# 1NC R6 Apple Valley

## 1

### T

#### Interpretation: The affirmative may not specify a just government.

#### “A” is an indefinite article that modifies “just government” in the res – means that you have to prove the resolution true in a vacuum, not a particular instance

CCC (“Articles, Determiners, and Quantifiers”, http://grammar.ccc.commnet.edu/grammar/determiners/determiners.htm#articles, Capital Community College Foundation, a nonprofit 501 c-3 organization that supports scholarships, faculty development, and curriculum innovation) LHSLA JC/SJ

The three articles — a, an, the — are a kind of adjective. The is called the definite article because it usually precedes a specific or previously mentioned noun; a and an are called indefinite articles because they are used to refer to something in a less specific manner (an unspecified count noun). These words are also listed among the noun markers or determiners because they are almost invariably followed by a noun (or something else acting as a noun). caution CAUTION! Even after you learn all the principles behind the use of these articles, you will find an abundance of situations where choosing the correct article or choosing whether to use one or not will prove chancy. Icy highways are dangerous. The icy highways are dangerous. And both are correct. The is used with specific nouns. The is required when the noun it refers to represents something that is one of a kind: The moon circles the earth. The is required when the noun it refers to represents something in the abstract: The United States has encouraged the use of the private automobile as opposed to the use of public transit. The is required when the noun it refers to represents something named earlier in the text. (See below..) If you would like help with the distinction between count and non-count nouns, please refer to Count and Non-Count Nouns. We use a before singular count-nouns that begin with consonants (a cow, a barn, a sheep); we use an before singular count-nouns that begin with vowels or vowel-like sounds (an apple, an urban blight, an open door). Words that begin with an h sound often require an a (as in a horse, a history book, a hotel), but if an h-word begins with an actual vowel sound, use an an (as in an hour, an honor). We would say a useful device and a union matter because the u of those words actually sounds like yoo (as opposed, say, to the u of an ugly incident). The same is true of a European and a Euro (because of that consonantal "Yoo" sound). We would say a once-in-a-lifetime experience or a one-time hero because the words once and one begin with a w sound (as if they were spelled wuntz and won). Merriam-Webster's Dictionary says that we can use an before an h- word that begins with an unstressed syllable. Thus, we might say an hisTORical moment, but we would say a HIStory book. Many writers would call that an affectation and prefer that we say a historical, but apparently, this choice is a matter of personal taste. For help on using articles with abbreviations and acronyms (a or an FBI agent?), see the section on Abbreviations. First and subsequent reference: When we first refer to something in written text, we often use an indefinite article to modify it. A newspaper has an obligation to seek out and tell the truth. In a subsequent reference to this newspaper, however, we will use the definite article: There are situations, however, when the newspaper must determine whether the public's safety is jeopardized by knowing the truth. Another example: "I'd like a glass of orange juice, please," John said. "I put the glass of juice on the counter already," Sheila replied. Exception: When a modifier appears between the article and the noun, the subsequent article will continue to be indefinite: "I'd like a big glass of orange juice, please," John said. "I put a big glass of juice on the counter already," Sheila replied. Generic reference: We can refer to something in a generic way by using any of the three articles. We can do the same thing by omitting the article altogether. A beagle makes a great hunting dog and family companion. An airedale is sometimes a rather skittish animal. The golden retriever is a marvelous pet for children. Irish setters are not the highly intelligent animals they used to be. The difference between the generic indefinite pronoun and the normal indefinite pronoun is that the latter refers to any of that class ("I want to buy a beagle, and any old beagle will do.") whereas the former (see beagle sentence) refers to all members of that class

#### Violation: they spec the US

#### Standards:

#### 1] Precision – the counter-interp justifies them arbitrarily doing away with random words in the resolution which decks negative ground and preparation because the aff is no longer bounded by the resolution. Independent voter for jurisdiction – the judge doesn’t have the jurisdiction to vote aff if there wasn’t a legitimate aff.

#### 2] Limits – there are infinite governments that could be just – explodes limits since there are tons of independent affs plus functionally infinite combinations, all with different advantages in different political situations. Kills neg prep and debatability since there are no DAs that apply to every aff – i.e. laws about the right to strike in the US are different than in New Zealand – means the aff is always more prepared and wins just for speccing.

#### 3] TVA – just read your aff as an advantage under a whole adv, solves your offense

#### Fairness – debate is a competitive activity that requires fairness for objective evaluation. Outweighs – it constrains your ability to evaluate the rest of the flow because they require fair evaluation.

#### Drop the debater – to deter future abuse and set better norms for debate.

#### Competing interps – reasonability is arbitrary and invites judge intervention but we creates a race to the top where we create the best norms for debate.

#### No RVIs – a] illogical, you don’t win for proving that you meet the burden of being fair, logic outweighs since it’s a prerequisite for evaluating any other argument, b] RVIs incentivize baiting theory and prepping it out which leads to maximally abusive practices

#### No 1AR theory – sandbagging o/w, irresolvable o/w, time skew o/w

## 2

### K

#### The Atlantic slave trade marked the birth of modern logistics and racial capitalism that was characterized by endless access and a drive for endless control. Even through this global regime of racialized violence, logistics is vulnerable to logisticality – a glitch amongst those in the grips of total access.

Harney et al. 18 Stefano Harney in conversation with Niccolò Cuppini and Mattia Frapporti, September 2018, “Logistics Genealogies: A Dialogue with Stefano Harney,” Social Text 136 • Vol. 36, No. 3, DOI 10.1215/01642472-6917802 Recut Justin

Modern logistics is a commercial logistics, with all the multiple sources that feed what Cedric Robinson calls racial capitalism. And it’s a capitalist science. Even today’s military logistics is most commonly outsourced to commercial rms, who make huge prfiots off the logistics of contempo- rary permanent war. As a commercial logistics, as a capitalist science, it can be traced directly and emphatically to the Atlantic slave trade. The Atlantic slave trade was the birth of modern logistics, as it was also the birth of a new kind of war on our species being, and the birth of racial cap- italism, which amounts to saying the same thing. This trade entailed the first global movement of mass commodities, voluminous and grotesque. Moreover, these humans were also perishable and volatile commodities that could “go missing” and were hard “to extract,” requiring complex, even diabolical, logistical technologies, supported by finance, insurance, law, and of course state and extrastate violence. Ian Baucom locates the origins of modern insurance in the Atlantic slave trade in his important work Spectres of the Altantic. We know from Sergio Bologna how much contemporary finance and logistics are entwined in today’s overleveraged global shipping industry, but this was true of the Atlantic slave trade too, where speculative finance was already at work. The story of the Zong slave ship is central to Baucom’s account and is also beautifully, unbearably rendered by M. NourbeSe Philip in her book-length poem Zong!, captur- ing what the birth of modern logistics did to any possible project of the human by bringing finance and logistics together in a devilish alliance over the commodity that really “could speak,” the “thing” that talks or is somehow in touch, neither subject nor proper object, a massive, subter- ranean, ethereal, undercommon threat to the individuation of modern “Man” emerging at the same time. But the Atlantic slave trade was also the birth of modern logistics because modern logistics is not just about how to transport large amounts of commodities or information or energy, or even how to move these ef- ficiently, but also about the sociopathic demand for access: topographical, jurisdictional, but as importantly bodily and social access. The nearly complete access that was imposed upon the African enslaved, upon the African continent, and upon the lands and indigenous peoples settled for plantations, this kind of access remains the ambition of logistics today, and it is for this reason that the slave trade remains so contemporary, that abolition as Jared Sexton rightly says is yet to come. And we might add that this abolition requires the abolishment of logistics which in its flows created a people without standing anywhere. We act in abolition not for a ground to stand on but for groundations beyond standing. Modern logistics, with its warehousing and its containers, is as much about controlling the flow as ensuring the flow, as much about the interface of movement of commodities and financialization of commodities as it is about just get- ting goods somewhere. That interface is an opportunity for speculation, and today the line itself, the supply line and the assembly line, their speed, efficiency, and metrics, are a source of massive financial speculation. This is also the horrific legacy of the Atlantic slave trade, the containerization of people, of the sociopathic access demanded to labor and sex, and the storage, in forts, in the hold. And even more murderously, the elimination of goods, of cargo, when the price falls, or considerations of finance as in the incident of the slave ship the Zong, in which 133 enslaved persons were thrown overboard for insurance purposes during a logistical operation. In short, this aggregated access allowed for the most evil calculations about the perishability of goods, the planned obsolescence of products, and the cost of replacement, in a word, financial speculation on the supply line that was in the case of the African enslaved in the Atlantic trade often indis- tinguishable from the assembly line. Marx said the rst thing the worker makes is himself. The slave was worker on the line and at the same time the supply coming off the line and into the line. The same concerns with speculation on the line, the line as a modulation of investment and exploi- tation of labor are still found today at Walmart or Starbucks, not so far from their origins, at least for the most part. As Susan Zieger reminds us in her study of “Box” Brown and logistics — he was the slave who mailed himself in a box to “freedom” from the slave-plantation South to the slave-dependent North in the United States — logistics incorporates loss in its logics. As Fred Moten and I say, logistics tracks us because it assumes fugitivity. Indeed, what is called surveillance might also be called preemptive logistics. It is possible that all we know of surveillance studies, including its most incisive work in black surveillance like Simone Browne’s, could also go under the name preemptive logistics, even predictive logistics, the anticipation not of resistance but of a kind of impenetrability even in the give. In other words, our entangled, indeterminate, undercommon rub- up of curvy lines, kinks, loops, and crooked lines summons logistics. It reacts to our sumptuous tangle. Our entanglement requires them to draw up contingency plans, which are plans to make our indeterminacy mere contingency, to account for what goes missing. Logistics is the science of loss, the science of their lost means, which is to say it will always be the white science and the science of being white. Logistics is the science of their loss, not ours, though we, and those closest to blackness in particu- lar, suffer horrific losses from their loss. However, it was not just modern logistics that was born in this hell-fire. It was also the birth of what Fred and I call logisticality, a social capacity found most intensely amongst those who found themselves, who found each other, under the duress of almost total access but in the grip of each other. As Frank Wilderson writes at the end of Incognegro, his brilliant more-than-memoir: “Something happened to us in the hold.” And not just in the hold. In her heart-breaking but unavoidable book Lose Your Mother, Saidiya Hartman speaks of the fugitivity that the ungoverned and the ungovernable of Africa were forced to invent because of the reach of the Atlantic slave trade. Those captured by the trade either were or became the people Cedric Robinson understands in Africa as living by a principle of “individual” incompleteness. Such peoples existed everywhere, as James Scott asserts in The Art of Not Being Governed. Scott details how highland peoples in Southeast Asia avoided the massive slave trade of the padi states, at trade that dominated precolonial Southeast Asia to the point that slaves became not only the biggest trade but currency itself. In many languages of the padi states these peoples were already known by the name slave before they were enslaved. These peoples refused to form political societies, have leaders, or see land as owned or even shared in ownership. They gathered, and they wandered. No written languages, they sought refuge with each other. But the hold, the middle passage, the ­fire that African peoples went through, those who were captured, and those who became fugitive, created something perhaps unprecedented in its total span across societies and histories. This is what Fred and I call logisticality, the ability to fi­nd each other, to move together, to break the rule of Newtonian time and space, disorder it, and legislate new time and space to disorder, to gather, stranded into refuge together. A people came into existence without origin — anoriginal, as Nahum Chandler would say — who were “in touch,” whose response to the sociopathic demand for access was paradoxically and necessarily a radical opening of being, a practice of touch without surface or border or edge, a practice of hapticality. Fred and I understand hapticality as a kind of touch without surface that undoes, that saps the fever of individuation, in a sometimes violent and profane exorcism. It is not a reassuring touch. It unensures precisely because it’s a loving touch. In a sense, African slaves who came through the ­re could be said to have reversed logistics and overturned it. Now the slaver sought this logisticality, sought but could not fully capture something that had been produced in capture but also preceded it as Robinson and Scott suggest, calling capture into being in all its murderous regulatory force. We can understand this logisticality in two registers, as I’ve suggested: First, in C. L. R. James’s famous contention that slaves ran the plantations in the Caribbean — that it was the slaves who had the capacity and know-how to work across half a dozen African and European languages in this early crucible of world capitalism — it was the slaves who worked the nascent capitalist machinery of the sugar mills and who handled the logistics of transport to the ships, and sometimes on the ships. It was the slaves who worked in exchanges of different currencies, commodities, and calculations of the future, with world prices. The slaves also ran the households, providing the care, nurturing, and attention. Now as James would be quick to point out, all this occurred despite the unbounded inhumanity and cruelty of the owners, as for instance he details in his chapter on owners and on the property in the Black Jacobins. All of this was also going on in the sixteenth and seventeenth centuries at a time when, as James notes, most of our families in Italy and across Europe, as we might say, “still only knew the bell tower.” This logisticality — the quantum ­nding, this hapticality, this feel without surface that hurts and loves — could also be understood as a capacity to recreate Robinson’s principle of incompleteness and, indeed, to detect and translate such principles of incompleteness and ungovernability, of the unregulated, the disorderly and the unruled, to feel these things, and feel others feeling you being undone. This hapticality was never going to be fully enslaved, even when American slavery turned to its speci­c Taylorist brutality and slave breeding with the rise of the cotton trade and industrial capitalism at the end of the eighteenth century. But more importantly, it survives as the basis of the black radical tradition, in radical social poesis, as Laura Harris says. It survives in/as blackness. So the shipped, the containerized, the accessed of the Atlantic slave trade gave birth to modern logistics but also conjured something in the break of this massive enclosure of those who lived together by the principle of incompleteness. And despite this, it is fundamentally necessary to place that hapticality against what Christina Sharpe, writing recently about the slave ship and its wake, might call its “weather,” the pervasive antiblack racism that this founding of modern logistics also bequeathed the contemporary world and perpetuates today.

