left has been oddly circumspect about the possibilities of new and better technologies, allowing the techno-optimism space to be dominated by libertarian-minded denizens of Silicon Valley.43 As British science journalist Leigh Phillips puts it: Once upon a time, the left ... promised more innovation, faster progress, greater abundance. One of the reasons I believe that the historically fringe ideology of libertarianism is today so surprisingly popular in Silicon Valley and with tech-savvy young people more broadly ... is that libertarianism is the only extant ideology that so substantially promises a significantly materially better future. There are several reasons for the left's ambiguous relationship to technology. One has already been mentioned: the left has tended to underestimate the importance of economic growth in the recent past, believing incorrectly that they can achieve their social objectives in an era of a tepid and poorly distributed growth. That leads naturally to an underestimation of the importance of technological change, since one of its chief attributes is promoting growth. Second, and worse, many on the left tend to regard technological change with dread rather than hope. They see technology as a force facilitating inequality rather than growth, disadvantaging manual workers rather than leading to skilled job creation, turning consumers into corporate pawns rather than information-savvy citizens and destroying the planet in the process. We are far, far away from the traditional left attitude that welcomed technological change as the handmaiden of abundance and increased leisure. Or, for that matter, from the liberal optimism that permeated the culture of the 1950s and '60s with tantalizing visions of flying cars and obedient robots. Third, the left has become infected with general pessimism about prospects for growth, acceding, as we have seen, to the idea that growth can't really be much greater than it already is. Just as this devalues the role of policy it also devalues the role of technological change. Why be optimistic about technological change if it's not likely to have much effect anyway? Feeding right into these sentiments is the growth of academic techno-pessimism. The leading light in this emerging school of thought is economist Robert Gordon, coincidentally in the same department at Northwestern University where leading techno-optimist Mokyr teaches. In his 2012 paper, "Is Economic Growth Over?: Faltering Innovation Confronts the Six Headwinds," and then in a number of follow-up papers and a massive book, Gordon argues that economic growth on the level we've been used to in the last 200 years may in fact be a historical anomaly and that strong growth has only been possible because of dramatic new innovations that have turbocharged economic advance—"industrial revolutions" in his terminology.45 The first industrial revolution was 1750—1830, based around steam engines, cotton spinning and railroads. The second revolution was 1870—1900, featuring electricity, the internal combustion engine and running water with indoor plumbing. He believes that both these industrial revolutions took about 100 years to work their way through the economy and generate their full effects. For example, the second industrial revolution was still giving us advances like air conditioning, home appliances and the interstate highway system in the 1950—70 period. The third industrial revolution is centered on computers and the internet. Gordon is not impressed with this revolution. He thinks all the really important, transformative stuff came from the first two revolutions, especially the second. He is fond of posing this question in his public lectures: which would you be willing to give up, your iPhone or the flush toilet? He thinks the post-1970 slowdown in productivity growth (it dropped by about half) is traceable to the relative triviality of the computer/internet revolution. And when we finally got a burst of productivity growth in the 1996—2004 period, it quickly petered out. The reason, he believes, is that the third industrial revolution has already run out of gas (no 100-year phase-in here) and just doesn't have much more to give us. Because of this and because of his six "headwinds" to growth (demographic burdens, stagnating educational attainment, high levels of inequality, globalization, rising energy and environmental costs, and high levels of household and government debt), he projects an ongoing decline in per capita economic growth to a meager 0.2 percent per year this century. But is it really true that all the cool stuff has already been invented? This does not seem likely. Mokyr points to emerging fields of innovation such as 3-D printing, genetic modification and custom- designed materials.46 There is also the rapid development of self-driving cars and ever-more sophisticated robots and artificial intelligence systems. Even more significantly, technology related to the generation and storage of clean energy has been advancing by leaps and bounds. For example, the price of solar power has been declining exponentially for years; according to Naam, the price of electricity from new solar declines by about 16 percent every time solar capacity doubles.4Z And progress has also been extremely rapid in making battery storage of renewable energy inexpensive, reliable and large- scale. Surely cheap, renewable energy qualifies as a breakthrough innovation. More generally, it is worth noting that by the end of the twentieth century more technological advances had been made in the previous hundred years than in all of history before 1900. As physicist Michio Kaku argues in his book Visions: How Science Will Revolutionize the 21st Century, there is no good reason to believe that this breakneck pace will slow in the twenty-first century, since we are just on the verge of mastering knowledge gleaned from technological revolutions in three interwined areas: computer science, biomolecular science/engineering, and quantum physics 48 Indeed, as we transition from an era where we have discovered the basic laws and building blocks in these fields to an era where we apply that knowledge, the pace of innovation, if anything, may accelerate. Currently underdeveloped fields like biotechnology, nanotechnology and quantum computing may leap forward in ways we cannot exactly anticipate but that are likely to have a big impact. Rather than correctly predicting a long-term innovation slowdown, it seems more likely that Gordon and his co-thinkers will join the long list of economic pessimists that have been proven wrong over the last 150 years.49 As blogger Kevin Drum cogently puts it: I can somehow imagine a circa-1870 version of Gordon arguing that all this folderol about electricity is ridiculous. Why, we've been studying electricity for over a century, and what do we have to show for it? Some clunky batteries, the telegraph, a few arc lamps with limited use, and a steady supply of techno-optimist inventors who keep telling us that any day now they'll invent a practical generator that will replace steam engines and change the world. Don't believe it, folks. 5 Interestingly, Drum, despite his bracing critique, is himself a sort of techno-pessimist—or, more precisely, a pessimistic techno-optimist. In an influential article for Mother Jones magazine, provocatively titled "Welcome Robot Overlords: Please Don't Fire Us?" Drum envisions robots growing smarter and more capable at an exponential rate so that by, say 2040, there will not be much need for human workers.51 Result: mass unemployment and social dysfunction despite unprecedented technological advance. Thus Drum goes to the other extreme from Gordon. Not only will there not be an innovation slowdown but there will be such a drastic innovation speedup that it will put everybody out of work. But this is just as unrealistic as Gordon. As Anthony Carnevale and Stephen Rose point out in their detailed study of the technological transformation of the U.S. economy, instead of assuming a virtual vanishing of growth as Gordon does, Drum is implicitly assuming economic growth in the neighborhood of 10 percent per year as smart machines generate greater and greater 52 output without human intervention. This seems unlikely to say the least. Yet this point of view is not without influence on the left, where a sort of neo-Luddism has become increasingly common. Drum himself has remarked: "The Luddites weren't wrong. They were just 200 years too early."53 Martin Ford's 2015 book, Rise of the Robots: Technology and the Threat of a Jobless Future, which predicts half of U.S. workers will be replaced by robots in the next 20 years, was widely 54 and respectfully reviewed in liberal outlets. Coming after a spell of high unemployment from the Great Recession, which is just lifting in the United States (and still hasn't in much of Europe), this seems like a very odd thing for those on the left to worry about. It is especially odd when the history of technological advance is full of transformations that put workers out of jobs in one sector only to have more jobs created in others as demand for new products and services grew.55 It's time for the left to discard both the Gordon and Drum forms of techno-pessimism and firmly embrace techno-optimism. Continuing technological advance is not only probable but good; instead of a future of no jobs it will be a future of different and more highly skilled jobs. These advances will likely transform our lives dramatically—in some ways we can already see and some we cannot anticipate. **They will be a key to human liberation and critically to the growth that will facilitate the pursuit of social justice and a higher standard of living for all**. Techno-optimism is too important to be left to the libertarians.