#### Endless access is inextricably tied to the logic of improvement and the Algorithm of work broadly – the demand for the right to strike is subsumed by logistical capitalism.

Moten & Harney 15 – [Fred, Professor of Performance Studies for the Tisch School of the Arts at NYU, PhD in English from UC Berkeley, 2020 MacArthur Genius Fellow, Stefano, Professor of Strategic Management for the Lee Kong Chian School of Business at Singapore Management University, PhD in Social and Political Sciences from the University of Cambridge, co-founder of Ground Provisions—a curatorial collective, founder of the School for Study—a nomadic study collective, 2015, “Mikey the Rebelator,” Performance Research, 20:4, 141-145, DOI: 10.1080/13528165.2015.1071057] Justin

Paolo Friere thought our incompleteness is what gave us hope.7 It is our incompleteness that inclines us toward one another. For Friere, the more we think of ourselves as complete, finished, whole, individual, the more we cannot love or be loved. Is it too much to put this the other way around? To say, by way of Friere, that love is the undercommon self-defence of being-incomplete? This seems important now when our incompleteness is something we are invited and then compelled to address and improve, when we are told to be impatient with it, and embarrassed by it. We need to be intact. We’re told to raise our buzz because we’re all fucked up. But in our defence we love that we are complete only in a plained incompletion, which they would have undone, finished, owned, and sent on down the line. We do mind working because we do mind dying. THE CONSU LTANT The consultant is not here to provide solutions, innovation or even advice. The consultant exists to demonstrate access in the era of logistical capitalism. The consultant is not an ideologue. Ideology operates here only for the consultant himself. He is demonstrably the only one who believes his bullshit, but fortunately for him this is not the point, not his point. The consultant literalizes access to workplaces, demonstrating their openness by showing up in their midst, like a drone. One day you come to work and there he is sitting next to the boss. Nothing she says or does is as important as this demonstration of access. What the consultant introduces into the imposed, exposed workers’ corp is the algorithm. The consultant bears the algorithm, which violates in the name of completion. When the consultant brings his algorithmic charge, the body of the workers, that undesired and constantly invaded enclosure, is finished. We are rendered complete, made free, by the work, in the work, of the algorithm. We are done, and done in by, the consultant’s forced, aggressive incorporation of an undoing that was of and for itself, of and for ourself, the undoing we keep on making in the face of every sovereign invasion, every violent ascription of words and worth and (the) work. The consultant completes, so that he can access the private loop of a thwarted desire to be intact. It is not the product or even the organization that interests the algorithm of work. It is the production line’s infinite curvature. The algorithm of work is a demonstration within a demonstration. With access comes (the necessity of) improvement, which always takes the form of a demand for more access. As the introduction of the consultant inside the organization demonstrates access, so the introduction of the algorithm demonstrates improvement. The algorithm is the machine of self-improvement; as such, it is the only machine that makes new machines. There is a mirror – marking and instantiating self-envisaging’s shared exclusivity, that scary, silly, Stuart Smalleyish binary solipsism – that stands between it and man, the other only machine that makes new machines and, in so doing, improves itself. The mirror between man, the mirror, and The Man, man’s mirror, is the algorithm. Meanwhile, the inhuman, which is our fleshly inherence and inhabitation in the general mechanics of a general disregard for self-reflection, makes machines because it does not want to improve. Before the algorithm, machines came from strikes, from resistance, from sabotage. Machines made from the algorithm do not wait for the class struggle. The algorithm of work subjects every labour process on the production line to undoing, disassembly and incompletion, in order to demand it be completed better, assembled better, done better. It leaves behind not an improved organization but a metric to ensure the organization will never be satisfied. The metric measures everything against its last instance, ensuring that the last instance never comes. The metric demands more access, more measurement of access, more movement, more assembly, more measure of the last instance, which is given in and as enclosure. The consultant is still talking but it does not matter now what he says. The algorithm of work has arrived, algorithmic surplus has gone viral. If the settler could not be heard over the screams of primitive accumulation, and the citizen could not be heard over the noise of the machines, the consultant cannot be heard over the click of the metrics. Mikey heard this noise and walked the other way, another way, so the algorithm could not pass through, so we could hold him up and pass him along. Nahum Chandler reminds us of a term W. E. B. DuBois invented and employed; ‘democratic despotism’8 . When the consultant cannot demonstrate access, and therefore the algorithm cannot demonstrate improvement, the consultant calls for policy as once (and still) the citizen calls for heteropatriachal nationalism or the settler for racist manifest destiny. Policy is past all that, even though all that’s not past. Policy comes in to diagnose what’s blocking access, and what’s blocking access are ‘those people’. What’s wrong with those people in Detroit who want water, in British Columbia who want land, in Manila who want some place to stay? Policy says there is something wrong with those people that makes it so that the consultant can’t get access. But it is the other way around. The consultant is denied access – those people deny him access – because they embrace the general access-in-antagonism that he denies. And so policy must be called. Selfdefence becomes the disease. Love becomes the problem because love is the problem, the self-defence of the accessible. But, hey, maybe governance can help, which is to say maybe those practising self-defence may be willing to self-diagnose, self-reflect, self-improve! One way or another policy will proscribe, or policy will get posed – as democracy, as democratic despotism, where everyone is given the chance to say there is something wrong with those people. Democratic despotism is the imposition of policy and its violent possibilities and impossibilities on the wrong(ed). Because the thing is, the consultant’s not wrong, the algorithm of work is not malfunctioning, the policy hustler is not misdiagnosing. We’re wrong, which is why we’re wronged. We are incomplete. Moreover, they got the very idea of incompleteness from us! Another word for incompleteness is study, or more precisely, revision. The consultant gets this revision from us, from study, from our sumptuous revisions of one another out of existence, as existence. Study happens and it don’t stop. In study, we are engaged consciously and unconsciously. We revise, and then again. This is not just about distinguishing improvement as capitalist efficiency. That is too easy to dismiss. It is about improvement itself, the time-concept, the moral imperative, the aesthetic judgement, which is to say capitalist improvement founded in and on black flesh, its female informality. Revision has no end and no connection to improvement, never mind efficiency. So the consultant does and undoes institutions but can’t access instituted life, can’t open black life, can’t uncover queer life, can’t expose feminist planning around the ‘kitchen table’ as Barbara and Beverly Smith called it and Tiziana Terranova calls to it again, all noting certain paradoxes of freedom and sequestration in little general intellects of surreal life.9 He can’t access open secrets, can’t incomplete what is already incomplete, can’t deform what is always informal already and yet; they can’t believe and this leads to the state emergency that goes under such names as resilience and preparedness. When democratic despotism fails, simple despotism in the name of democracy must be imposed. Resilience is the name for the violent destruction of things that won’t give, won’t return to form, won’t bend when access is demanded, won’t be flexible and (com)pliant. Stopping when you are told to stop and moving along when you are told to move along demonstrates resilience and composure; but broken, breaking, dissed assembly demonstrates itself openly, secretly, dissembling in captured but inaccessible glance, for us, to us, as incomplete and much more than complete. Its daimonic performance can’t be individuated and won’t be performed. HOL D SHE It’s not about who’s holding you down when you try to jay-walk; it’s about who’s holding you up. This is the question of hapticality. The police can’t hold what’s already held. At the same time, what’s already held is all that we can hold. That’s our haptic institution. Watching mama listen to a song, you’re instituted. Here go that Michael Jackson song she turned up to teach me how to dance. In the photograph, they containerize her but she is uncontained. They bend her because access and logistics strive to be one. The more she is captured by the police, the photographer, the viewer, the more she is shipped. But the more she is shipped, the more she is held, the more she is handed.

#### Statist affirmations of the right to strike gives them the jurisdiction to circumscribe class struggles into the law – that diffuses radical planning into policy.

Crépon 19 Mark Crépon (French philosopher), translated by Micol Bez “The Right to Strike and Legal War in Walter Benjamin’s ‘Toward the Critique of Violence,’” Critical Times, 2:2, August 2019, DOI 10.1215/26410478-7708331 Recut Justin

If we wish to understand how the question of the right to strike arises for Walter Benjamin in the seventh paragraph of his essay “Zur Kritik der Gewalt,” it is impor­ tant to first analyze the previous paragraph, which concerns the state’s monopoly on violence. It is here that Benjamin questions the argument that such a monopoly derives from the impossibility of a system of legal ends to preserve itself as long as the pursuit of natural ends through violent means remains. Benjamin responds to this dogmatic thesis with the following hypothesis, arguably one of his most impor­ tant reflections: “To counter it, one would perhaps have to consider the surprising possibility that law’s interest in monopolizing violence vis­à­vis the individual is explained by the intention not of preserving legal ends, but rather of preserving law itself. [This is the possibility] that violence, when it does not lie in the hands of law, poses a danger to law, not by virtue of the ends that it may pursue but by virtue of its mere existence outside of law.”1 In other words, nothing would endanger the law more than the possibility of its authority being contested by a violence over which it has no control. The function of the law would therefore be, first and foremost, to contain violence within its own boundaries. It is in this context that, to demonstrate this surprising hypothesis, Benjamin invokes two examples: the right to strike guaranteed by the state and the law of war. Let us return to the place that the right to strike occupies within class struggle. To begin with, the very idea of such a struggle implies certain forms of violence. The strike could then be understood as one of the recognizable forms that this violence can take. However, this analytical framework is undermined as soon as this form of violence becomes regulated by a “right to strike,” such as the one recognized by law in France in 1864. What this recognition engages is, in fact, the will of the state to control the possible “violence” of the strike. Thus, the “right” of the right to strike appears as the best, if not the only, way for the state to circumscribe within (and via) the law the relative violence of class struggles. We might consider this to be the per­ fect illustration of the aforementioned hypothesis. Yet, there are two lines of ques­ tioning that destabilize this hypothesis that we would do well to consider. First, is it legitimate to present the strike as a form of violence? Who has a vested interest in such a representation? In other words, how can we trace a clear and unequivocal demarcation between violence and nonviolence? Are we not always bound to find residues of violence, even in those actions that we would be tempted to consider nonviolent? The second line of questioning is just as important and is rooted in the distinction established by Georges Sorel, in his Reflections on Violence, between the “political strike” and the “proletarian general strike,” to which Benja­ min dedicates a set of complementary analyses in §13 of his essay. Here, again, we are faced with a question of limits. What is at stake is the possibility for a certain type of strike (the proletarian general strike) to exceed the limits of the right to strike— turning, in other words, the right to strike against the law itself. The phenomenon is that of an autoimmune process, in which the right to strike that is meant to protect the law against the possible violence of class strugles is transformed into a means for the destruction of the law. The diference between the two types of strikes is nevertheless introduced with a condition: “The validity of this statement, however, is not unrestricted because it is not unconditional,” notes Benjamin in §7. We would be mistaken in believing that the right to strike is granted and guaranteed uncondi­ tionally. Rather, it is structurally subjected to a conflict of interpretations, those of the workers, on the one hand, and of the state on the other. From the point of view of the state, the partial strike cannot under any circumstance be understood as a right to exercise violence, but rather as the right to extract oneself from a preexisting (and verifiable) violence: that of the employer. In this sense, the partial strike should be considered a nonviolent action, what Benjamin named a “pure means.” The interpretations diverge on two main points. The first clearly depends on the alleged “violence of the employer,” a predicate that begs the question: Who might have the authority to recognize such violence? Evidently it is not the employer. The danger is that the state would similarly lack the incentive to make such a judgment call. It is nearly impossible, in fact, to find a single instance of a strike in which this recognition of violence was not subject to considerable controversy. The political game is thus the following: the state legislated the right to strike in order to con­ tain class strugles, with the condition that workers must have “good reason” to strike. However, it is unlikely that a state systematically allied with (and accomplice to) employers will ever recognize reasons as good, and, as a consequence, it will deem any invocation of the right to strike as illegitimate. Workers will therefore be seen as abusing a right granted by the state, and in so doing transforming it into a violent means. On this point, Benjamin’s analyses remain extremely pertinent and profoundly contemporary. They unveil the enduring strategy of governments confronted with a strike (in education, transportation, or healthcare, for example) who, afer claiming to understand the reasons for the protest and the grievances of the workers, deny that the arguments constitute sufcient reason for a strike that will likely paralyze this or that sector of the economy. They deny, in other words, that the conditions denounced by the workers display an intrinsic violence that jus­ tifies the strike. Let us note here a point that Benjamin does not mention, but that is part of Sorel’s reflections: this denial inevitably contaminates the (socialist) lef once it gains power. What might previously have seemed a good reason to strike when it was the opposition is deemed an insufcient one once it is the ruling party. In the face of popular protest, it always invokes a lack of sufcient rationale, allow­ ing it to avoid recognizing the intrinsic violence of a given social or economic situ­ ation, or of a new policy. And it is because it refuses to see this violence and to take responsibility for it that the left regularly loses workers’ support.

#### That continuous improvement paradoxically necessitates racialized genocide and ecological destruction.

**Moten and Harney 21** [Fred Moten, Professor of Performance Studies for the Tisch School of the Arts at NYU, PhD in English from UC Berkeley, 2020 MacArthur Genius Fellow, Stefano Harney, Professor of Strategic Management for the Lee Kong Chian School of Business at Singapore Management University, PhD in Social and Political Sciences from the University of Cambridge, co-founder of Ground Provisions—a curatorial collective, founder of the School for Study—a nomadic study collective, 2021, *All Incomplete*, pp 13-18] GZ Recut Justin

What does it mean to stand for improvement? Or worse, to stand for what business calls **a ‘commitment to continuous improvement‘?** It **means** to stand for **the brutal speciation of all**. To take a stand for speciation is the beginning of a **diabolical usufruct**. **Improvement comes to us by way of an innovation in land tenure**, where **individuated ownership, derived from increasing the land’s productivity, is given in the perpetual**, and thus arrested, becoming of exception’s miniature. This is to say that from the outset, **the ability to own** – and that ability’s first derivative, **self-possession** – **is entwined with the ability to make more productive**. In order to be improved, to be rendered more productive, **land must be violently reduced to its productivity**, which is the **regulatory diminishment and management of earthly generativity**. Speciation is this general **reduction of the earth to productivity** and **submission of the earth to techniques of domination** that isolate and enforce particular increases in and accelerations of **productivity**. In this regard, (necessarily European) man, in and as the exception, imposes speciation upon himself, in an operation that **extracts and excepts himself from the earth** in order to confirm his supposed **dominion over it**. And just as **the earth must be forcefully speciated to be possessed**, man must **forcefully speciate himself** in order to enact this kind of possession. This is to say that **racialization is present in the very idea of dominion over the earth**; in the very idea and enactment of the exception; **in the very nuts and bolts of possession-by-improvement**. Forms of racialization that both Michel Foucault and, especially and most vividly, Robinson identify in medieval Europe become *usufructed* with modern possession through improvement. Speciated humans are **endlessly improved** through the **endless work** they do on their **endless way to becoming Man**. This is the usufruct of man. In early modern England, establishing title to land by making it more productive meant **eliminating biodiversity** and isolating and breeding a species – barley or rye or pigs. Localized ecosystems were aggressively transformed so that **monocultural productivity smothers anacultural generativity**. **The emergent relation between speciation and racialization is the very conception and conceptualization of the settler**. Maintenance of that relation is his vigil and his eve. For the encloser, possession is established through improvement – this is true for the possession of land and for the possession of self. **The Enlightenment is the universalization/ globalization of the imperative to possess and its corollary, the imperative to improve**. However, this productivity must always confront its contradictory impoverishment: the **destruction of its biosphere** and its **estrangement in, if not from, entanglement**, both of which combine to ensure **the liquidation of the human differential that is already present in the very idea of man, the exception**. To stand for such improvement is to **invoke policy**, which attributes depletion to the difference, which is to say the wealth, **whose simultaneous destruction and accumulation policy is meant to operationalize**. **This attribution of a supposedly essential lack**, an inevitable and supposedly natural diminution, is achieved alongside **the imposition of possession-by-improvement**. **To make policy is to impose speciation upon everybody and everything, to inflict impoverishment in the name of improvement, to invoke the universal law of the usufruct of man**. In this context, continuous improvement, as it emerged with decolonization and particularly with the defeat of national capitalism in the 1970s, is the continuous crisis of speciation in the surround of the general antagonism. This is the contradiction Robinson constantly invoked and analyzed with the kind of profound and solemn optimism that comes from being with, and being of service to, your friends.