#### Algorithmic governance as per their Beller evidence is good -- it solves crisis escalation.

Corneliu Bjola 19, Head of the Oxford Digital Diplomacy Research Group, University of Oxford, 11/10/19, “Diplomacy in the Age of Artificial Intelligence,” http://www.realinstitutoelcano.org/wps/portal/rielcano\_en/contenido?WCM\_GLOBAL\_CONTEXT=/elcano/elcano\_in/zonas\_in/ari98-2019-bjola-diplomacy-in-the-age-of-artificial-intelligence

Taking note of the fact that developments in AI are so dynamic and the implications so wide-ranging, another report prepared by a German think tank calls on Ministries of Foreign Affairs (MFAs) to immediately begin planning strategies that can respond effectively to the influence of AI in international affairs. Economic disruption, security & autonomous weapons, and democracy & ethics are the three areas they identify as priorities at the intersection of AI and foreign policy. Although they believe that transformational changes to diplomatic institutions will eventually be needed to meet the challenges ahead, they favour, in the short term, an incremental approach to AI that builds on the successes (and learns from the failures) of “cyber-foreign policy”, which, in many countries, has been already internalised in the culture of the relevant institutions, including of the MFAs.13 In the same vein, the authors of a report prepared for the Centre for a New American Security see great potential for AI in national security-related areas, including diplomacy. For example, AI can help improve communication between governments and foreign publics by lowering language barriers between countries, enhance the security of diplomatic missions via image recognition and information sorting technologies, and support international humanitarian operations by monitoring elections, assisting in peacekeeping operations, and ensuring that financial aid disbursements are not misused through anomaly detection.14

From an AI perspective, consular services could be a low-hanging fruit for AI integration in diplomacy as decisions are amenable to digitisation, the analytical contribution is reasonable relevant and the technology favours collaboration between users and the machine. Consular services rely on highly structured decisions, as they largely involve recurring and routinised operations based on clear and stable procedures, which do not need to be treated as new each time a decision has to be made (except for crisis situations, which are discussed further below). From a knowledge perspective, AI-assisted consular services may embody declarative (know-what) and procedural knowledge (know-how) to automate routinised operations and scaffold human cognition by reducing cognitive effort. This can be done by using data mining and data discovery techniques to organize the data and make it possible to identify patterns and relationships that would be difficult to observe otherwise (e.g., variation of demand for services by location, time, and audience profile).

Case study #1: AI as Digital Consul Assistant

The consulate of country X has been facing uneven demand for emergency passports, visa requests and business certifications in the past five years. The situation has led to a growing backlog, significant loss of public reputation and a tense relationship between the consulate and the MFA. An AI system trained with data from the past five years uses descriptive analytics to identify patterns in the applications and concludes that August, May and December are the most likely months to witness an increase of the demand in the three categories next year. AI predictions are confirmed for August and May but not for December. AI recalibrates its advice using updated data and the new predictions help consular officers manage requests more effectively. As the MFA confidence in the AI system grows, the digital assistant is then introduced to other consulates experiencing similar problems.

Digital platforms could also emerge as indispensable tools for managing diplomatic crises in the digital age and for good reasons. They can help embassies and MFAs make sense of the nature and gravity of the events in real-time, streamline the decision-making process, manage the public’s expectations, and facilitate crisis termination. At the same time, they need to be used with great care as factual inaccuracies, coordination gaps, mismatched disclosure level, and poor symbolic signalling could easily derail digital efforts of crisis management.15 AI systems could provide great assistance to diplomats in times of crisis by helping them make sense of what it is happening (descriptive analytics) and identify possible trends (predictive analytics). The main challenge for AI is the semi-structured nature of the decisions to be taken. While many MFAs have pre-designed plans to activate in case of a crisis, it is safe to assume that reality often defies the best crafted plans. Given the high level of uncertainty in which crisis decision-making operates and the inevitable scrutiny and demand of accountability to occur if something goes wrong, AI integration can work only if humans retain control over the process. As a recent SIPRI study pointed out, AI systems may fail spectacularly when confronted with tasks or environments that differ slightly to those they were trained for. Their algorithms are also opaque, which makes difficult for humans to explain how they work and whether they include bias that could lead to problematic –if not dangerous– behaviours.16

#### Externally, environmental sustainability – extinction.

David Victor 19, professor of international relations at the School of Global Policy and Strategy and director of the Laboratory on International Law and Regulation, Co-Chair of the Brookings Initiative on Energy and Climate, 1/10/19, “How artificial intelligence will affect the future of energy and climate,” https://www.brookings.edu/research/how-artificial-intelligence-will-affect-the-future-of-energy-and-climate/

HOW AI WILL IMPROVE CLIMATE POLICY

Since the chief protagonist in the climate change story, CO2, has a long atmospheric lifetime, there is only a sluggish relationship between changes in emissions and the accumulated concentrations; in turn, those concentrations have a sluggish impact on the climate. Even if AI were part of some massive transformation in the energy system, the built-in inertia of that energy system, along with the inertia in the climate system, virtually guarantees that the world is in for a lot of climate change. All this is grim news and means that widely discussed goals, such as stopping warming at 1.5 or 2 degrees Celsius are unlikely to be realized.