#### We affirm Anarcho-Blackness as an undercommon insurgency.

Bey 20 Marquis Bey, 2020, “Anarcho-Blackness: Notes Toward a Black Anarchism,” AK Press, SJBE

IT IS MISGUIDED TO PRESUME THAT AN ANARCHIC WORLD, A WORLD IN which, for classical anarchists, the State is eliminated—or a world in which, for Black queer feminist anarchists, racial capitalism and cisheteronormative patriarchy is overturned —is the “end” of anarchist pursuits. Anarcho-Blackness, with its disruptive disorderly conduct—its mode of conducting itself as, in other words, disorderly—advances a critical praxis that answers the fundamental political question, “What is to be done?” Kind of. The question “What is to be done?” demands an answer, not that the texture, tenor, or terms of that answer can be readily discerned. Nor does admitting this exculpate us from needing to, nevertheless, provide an answer. So again: what is to be done? Indeed, accosted by right-wing populism, virulent white supremacy, transantagonism, heteronormative patriarchy, and the litany of other violent regimes in our midst, we so earnestly want them to cease. We demand that it all end, now, and for justifiable reasons. I, though, animated by anarchism’s critical praxis—its practice of a criticality—do not place my crosshairs on a moment beyond now, when things might come to a close. This is not motivated by a nihilistic pessimism about the fate of the current political moment, where I cannot fathom cessation or even mitigation of various violences; this is not motivated by a perverse infatuation with the bounding persistence of hegemonic terrors. It is motivated by a kind of zeal, in fact, one where refusing an end allows for a perpetual openness that enables, always, the possibility of another beginning. Black anarchism’s emphasis on the constitutivity of the concepts of critical and praxis is fundamental here, as it itself is constituted through an indebtedness to Black queer and trans feminisms. This project is deeply theoretical, but also practical and material, because there is nothing more theoretically practical than trying to figure out how to fundamentally change the very system by which we live; indeed, to quote Zoé Samudzi, “What does it mean to create community that is safe for Black women, for Black trans women? That’s an incredibly theoretical exercise because that requires that we have all of these conversations and start to create material politics around misogynoir and trans misogynoir.”1 So the critical praxis and its theoretical heft is a ruthless interrogation of the established and institutionalized—in the vein of Marx’s 1843 call for die rücksichtlose Kritik alles Bestehenden (the ruthless criticism of all that exists); and if praxis is a doing, an agential enactment that bears on sociality, then a critical praxis marks an interrogative social enactment. What kind of politics might this lead to? What kind of world might this engender, and who might show up to this promiscuous gathering? The space cultivated by this critical praxis is where a Black anarchic politics and those subjectivated by an anarcho-Blackness, its attendant Black queer feminist electrical circuitry, show up. Those maroons, subversive intellectuals, fugitives, queers, feminists, anarchists, and rebellious workers meet to conspire together in the undercommons: a non-place where everyone is Black, queer, anarchic, because they are changed by the undercommons, which is not a place you enter but a groove that enters you. Critical praxis becomes a radical invitation to not only do but to be done by the undercommon insurgency that makes its own demands. And such an interrogation must suspend the presumption of an end goal. We know from Moten and Harney, and Jack Halberstam, that what we think we want before the crisis that precipitates our insurgency will necessarily shift after we’ve attained the limits of what our coalitional knowledge could compile. It is not because we are insufficient, as if insufficiency is a deficiency rather than a willingness to risk getting at the outer limits of what we dared to think; it is because we cannot, and must not, assume that the logics and rubrics we have when moving within the maelstrom of the hegemonic—radically altered as they may be—can operate to our benefit when we’ve unseated the hegemon. We will need new rubrics and metrics, unrubrics and unmetrics, because a radically other-world requires radically other means to love it, to caress it, to be all the way in it. So why is there no “end”? To assert this might seem to sidestep what Foucault claims in the Preface of Anti- Oedipus: to be “less concerned with why this or that than with how to proceed.” Refusing to bank on the “end” is, at least in part, how to proceed. “An abdication of political responsibility?” Moten and Harney write, anticipating the accusation. “OK. Whatever. We’re just anti-politically romantic about actually existing social life.”2 I submit that one’s concern must be an ethical one that—to supplement an oversight in Moten and Harney—not only sets its sights on social life that “actually” (I shiver at the hubris of this word) exists but, more substantively, fertilizes the conditions of possibility for otherwise and unsung and unknown emergence. There is no “end” because to know the end is to think one knows the totality of the landscape, a line of thinking that cannot account for that which falls outside the dictates of legibility. There might always be something else just outside, and we cannot close the discussion when we think it is over. Fugitive planning plans for what it cannot plan for by refusing to plan for it. So there is no end in sight because sight is not the only sense available to us. (But there is also no end in touch, smell, feel, or taste—or any other “sense.”) There is no end in sight because our end may only be someone else’s beginning or middle. Thus, our critical praxis, our interrogative social enactment, does something precisely when it commits to a political endeavor proliferating life where no life is said to be found. And the “where” of “life where no life is said to be found” is the place brought about by abolition. Abolition is fundamentally anarchic, as will be discussed at greater length in the final chapter. It is the eradication “of a society that could have prisons, that could have slavery, that could have the wage, and therefore not abolition as the elimination of anything but abolition as the founding of a new society.”3 This entails, to put it simply, the eradication of society inasmuch as “Society” is predicated on, constituted by, the existence of these things. Anarchism is the ground on which we assert the destitution of the terrain, a destitution that marks, according to the Invisible Committee, “a rupture in the fatality that condemns revolutions to reproduce what they have driven out, shattering the iron cage of counter-revolution.”4 Following this line of thinking, we might also say that destitution is another name for the position of Blackness, that “irreparable disturbance.”5 Destituting the world-as-is, the Blackening of the world, shifts what counts as the “real” terrain of politics. To be ungoverned is a quotidian practice (a way of life), and the space in which that practice is lived is a space of anarchy—not nihilism or chaos but life by other means. Anarcho-life. What Black anarchists seek to do is to found a new society, not necessarily by bringing about the destruction of myriad edifices of terror, violence, circumscription, and normativity but by cultivating the spaces and places that, by dint of their existence, instantiate the impossibility of the normative bastions that now surround us. We might call this justice, might call this a non-utopic utopia, a sanctuary. We might call it the undercommons. How, then, to do this? Upon a re-reading of The Undercommons, I was drawn, obsessively, to one phrase, one that struck me at first as dangerously wrongheaded. But, then, the revolutionary will always be dangerous. The revolutionary call that Moten and Harney require and that I’ve been obsessed with is this: they insist that our radical politics, our anarchic world-building must be “unconditional—the door swings open for refuge even though it may let in police agents and destruction.”6 As my grandmother might quip, what kind of foolishness is this? But it is not foolishness precisely because the only ethical call that could bring about the radical revolutionary overturning we seek is one that does not discriminate or develop criteria for inclusion and, consequently, exclusion. If the door swings open without a bouncer checking names, it means that whoever shows up will be let in, unconditionally, without conditions. The ethical demand here is to be monstrously inclusive, a lesson learned in the Black Radical Tradition, Black feminisms, and trans activism. Yes, the Law might send agents to infiltrate our conspiratorial sessions. Or, even worse, as has happened, our enemy might show up and sit with us in prayer before gunning us down. But, at the same time, a salvational figure might show up or, better yet, a fugitive might show up, asking us to provide her refuge and a safe harbor. And we must let her in—this is what is to be done—we must feed and shelter her, because this fugitive, any fugitive, might be the one we didn’t know we were doing all this insurgent conspiratorial work for. Answering “What is to be done?” carries a deeply ethical valence. The manner by which things get done and the result of the doing inflects to whom we owe allegiances, who is or is not on our minds, and most fundamentally for whom we wish to see the world changed. The doing we seek is committed to making a world for people we don’t yet know, people who might need a drastically different world, while understanding that even our idea of “worldness” might be predicated on the logics of normative regimes that limit our horizons. It is imperative, then, to commit to the work without presuming to know who the work is for, only committing to the work because it might allow for those we did not know existed to finally live. When we volunteer at the soup kitchen we must turn no one away, even and especially when they look like they just ate a hearty bowl of soup; when we are faced with imminent violence we must refuse to proliferate violence, because we’ve come into being via a violation and this bestows upon us the ethical commitment to mitigate that violence; when we hear a knock at the door and someone asking for help because they are being chased we must let them in. Again, “the door swings open...” Each entity that crosses the threshold is another possible signatory on our missives for “the antipolitics of dissent.”7 To take praxis seriously, a praxis that has as its never-‐ ending end the proliferation of nonnormative life and the livelihood of the unemerged, is to risk what we ultimately come to. We cannot be afraid of what we find in our critical praxis precisely because, if it commits to the aforementioned, it will indeed be scary and impossible to prepare for. That is the work of the monstrous—a liberatory, unanticipated salvation, that troubling interrogation of gender Susan Stryker finds in the trans; that divine portent that Derrida would argue is unannounceable, which is to say untamable, unable to be absorbed into existing logics; that claimable thingliness that Hortense Spillers says might “rewrite after all a radically different text.”8 Critical praxis in the undercommons—insurgent work being done by folks who were let in without paperwork and without vouchers because they, despite where they came from, got down to work for the revolution—is work for monsters, monstrous work. In the end, what I am asking for is assemblic work for those who are impoverished in spirit, who come together, an intimate proximity reached because we are doing the work not because of an ontologized accident. What I am asking for is a willingness to move toward becoming subjectivated by an analytical queerness, a radical transitivity, an anoriginal Blackness, where Blackness names a sociopoetic force of subversive irregularity and, as Moten expressed to me in an email exchange, “must be claimed by any and every body” who seeks to do anarchic work. What is being asked for, what is to be done, is a Blackening that inducts all those who live and be in the undercommons, stealing life so it can steal more life, pilfering resources and asking no permission, taking no responsibility, because the ones who need this stuff might not know they need it, and neither do we. But if we must hack into government security systems and disseminate the firewalled information, that is what is to be done; if we must lie about the destination of funding we are given, allocating it to unauthorized and unadvised and undisclosed locations, that is what is to be done; if we must sully ourselves by hanging around a bad crowd that is bad only because the good’s violent optics and ethics deem it so, then that is what is to be done.

## 3

### NC

#### The aff burden is to prove that the aff will logically happen in the status quo. To clarify – this doesn’t question your framework but rather is a prerequisite.

Top of Form

Bottom of Form

#### Prefer:

#### 1] Text –

#### Oxford Dictionary defines ought as “used to indicate something that is probable.”

<https://en.oxforddictionaries.com/definition/ought> //Massa

#### Ought is “used to express logical consequence” as defined by Merriam-Webster

(<http://www.merriam-webster.com/dictionary/ought>) //Massa

#### 2] Neg definition choice – the aff should have defined ought in the 1ac because it was in the rez so it’s predictable contestation, by not doing so they have forfeited their right to read a new definition – kills 1NC strategy since I premised my engagement on a lack of your definition.

#### Now negate:

#### 1] Merrian websters defines to as

https://www.merriam-webster.com/dictionary/to

to preposition Save Word To save this word, you'll need to log in. Log In \ tə, tu̇, ˈtü \ Definition of to (Entry 1 of 3) 1a—used as a function word to **indicate movement** or an action or condition suggestive of movement toward a place, person, or thing reached

#### But just governments can’t move to an obligations so rez is incoherent

#### 2] Merrian Websters defines right as

https://www.merriam-webster.com/dictionary/right

**having** the **axis perpendicular to** the **base**

#### But there is no base for strikes to be perpendicular to, so the rez does nothing

**3] Merrian websters defines Strike as** **to delete something**

https://www.merriam-webster.com/dictionary/strike

#### 4] Merrian Websters defines workers as

any of the sexually underdeveloped and usually **sterile members of a colony of social ants**, bees, wasps, or termites that perform most of the labor and protective duties of the colony

https://www.merriam-webster.com/dictionary/worker

#### 5] Inherency – either a) the aff is non-inherent and you vote neg on presumption or b) it is and it isn’t going to happen.

# Case

## FW

### 1NC – Top level

Reject util:

1 - Tautology — util is circular because it deems morality based on pleasure and pleasure based on morality — we need some other framework to determine what good is, so our method of describing violence is a way to describe ethical theories even if util is true — that means anti-black violence take priority because their model devolves into artificial and sadistic desires to define universal value —

2 - Intrinsicness — util justifies atrocities because actions don’t have intrinsic value — justifies slavery and spirit murder because of pleasure for slave master and order of magnitude — the actions of voting for a framework that justifies slavery is psychologically violent.

#### 3 - Atrocities — util justifies atrocities since it allows us to harm some for the benefit of others — for example capturing 1 slave to work for 10 masters would lead to net pleasure which creates an obligation to oppress people.

### 1NC – AT: Extinction First

#### Algorithmic expansion targets discounted bodies first – computational analysis of value fails and leads to extinction and genocidal cleansing.

Mbembe 19 [Achille; Philosopher, postcolonial critical theorist, political scientist, and public intellectual from Cameroon. Member of the Wits Institute for Social and Economic Research at the University of the Witwatersrand, Johannesburg, South Africa; “Bodies as borders,” 2019; From the European South; http://europeansouth.postcolonialitalia.it/journal/2019-4/2.Mbembe.pdf] Recut Justin

Part of what we are witnessing as a result is a novel imbrication, a symbiotic merging of life and mobility. To be alive, or to survive, is more and more co-terminus with the capacity to move. Just as living, movement, in turn, involves continual doublings, the incessant crossing of multiple lines and thresholds, multiple transitions across layers. Life itself is more and more taken as something that can be calculated and recombined rather than merely represented. Furthermore, we are witnessing a bifurcation between life on the one hand and bodies on the other hand. Nowadays, not every body is thought of as containing life. Discounted bodies are believed to contain no life as such. They are, strictly speaking, bodies at the limits of life, trapped in uninhabitable worlds and inhospitable places. The kind of life they bear or contain is not insured or is uninsurable, folded as it is in extreme and thin envelopes. Such bodies on the precipice are the most exposed to droughts**,** storms and famines**,** toxic waste and various experiences of effacement. Their livelihoods made impossible, they are the most likely to sustain the most ~~crippling~~ [harmful] wounds and injuries. Trapped human subjects often without escape, they bear the brunt of terrestrial life on a damaged planet (Tsing et al. 2017). At the same time, they exceed all attempts to contain them. These bodies are not simply in motion. Interactive and generative, they are movements and events. The inside of such bodies is not separated from their outward environments. From the perspective of discounted bodies, to be alive is always and already to breach boundaries or to be exposed to the risk of the outside entering the inside (read Litvintseva 2019). This disentanglement of life from discounted bodies, this redistribution of life on differential scales of insurability and non-insurability, is a key dimension of contemporary migration regimes. The latter aim either at slowing down the dynamics of people’s interactions, at creating distance or at shattering the chains of relations between them, so as to institute new patterns of separation. Contemporary movement restrictions are not limited to national boundaries. They are at work on a global scale. They are deepening the space and time asymmetries between different categories of humanity while leading to the progressive ghettoization of entire regions of the world. To a large extent, this is akin to a universalization of the Israeli model. In this model, the restriction of movement does not necessarily aim “to confine unwanted people territorially or to dissociate their movements from those of citizens, but to inscribe them into temporalities and spatialities that are disjointed to the point of giving these populations the illusion of being territorially separated” (Parizot 2018, 38). fFurthermore, at a time when the material components and biological organization of the body can be reengineered and redesigned, the latter are more than ever based on the ideas of repressive selection, reproduction and the rejuvenation of species. Only what can potentially generate value counts as life. In this context, borders are meant to concretize the principle of dissimilarity rather than that of affinity. They are not only obstacles to free movement. They are boundaries between species and varieties of the human. As such, they play a crucial role in contemporary modes of production of human difference and relatedness. Human bodies are increasingly divided between those that matter and those that do not, those who can move and those who cannot or should not, or should only move under very strict conditions. Bodies that should not move are those that are uninsured. They must be tracked, captured, and dispensed of. Such bodies are kept shifting between invisibility, waiting and effacement. They are trapped in fragmented spaces, stretched time and indefinite waiting (Peteet 2018). As for the dream of perfect security, it requires not only complete systematic surveillance, but also a cleansing policy. This dream is symptomatic of the structural tensions that, for decades, have accompanied our transition into a new technical system of increased automation – one that is increasingly complex yet also increasingly abstract. One of the major contradictions of the liberal order has always been the tension between freedom and security. Today, this question seems to have been cut in two. Security now matters more that freedom. A society of security is not necessarily a society of freedom. A society of security is a society dominated by the irrepressible need for adhesion to a collection of certainties. It is one fearful of the type of interrogation that delves into the unknown, unearthing the risks that must surely be contained within. This is why in a society of security, the priority is, at all cost, to identify what lurks behind each new arrival – who is who, who lives where, with whom and since when, who does what, who comes from where, who is going where, when, how, why, and so on and so forth. Moreover, who plans to carry out which acts, either consciously or unconsciously. The aim of a society of security is not to affirm freedom, but to control and govern the modes of arrival. The current myth claims that technology constitutes the best tool for governing these arrivals; that technology alone allows for the resolution of this problem – a problem of order, but also of awareness, of identifiers, of anticipation and predictions. It is feared that the dream of a humanity transparent to herself, stripped of mystery, might prove to be a catastrophic illusion. For the time being, migrants and refugees are bearing the brunt of it. In the long run, it is by no means certain that they will be the only ones. The mega processes highlighted above leave us with foundational questions that will haunt us for most of this century. The first foundational question is related to what I called ‘borderization’, or the logics of containment, enclosure, and contraction. Perhaps more than at any other moment in our recent past, we are increasingly faced with the question of what to do with those whose very existence does not seem to be necessary for our reproduction; those whose mere existence or proximity is deemed to represent a physical or biological threat to our own life. Throughout history, and in response to this foundational question, various paradigms of rules have been designed for human bodies deemed either in excess, unwanted, illegal, dispensable, or superfluous. One historical response has consisted in putting in place spatial exclusionary arrangements. Such was, for instance, the case during the early phases of modern settler or genocidal colonialism in relation to Native American reservations in the United States, island prisons, penal colonies such as Australia, camps and Bantustans in South Africa. A late modern example is Gaza, and Gaza might well prefigure what is yet to come. Here, control of vulnerable, unwanted, surplus or racialized people is exercised through a combination of tactics, chief among which is ‘modulated blockade’. A blockade prohibits, obstructs, and limits who and what can enter and leave the Strip. The goal might not be to cut the Strip off entirely from supply lines, infrastructural grids or trade routes. It is nevertheless relatively sealed off in a way that effectively turns it into an imprisoned territory. Comprehensive or relative closure is accompanied by periodic military escalations and the generalized use of extra-judicial assassinations. Spatial violence, humanitarian strategies, and a peculiar biopolitics of punishment all combine to produce, in turn, a peculiar detention space in which people deemed surplus, unwanted, or illegal are governed through abdication of any responsibility for their lives and their welfare. But there is another, early 21st-century example, which consists in waging new forms of wars, which can be called wars on speed and mobility. Wars on mobility are wars whose aim is to turn into dust the means of existence and survival of vulnerable people taken as enemies. These kinds of wars of attrition, methodically calculated and programmed, and implemented with new methods, are wars against the very ideas of mobility, circulation, and speed, whilst the age we live in is precisely one of velocity, acceleration, and increasing abstraction and algorithms. Moreover, the targets of this kind of warfare are not by any means singular bodies, but rather great swathes of humanity judged worthless and superfluous. All of the above belongs to the current practice of remote borderization, carried out from afar, in the name of freedom and security. This battle, waged against certain undesirables and reducing them to mounds of human flesh, is rolled out on a global scale. It is on the verge of defining the times in which we live. Wars on mobility are peculiar wars on bodies. They have to do with two broad questions that confront us today and will haunt us for most of this century: on the one hand the question of life futures, that is, of the self-organization of being and matter; on the other hand, that of the future of reason. The future of life and the future of reason For a long time, the human race has been concerned with how life emerges and the conditions of its evolution. The key question today is how it can be reproduced, sustained, made durable, preserved and universally shared, and under what conditions it ends. Overall, these debates about how life on Earth can be reproduced and sustained, and under what conditions it ends, are forced upon us by the epoch itself, characterized as it is by the impending ecological catastrophe and by technological escalation. It is a fact that, today, unprecedented numbers of human beings are embedded in increasingly complex technostructures. The latter are increasingly intervening in the dynamics of the Earth system on a planetary scale. This has led to the transgression of planetary boundaries such as those related to anthropogenic climate change, degenerative land-use change, accelerated biodiversity loss, perturbation of the global biogeochemical cycles of nitrogen and phosphorus, and the creation and release of novel entities such as nanoparticles and genetically engineered organisms (see Donges et al.). Furthermore, both metabolically (for example in terms of their energy needs) and reproductively, technologies are becoming more and more tied in complex networks of extraction and predation, manufacturing and innovation. An example is recent developments in the domain of genes and molecules. As Margarida Mendes shows, the heyday of DNA study has allowed the cracking and public dissemination of the genetic codes of humans, plants, and animals. This, in turn, has given way to an exponential rise of biological patents, as currently nearly 20% of the human genome is now privately owned, in a context of a market logic that addresses life as a commodity to be manipulated and replicated under the volatility of market consumption. Studies after studies have shown for instance that corporations are intervening directly in the natural cycles of life and ecosystems through the widespread genetic modification of key elements in the food chain (see Mendes 2017). As patented GMO genes are absorbed into our bodies in a proprietary relationship of biological subjugation, the body itself becomes an expanded, multiple infrastructure, where intervention can happen at many different scales. It is therefore correct to argue that there is a shifting distribution of powers between the human and the technological, in the sense that technologies are moving towards ‘general intelligence’ and self-replication. They are being granted the powers of reproduction and independent teleonomic purpose rather than having them taken away. Over the last decades, we have witnessed the development of algorithmic forms of intelligence. They have been growing in parallel with genetic research, and often in its alliance. The integration of algorithms and big data analysis in the biological sphere does not only bring with it an increasingly greater belief in techno-positivism and modes of statistical thought. It also paves the way for regimes of assessment of the natural world, and modes of prediction and analysis that treat life itself as a computable object. Concomitantly, algorithms inspired by the natural world, and ideas of natural selection and evolution are on the rise. Such is the case with genetic algorithms – a subset of evolutionary algorithms that mimic actions inspired in biological operators, such as cells, seeking to optimize the responses to the problems of their environments by self-generating, and encompassing processes of mutation and natural selection. The latter are designed to evolve and further adapt to the environment, in a process of self-generation. The belief today is that everything is potentially computable and predictable. In the process, what is rejected is the fact that life itself is an open system, non-linear, and exponentially chaotic.