These geophysical and infrastructural realities give rise to a new policy reality: adaptation is urgent.[7] They also mean that emergency responses to extreme climate impacts—for example, solar geoengineering, might be needed as well.

Existing research shows that there is a huge difference in the impact on public welfare from scenarios where climate change affects a society that doesn’t have an adaptation plan compared with a society that takes active adaptive measures. For example, the most recent U.S. climate-impact assessment released in November 2018 demonstrates that active adaptation measures can radically reduce losses from some climate impacts—often with benefits that far exceed the costs.[8] Extreme climate change is going to be ugly and will require hard choices—such as which coastlines to protect or abandon. Without smart adaptation strategies, it will be a lot worse.

One of the central insights from the science of climate impacts is that extreme events will cause most of the damage. A world that is a bit warmer and wetter (and a bit drier in some places) is a world that societies, within reason, can probably adapt to—especially if those gradual changes are easy to anticipate. But a world that has more extreme events—put differently, climate events that have a higher variance—is a world that requires a lot more preparedness. A farming area that faces a new, significant risk of truly extreme drought for example, such as a decade-long dust bowl, will need to prepare as if that extreme event is commonplace. It will need irrigation systems, the option of planting hardier crops and other possible interventions that sit ready when the extreme events come.

Once those systems are purchased, much of the expense is borne and it makes sense to use them all the time. This has been the experience, for example, with the Thames river barrier or a similar Dutch flood barrier—these systems were designed and installed at vast expense with extreme events in mind, and now they are being used much more frequently. Climate impacts are, fundamentally, stochastic events centered around shifting medians—a warmer world, for example, is one where median temperature rises and where the whole distribution of temperatures from cold to hot shifts hotter. But the tails in that statistical distribution also probably fatten, and for some impacts, those tails get a lot fatter. Machine learning techniques will probably improve the ability to understand the shapes of those tails.

This logic of extreme events as the main drivers of climate impacts and response strategies has some big implications for how societies will plan for adaptation and how AI can help—possibly in transformative ways.

First, AI can help focus and adjust adaptation strategies. Because uncertainty is high and extreme events are paramount, policymakers, firms, and households will not know where to act nor what expense is merited. They will have a large portfolio of responses, each with an option value. Machine learning can help improve the capacity to assess those option values more rapidly. Such techniques might also make it possible to rely more heavily on market forces to weigh which options generate private and public welfare—if so, AI could help reduce one of the greatest dangers as societies develop adaptation strategies, which is that they commit vast resources to adaptation without guiding resources to their greatest value. High levels of uncertainty, along with acute private incentives that can mis-allocate resources—for example, local construction firms and organized labor might favor some kinds of adaptive responses (e.g., building sea walls and other hardened infrastructure) even when other less costly options are available—mean that adaptation needs could generate a massive call on resources and thus a massive opportunity for mischief and mis-allocation.

Second, most adaptation efforts are intrinsically local and regional affairs. As a matter of geophysics, climate change harms public welfare when general perturbations in the oceans and atmosphere get translated into specific climatological events that are manifest in specific places—specific coastlines, mountainous regions, public lands, and natural ecosystems. As a matter of public policy, the actors whose responses have the biggest leverage on local impacts are managers of local infrastructures—coastal and urban planners, developers, city managers, and the like. Politically, this is one of the reasons why, despite all the difficulties in mobilizing action to control emissions, it is likely that as communities realize what’s at stake with adaptation, they will respond. Local responses generate, for the most part, local benefits. A big challenge in all this local response, however, is that local authorities are intrinsically decentralized and usually not steeped in technical expertise. Getting the best information on climate impacts and response strategies—let alone keeping that information aligned with local circumstances and shifting odds for climate impacts—is all but impossible. AI could help lower that cost and, in effect, democratize quality climate impacts response.

1. <http://dictionary.reference.com/browse/negate>, <http://www.merriam-webster.com/dictionary/negate>, <http://www.thefreedictionary.com/negate>, <http://www.vocabulary.com/dictionary/negate>, <http://www.oxforddictionaries.com/definition/english/negate> [↑](#footnote-ref-1)
2. *Dictionary.com – maintain as true, Merriam Webster – to say that something is true, Vocabulary.com – to affirm something is to confirm that it is true, Oxford dictionaries – accept the validity of, Thefreedictionary – assert to be true* [↑](#footnote-ref-2)