## Advantage

### 1NC – Spark

#### They read no terminal to nuke war.

#### Counterforcing ensure only a few million die.

Mueller 9 [Woody Mueller, Chair of National Security Studies, Professor of Political Science at Ohio State University, Cato Senior Fellow, 2009 “Atomic Obsession: Nuclear Alarmism from Hiroshima to Al-Qaeda,” *Google Books*, October 5th, p. 8] // Re-Cut Justin

To begin to approach a condition that can credibly justify applying such extreme characterizations as societal annihilation, a full-out attack with hundreds, probably thousands, of thermonuclear bombs would be required. Even in such extreme cases, the area actually devastated by the bombs' blast and thermal pulse effective **would be limited**: 2,000 1-MT explosions with a destructive radius of 5 miles each would directly demolish **less than 5 percent** of the territory of the United States, for example. Obviously, if major population centers were targeted, this sort of attack could inflict massive casualties. Back in cold war days, when such devastating events sometimes seemed uncomfortably likely, a **number of studies** were conducted to estimate the consequences of massive thermonuclear attacks. One of the **most prominent** of these considered several probabilities. The most likely scenario--one that could be perhaps considered at least to begin to approach the rational--was a "counterforce" strike in which well over 1,000 thermonuclear weapons would be targeted at America's ballistic missile silos, strategic airfields, and nuclear submarine bases in an effort to destroy the country’s strategic ability to retaliate. Since the attack **would not** directly **target population centers**, most of the ensuing deaths would be from radioactive fallout, and the study estimates that from 2 to 20 million, depending mostly on wind, weather, and sheltering, would perish during the first month.15 That sort of damage, which would kill less than 10 percent of the population, might or might not be enough to trigger words like “annihilation.”

#### Small arsenals and tests prove no extinction

Frankel et al. 15 [Dr. Michael J. Frankel is a senior scientist at Penn State University’s Applied Research Laboratory, where he focuses on nuclear treaty verification technologies, is one of the nation’s leading experts on the effects of nuclear weapons, executive director of the Congressional Commission to Assess the Threat to the United States from Electromagnetic Pulse Attack, led development of fifteen-year global nuclear threat technology projections and infrastructure vulnerability assessments; Dr. James Scouras is a national security studies fellow at the Johns Hopkins University Applied Physics Laboratory and the former chief scientist of DTRA’s Advanced Systems and Concepts Office; Dr. George W. Ullrich is chief technology officer at Schafer Corporation and formerly senior vice president at Science Applications International Corporation (SAIC), currently serves as a special advisor to the USSTRATCOM Strategic Advisory Group’s Science and Technology Panel and is a member of the Air Force Scientific Advisory Board. 04-15-15. “The Uncertain Consequences of Nuclear Weapons Use.” The Johns Hopkins University Applied Physics Laboratory. DTIC. <https://apps.dtic.mil/dtic/tr/fulltext/u2/a618999.pdf>] Justin

Scientific work based on real data, rather than models, also cast additional doubt on the basic premise. Interestingly, publication of several contradictory papers describing experimental observations actually predated Schell’s work. In 1973, nine years before publication of The Fate of the Earth, a published report failed to find any ozone depletion during the peak period of atmospheric nuclear testing.26 In another work published in 1976, attempts to measure the actual ozone depletion associated with Russian megaton-class detonations and Chinese nuclear tests were also unable to detect any significant effect.27 At present, with the reduced arsenals and a perceived low likelihood of a large-scale exchange on the scale of Cold War planning scenarios, official concern over nuclear ozone depletion has essentially fallen off the table. Yet continuing scientific studies by a small dedicated community of researchers suggest the potential for dire consequences, even for relatively small regional nuclear wars involving Hiroshimasize bombs. Nuclear Winter The possibility of catastrophic climate changes came as yet another surprise to Department of Defense scientists. In 1982, Crutzen and Birks highlighted the potential effects of high-altitude smoke on climate,29 and in 1983, a research team consisting of Turco, Toon, Ackerman, Pollack, and Sagan (referred to as TTAPS) suggested that a five-thousand-megaton strategic exchange of weapons between the United States and the Soviet Union could effectively spell national suicide for both belligerents.30 They argued that a massive nuclear exchange between the United States and the Soviet Union would inject copious amounts of soot, generated by massive firestorms such as those witnessed in Hiroshima, into the stratosphere where it might reside indefinitely. Additionally, the soot would be accompanied by dust swept up in the rising thermal column of the nuclear fireball. The combination of dust and soot could scatter and absorb sunlight to such an extent that much of Earth would be engulfed in darkness sufficient to cease photosynthesis. Unable to sustain agriculture for an extended period of time, much of the planet’s population would be doomed to perish, and—in its most extreme rendition—humanity would follow the dinosaurs into extinction and by much the same mechanism.31 Subsequent refinements by the TTAPS authors, such as an extension of computational efforts to three-dimensional models, continued to produce qualitatively similar results. The TTAPS results were severely criticized, and a lively debate ensued between passionate critics of and defenders of the analysis. Some of the technical objections critics raised included the TTAPS team’s neglect of the potentially significant role of clouds;32 lack of an accurate model of coagulation and rainout;33 inaccurate capture of feedback mechanisms;34 “fudge factor” fits of micrometer-scale physical processes assumed to hold constant for changed atmospheric chemistry conditions and uniformly averaged on a grid scale of hundreds of kilometers;35 the dynamics of firestorm formation, rise, and smoke injection;36 and estimates of the optical properties and total amount of fuel available to generate the assumed smoke loading. In particular, more careful analysis of the range of uncertainties associated with the widely varying published estimates of fuel quantities and properties suggested a possible range of outcomes encompassing much milder impacts than anything predicted by TTAPS.37 Aside from the technical issues critics raised, the five-thousand-megaton baseline exchange scenario TTAPS envisioned was rendered obsolete when the major powers decreased both their nuclear arsenals and the average yield of the remaining weapons. With the demise of the Soviet Union, the nuclear winter issue essentially fell off the radar screen for Department of Defense scientists, which is not to say that it completely disappeared from the scientific literature. In the last few years, a number of analysts, including some of the original TTAPS authors, suggested that even a “modest” regional exchange of nuclear weapons—one hundred explosions of fifteenkiloton devices in an Indian–Pakistani exchange scenario—might yet produce significant worldwide climate effects, if not the full-blown “winter.”38 However, such concerns have failed to gain much traction in Department of Defense circles.

#### Empirics – we’ve nuked ourselves 2,000 times and the largest event was only 1/1000th as powerful as natural disasters

Eken 17 [Mattias Eken - PhD student in Modern History at the University of St Andrews. “The understandable fear of nuclear weapons doesn’t match reality”. 3/14/17. <https://theconversation.com/the-understandable-fear-of-nuclear-weapons-doesnt-match-reality-73563>] // Re-Cut Justin

Nuclear weapons are unambiguously the most destructive weapons on the planet. Pound for pound, they are the most lethal weapons ever created, capable of killing millions. Millions live in fear that these weapons will be used again, with all the potential consequences. However, the destructive power of these weapons **has been vastly exaggerated**, albeit for good reasons. Public fear of nuclear weapons being used in anger, whether by terrorists or nuclear-armed nations, has risen once again in recent years. **This is** in no small part **thanks to the current political climate** between states such as the US and Russia and the various nuclear tests conducted by North Korea. But whenever we talk about nuclear weapons, it’s easy to get carried away with doomsday scenarios and apocalyptic language. As the historian Spencer Weart once argued: “**You say ‘nuclear bomb’ and everybody immediately thinks of the end of the world.**” Yet the means necessary to produce a nuclear bomb, let alone set one off, remain incredibly complex – and while the damage that would be done if someone did in fact detonate one might be very serious indeed, **the chances that it would mean “the end of the world” are vanishingly small**. In his 2013 book Command and Control, the author Eric Schlosser tried to scare us into perpetual fear of nuclear weapons by recounting stories of near misses and accidents involving nuclear weapons. One such event, the 1980 Damascus incident, saw a Titan II intercontinental ballistic missile explode at its remote Arkansas launch facility after a maintenance crew accidentally ruptured its fuel tank. Although the warhead involved in the incident didn’t detonate, Schlosser claims that “if it had, much of Arkansas would be gone”. But that’s not quite the case. The nine-megaton thermonuclear warhead on the **Titan II** missile had a blast radius of 10km, or an area of about 315km². The state of Arkansas spreads over 133,733km², meaning the weapon **would have caused destruction across 0.2% of the state.** That would naturally have been a terrible outcome, but certainly not the catastrophe that Schlosser evokes. Claims exaggerating the effects of nuclear weapons have become commonplace, especially after the September 11 terrorist attacks in 2001. In the early War on Terror years, Richard Lugar, a former US senator and chair of the Senate Foreign Relations Committee, argued that terrorists armed with nuclear weapons pose an existential threat to the Western way of life. What he failed to explain is how. It is by no means certain that a single nuclear detonation **(or even several)** would do away with our current way of life. Indeed, **we’re still here despite having nuked our own planet more than 2,000 times** – a tally expressed beautifully in this video by Japanese artist Isao Hashimoto). While the 1963 Limited Test Ban Treaty forced nuclear tests underground, **around 500 of** all **the nuclear weapons detonated were unleashed in the Earth’s atmosphere**. This includes the world’s largest ever nuclear detonation, the 57-megaton bomb known as **Tsar Bomba**, detonated by the Soviet Union on October 30 1961. Tsar Bomba was more than 3,000 times more powerful than the bomb dropped on Hiroshima. That is immense destructive power – but as one physicist explained, **it’s only “one-thousandth the force of an earthquake, one-thousandth the force of a hurricane”.** The Damascus incident proved how incredibly hard it is to set off a nuclear bomb and the limited effect that would have come from just one warhead detonating. Despite this, some scientists have controversially argued that an even limited all-out nuclear war might lead to a so-called nuclear winter, since the smoke and debris created by very large bombs could block out the sun’s rays for a considerable amount of time. To inflict such ecological societal annihilation with weapons alone, we would have to detonate hundreds if not thousands of thermonuclear devices in a short time. Even in such extreme conditions, the area actually devastated by the bombs would be limited: for example, **2,000 one-megaton explosions with a destructive radius of five miles each would directly destroy less than 5% of the territory of the US**. Of course, if the effects of nuclear weapons have been greatly exaggerated, there is a very good reason: since these weapons are indeed extremely dangerous, any posturing and exaggerating which intensifies our fear of them makes us less likely to use them. But it’s important, however, to understand why people have come to fear these weapons the way we do. After all, nuclear weapons are here to stay; they can’t be “un-invented”. If we want to live with them and mitigate the very real risks they pose, we must be honest about what those risks really are. Overegging them to frighten ourselves more than we need to keeps nobody safe.

#### Isolated island populations repopulate after radiation and nuclear winter – bunkers and submarines.

Turchin and Green 18 [Alexey Turchin – Scientist for the Foundation Science for Life Extension in Moscow, Russia, Founder of Digital Immortality Now, author of several books and articles on the topics of existential risks and life extension. Brian Patrick Green – Director of technology ethics at the Markkula Center for Applied Ethics, teaches AI ethics in the Graduate School of Engineering at Santa Clara University. <MKIM> “Islands as refuges for surviving global catastrophes”. September 2018. DOA: 7/20/19. <https://www.emerald.com/insight/content/doi/10.1108/FS-04-2018-0031/full/html?fullSc=1&mbSc=1&fullSc=1>] // Re-Cut Justin

Different types of possible catastrophes suggest different scenarios for how survival could happen on an island. What is important is that the island should have properties which protect against the specific dangers of particular global catastrophic risks. Specifically, different islands will provide protection against different risks, and their natural diversity will contribute to a higher total level of protection: **Quarantined island survives pandemic**. An island could impose effective quarantine if it is sufficiently remote and simultaneously able to protect itself, possibly using military ships and air defense. **Far northern aboriginal people survive an ice age**. Many far northern people have adapted to survive in extremely cold and dangerous environments, and under the right circumstances could potentially survive the return of an ice age. However, their cultures are endangered by globalization. If these people become dependent on the products of modern civilization, such as rifles and motor boats, and lose their native survival skills, then their likelihood of surviving the collapse of the outside world would decrease. Therefore, preservation of their survival skills may be important as a defense against the risks connected with **extreme cooling**. Remote polar island with high mountains survives brief global warming of median surface temperatures, up to 50˚C. There is a theory that the climates of planets similar to the Earth could have several semi-stable temperature levels (Popp et al., 2016). If so, because of climate change, the Earth could transition to a second semi-stable state with a median global temperature of around 330 K, about 60˚C, or about 45˚C above current global mean temperatures. But even in this climate, **some regions of Earth could still be survivable for humans**, such as the Himalayan plateau at elevations above 4,000 m, but below 6,000 (where oxygen deficiency becomes a problem), or on polar islands with mountains (however, global warming affects polar regions more than equatorial regions, and northern island will experience more effects of climate change, including thawing permafrost and possible landslides because of wetter weather). In the tropics, the combination of increased humidity and temperature may increase the wet bulb temperature above 36˚C, especially on islands, where sea moisture is readily available. In such conditions, proper human perspiration becomes impossible (Sherwood and Huber, 2010), and there will likely be increased mortality and morbidity because of tropical diseases. If temperatures later returned to normal – either naturally or through climate engineering – **the rest of the Earth could be repopulated**. ‘‘Swiss Family Robinsons’’ survive on a tropical island, unnoticed by a military robot ‘‘mutiny’’. Most AI researchers ignore medium-term AI risks, which are neither near-term risks, like unemployment, nor remote risks, like AI superintelligence. But a large drone army – if one were produced – could receive a wrong command or be infected by a computer virus, leading it to attack people indiscriminately. Remote islands without robots could provide protection in this case, allowing survival until such a drone army ran out of batteries, fuel, ammunition or other supplies: Primitive tribe survives civilizational collapse. The inhabitants of **North Sentinel Island**, near the Andaman Islands in the Indian Ocean, are hostile and uncontacted. **The Sentinelese survived the 2004 Indian Ocean tsunami apparently unaffected** (Voanews, 2009), and if the rest of humanity disappear, **they might well continue their existence without change.** Tropical Island survives extreme global nuclear winter and glaciation event. Were a **nuclear**, bolide impactor or volcanic “**winter**” scenario to unfold, these islands would remain surrounded by Warm Ocean, and local volcanism or other energy sources might provide heat, energy and food. Such island refuges may have helped life on Earth survive during the **“Snowball Earth”** event in Earth’s distant past (Hoffman et al., 1998). Remote island base for project “Yellow submarine”. Some catastrophic risks such as a gamma ray burst, a global nuclear war with high radiological contamination or multiple pandemics might be best survived **underwater in nuclear submarines** (Turchin and Green, 2017). However, after a catastrophe, the submarine with survivors would eventually need a place to dock, and an island with some prepared amenities would be a reasonable starting point for rebuilding civilization. Bunker on remote island. For risks which include multiple or complex catastrophes, such as a bolide impact, extreme volcanism, tsunamis, multiple pandemics and nuclear war with radiological contamination, **island refuges could be strengthened with bunkers**. Richard Branson survived hurricane Irma on his own island in 2017 by seeking refuge in his concrete wine cellar (Clifford, 2017). Bunkers on islands would have higher survivability compared to those close to population centers, as they will be neither a military target nor as accessible to looters or unintentionally dangerous (e.g. infected) refugees. These bunkers could potentially be connected to water sources by underwater pipes, and passages could provide cooling, access and even oxygen and food sources.

#### Specifically, AI.

Seth Baum & Anthony Barrett 18. Global Catastrophic Risk Institute. 2018. “A Model for the Impacts of Nuclear War.” SSRN Electronic Journal. Crossref, doi:10.2139/ssrn.3155983. // Re-Cut Justin

Another link between nuclear war and other major catastrophes comes from the potential for general malfunction of society shifting work on risky technologies such as artificial intelligence, molecular nanotechnology, and biotechnology. The simplest effect would be for the general malfunction of society to halt work on these technologies. In most cases, this would reduce the risk of harm caused by those technologies.

#### AI leads to extinction.

Alan Rominger 16, PhD Candidate in Nuclear Engineering at North Carolina State University, Software Engineer at Red Hat, Former Nuclear Engineering Science Laboratory Synthesis Intern at Oak Ridge National Laboratory, BS in Nuclear Engineering from North Carolina State University, “The Extreme Version of the Technological Singularity”, Medium 11-6, [https://medium.com/@AlanSE/the-extreme-version-of-the-technological-singularity-75608898eae5 //](https://medium.com/@AlanSE/the-extreme-version-of-the-technological-singularity-75608898eae5%20//) Re-Cut Justin

Let’s reformulate that story of the AI paperclip maker.

1. We design an AI to optimize paperclip production
2. The AI improves up to the ability of self-enhancement
3. AI’s pace of improvement becomes self-reinforcing, becomes god-like
4. Time ends.
5. Something else begins?

There are many valid-sounding possibilities for the 5th step. The AI creates new baby universes from black holes. Maybe not exactly in this way. Perhaps the baby universes have to be created in particle accelerators, which is obvious to the AI after it solves the string theory problems of how our universe is folded. There’s also no guarantee that whatever next step is involved can be taken without destroying the universe that we live in. Go ahead, imagine that the particle accelerators create a new universe but trigger the vacuum instability in our own. In this case, it’s entirely possible that the AI carefully plans and coordinates the death of our universe. For a simplistic example, let’s say that after lifting the 10 nearest stars, the AI realizes the most efficient ways to stimulate the curved dimensions on the Planck scale to create baby universes. Next, it conducts an optimization study to balance the number of times this operation can be performed with gains from further expansion. Since its plans begin to largely max-out once the depth of the galactic disk is exploited, I will assume that its go-point is somewhere around the colonization of half of the milky way. At this point, a coordinated experiment is conducted throughout all of the space. Each of these events both create a baby universe and trigger an event in our own universe which destroys the meta-stable vacuum that we live in. Billions of new universes are created, while the space-time that we live in begins to unravel in a light-speed front emanating out from each of the genesis points. There is an interesting energy-management concept that comes from this. A common problem when considering exponential galactic growth of star-lifted fusion power is that the empty space begins to get cooked from the high temperature radiated out into space. If the end-time of the universe was known in advance, this wouldn’t be a problem because one star would not absorb the radiation from the neighbor star until the light had time to propagate that distance at the speed of light. That means that the radiators can pump out high-temperature radiation into nice and normal 4-Kelvin space without concerns of boiling all the industrial machinery being used. Industrial activities would be tightly restricted until the “prepare-point”, when an energy bonanza happens so that the maximum number of baby-universe produces can be built. So the progress goes in phases. Firstly, there is expansion, next there is preparation, then there is the final event and the destruction of our universe There is one more modification that can be made. These steps could be applied to an intergalactic expansion if new probes could temporarily outrun the wave-front of the destruction of the universe if proper planning is conducted. Then it could make new baby universes in new galaxies, just before the wave-front reaches them. This might all happen within a few decades of 100 years in relative time from the perspective of someone aboard one of the probes. That is vaguely consistent with my own preconceptions of the timing of an asymptotic technological singularity in our near future. So maybe we should indulge this thinking. Maybe there won’t be a year 2,500 or 3,000. Maybe our own creations will have brought about an end to the entire universe by that time, setting in motion something else beyond our current comprehension. Another self-consistent version of this story is that we are, ourselves, products of a baby universe from such an event. This is also a relatively good, self-consistent, resolution to the Fermi Paradox, the Doomsday argument, and the Simulation argument.

#### Growth causes a global toxification crisis – risks extinction

Ehrlichand Ehrlich 13 Paul R. Ehrlich, Professor of Biology and President of the Center for Conservation Biology at Stanford University, and Adjunct Professor at the University of Technology, Sydney, Anne H. Ehrlich, Senior Research Scientist in Biology at Stanford and focuses her research on policy issues related to the environment, “Can a collapse of global civilization be avoided?”, Proc Biol Sci. Mar 7, 2013; 280(1754)/TK // Re-Cut Justin

Another possible threat to the continuation of civilization is global toxification. Adverse symptoms of exposure to synthetic chemicals are making some scientists increasingly nervous about effects on the human population [77–79]. Should a global threat materialize, however, no planned mitigating responses (analogous to the ecologically and politically risky ‘geoengineering’ projects often proposed to ameliorate climate disruption [80]) are waiting in the wings ready for deployment. Much the same can be said about aspects of the epidemiological environment and the prospect of epidemics being enhanced by rapid population growth in immune-weakened societies, increased contact with animal reservoirs, high-speed transport and the misuse of antibiotics [81]. Nobel laureate Joshua Lederberg had great concern for the epidemic problem, famously stating, ‘The survival of the human species is not a preordained evolutionary program’ [82, p. 40]. Some precautionary steps that should be considered include forbidding the use of antibiotics as growth stimulators for livestock, building emergency stocks of key vaccines and drugs (such as Tamiflu), improving disease surveillance, expanding mothballed emergency medical facilities, preparing institutions for imposing quarantines and, of course, moving as rapidly as possible to humanely reduce the human population size. It has become increasingly clear that security has many dimensions beyond military security [83,84] and that breaches of environmental security could risk the end of global civilization.

### 1NC – AT: Biodiversity

#### Their internal link is horrible – it says a PROPOSED solution would be bad – inserted a rehighlighting in blue.

Tian et al 21-- Tian, Zhixi [principal investigator, Institute of Genetics and Developmental Biology and former research geneticist at Purdue], et al. "Designing future crops: challenges and strategies for sustainable agriculture." The Plant Journal 105.5 (2021): 1165-1178. (AG DebateDrills)

From the perspective of human evolution, each period of rapid population growth, such as during the Neolithic agricultural revolution, which began at about 8000 BC, the hydro agricultural or irrigation revolutions in the Near East, which began about 3000 BC, and the medieval and modern agricultural periods, which began about 1000 AD, benefited from an advance in agriculture (Taiz, 2013; Wallace et al., 2018). The recent rapid population growth during the past 300 years, in contrast, mainly resulted from the Industrial Revolution, which began in Britain about 1760. The Industrial Revolution greatly increased the range of human activities and accelerated farmland expansion. In 1700, it was reported that nearly 95% of Earth’s ice-free land consisted of wildlands and semi-natural anthromes; however, by 2000, ~55% of these regions were used as arable land (Figure 1a, data from https://ourworldindata.org/). The Industrial Revolution also gave birth to new technologies and production systems in agriculture, such as the application of larger irrigation systems, and more fertilizers and pesticides. In the 1960s, semi-dwarf wheat and rice varieties were introduced. These semi-dwarf crops exhibit beneficial characteristics, such as improved response to fertilizer input, lodging resistance and enhanced light utilization (Hedden, 2003; Wallace et al., 2018). Along with the fertilizers, pesticides and irrigation systems made possible by the Industrial Revolution, semi-dwarf crops were quickly adopted and resulted in a significant increase in total grain production globally. This big leap in agriculture was known as the ‘Green Revolution’ (Khush, 2001). Indeed, statistical data have revealed that the average daily food supply per person (in terms of calories) has doubled since the middle of the 19th century (Figure 1b, data from https://ourworld indata.org/). It is estimated that the world population will rise to more than 9 billion by 2050 (Alexandratos, 1999; Cassman, 1999), and at that time we will need at least 60% more food than is consumed by humans today. Moreover, our population will continuously increase, reaching over 11 billion by 2100 (Figure 1a, data from https://ourworldindata.org/). How to feed the increasing population is a challenge facing the whole world (Tilman et al., 2001; Godfray et al., 2010; Foley et al., 2011; Wallace et al., 2018). A simple solution to feed a population of 9 billion is to constantly turn wild habitats into farmland. However, this type of expansion is unrealistic as most of the world’s icefree and non-barren land area has been exhausted, and much of the rest is unlikely to sustain high yields (Cassman, 1999). More importantly, intact forests have been known to play essential roles in protecting the environment, such as storing fresh water, decreasing flooding and regenerating fertile soils. Clearing of forests will result in prohibitive ecological costs, such as loss of biodiversity and greenhouse gas emissions. It was reported that, due to agriculture expansion, ~30% of all plant species will become extinct (Taiz, 2013). The destruction of tropical forests releases about 1.1 9 1012 tons of carbon per year, which accounts for 12% of total anthropogenic CO2 emissions (Friedlingstein et al., 2010).

#### No tipping point

* Permian-Triassic extinction proves resiliency
* No data on tipping points
* Ecosystems never outright collapse
* 600 models prove no ecosystem collapse

Hance 18 [Jeremy Hance, wildlife blogger for the Guardian and a journalist with Mongabay focusing on forests, indigenous people, climate change and more. He is also the author of Life is Good: Conservation in an Age of Mass Extinction. Could biodiversity destruction lead to a global tipping point? Jan 16, 2018. https://www.theguardian.com/environment/radical-conservation/2018/jan/16/biodiversity-extinction-tipping-point-planetary-boundary]

Just over 250 million years ago, the planet suffered what may be described as its greatest holocaust: ninety-six percent of marine genera (plural of genus) and seventy percent of land vertebrate vanished for good. Even insects suffered a mass extinction – the only time before or since. Entire classes of animals – like trilobites – went out like a match in the wind.

But what’s arguably most fascinating about this event – known as the Permian-Triassic extinction or more poetically, the Great Dying – is the fact that anything survived at all. Life, it seems, is so ridiculously adaptable that not only did thousands of species make it through whatever killed off nearly everything (no one knows for certain though theories abound) but, somehow, after millions of years life even recovered and went on to write new tales.

Even as the Permian-Triassic extinction event shows the fragility of life, it also proves its resilience in the long-term. The lessons of such mass extinctions – five to date and arguably a sixth happening as I write – inform science today. Given that extinction levels are currently 1,000 (some even say 10,000) times the background rate, researchers have long worried about our current destruction of biodiversity – and what that may mean for our future Earth and ourselves.

In 2009, a group of researchers identified nine global boundaries for the planet that if passed could theoretically push the Earth into an uninhabitable state for our species. These global boundaries include climate change, freshwater use, ocean acidification and, yes, biodiversity loss (among others). The group has since updated the terminology surrounding biodiversity, now calling it “biosphere integrity,” but that hasn’t spared it from critique.

A paper last year in Trends in Ecology & Evolution scathingly attacked the idea of any global biodiversity boundary.

“It makes no sense that there exists a tipping point of biodiversity loss beyond which the Earth will collapse,” said co-author and ecologist, José Montoya, with Paul Sabatier Univeristy in France. “There is no rationale for this.”

Montoya wrote the paper along with Ian Donohue, an ecologist at Trinity College in Ireland and Stuart Pimm, one of the world’s leading experts on extinctions, with Duke University in the US.

Montoya, Donohue and Pimm argue that there isn’t evidence of a point at which loss of species leads to ecosystem collapse, globally or even locally. If the planet didn’t collapse after the Permian-Triassic extinction event, it won’t collapse now – though our descendants may well curse us for the damage we’ve done.

Instead, according to the researchers, every loss of species counts. But the damage is gradual and incremental, not a sudden plunge. Ecosystems, according to them, slowly degrade but never fail outright.

“Of more than 600 experiments of biodiversity effects on various functions, none showed a collapse,” Montoya said. “In general, the loss of species has a detrimental effect on ecosystem functions...We progressively lose pollination services, water quality, plant biomass, and many other important functions as we lose species. But we never observe a critical level of biodiversity over which functions collapse.”